Disclaimer

This document has been prepared and presented as an informational guide only. Course offerings, fee schedules, and other representations provided are not controlling and are subject to change, amendment, or deletion by the College as deemed appropriate. The information is taken from Board Policies and Procedures. The most current catalog is available on the College’s website. The information in the printed catalog is current up to the print date. These sources can be accessed online at www.broward.edu

Broward College is an equal access/equal opportunity institution. Students with documented disabilities are assured participation in all college activities and services. Registrants seeking accommodations should contact the Campus Office of Disability Services at least two weeks prior to the first class session. This information is available in alternative format upon request.
### Table of Contents

#### Section I: College Information
- Message from the President .................................................... 2
- Campuses and Centers ............................................................ 3
- Accreditation ............................................................................ 4
- Vision, Mission, Core Values, and Philosophy .......................... 4
- History of the College ............................................................... 6
- Equal Opportunity Policy ......................................................... 8
- Board of Trustees .................................................................... 10
- Broward College Foundation .................................................. 11
- Quality Enhancement Plan ....................................................... 14
- Academic Calendar ................................................................. 15
- Final Examination Schedule .................................................... 20

#### Section II: Student Services
- Academic Advisement and Educational Planning .................... 23
- Academic Success Centers ...................................................... 24
- Bookstore .............................................................................. 26
- Campus Safety ......................................................................... 26
- Career Centers ....................................................................... 28
- Dining and Vending Services .................................................. 29
- Disability Services ................................................................. 30
- Enrollment Services .............................................................. 31
- Family Educational Rights and Privacy Act (FERPA) ............... 52
- Institute for Economic Development ...................................... 55
- International Education Programs ........................................ 63
- International Student Admissions .......................................... 65
- Libraries ................................................................................. 70
- Placement Testing .................................................................... 71
- Records Retention ................................................................... 74
- Registration ............................................................................. 75
- Skill Improvement Programs .................................................. 77
- Student Activities .................................................................... 77
- Student Affairs Policies and Procedures ................................. 79
- Student Financial Aid ............................................................. 102
- Student Pay-for-Print ............................................................. 114
- Student Tuition and Fees ....................................................... 115
- Title IX and Sexual Misconduct .............................................. 124
- Veteran Affairs ...................................................................... 125

#### Section III: Academic Affairs
- Academic Honors .................................................................... 129
- Academic Load ........................................................................ 129
- Transcript Evaluation ............................................................. 130
- Academic Standards of Progress .......................................... 130
- Class Attendance Policy ......................................................... 131
- Campus/Center Closing ......................................................... 132
- Final Grades and Records ....................................................... 132
- Grade Appeal Process ............................................................ 134
- Applicable Catalog .................................................................. 135
<table>
<thead>
<tr>
<th>Recency of Credit</th>
<th>135</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduation Honors</td>
<td>135</td>
</tr>
<tr>
<td>Semester Credit Hour</td>
<td>136</td>
</tr>
<tr>
<td>Semester System</td>
<td>136</td>
</tr>
<tr>
<td>Grade Forgiveness Policy</td>
<td>136</td>
</tr>
<tr>
<td>Maximum Attempts per Course</td>
<td>137</td>
</tr>
<tr>
<td>Course Pre-requisites and Co-requisites</td>
<td>137</td>
</tr>
<tr>
<td>Excess Credit Hours</td>
<td>138</td>
</tr>
<tr>
<td>Student Ombudsman</td>
<td>138</td>
</tr>
<tr>
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<td>138</td>
</tr>
<tr>
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<td>139</td>
</tr>
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</tr>
<tr>
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<td>153</td>
</tr>
<tr>
<td>Advanced Technical Certificate Program</td>
<td>153</td>
</tr>
<tr>
<td>Developmental Education Program</td>
<td>154</td>
</tr>
<tr>
<td>Academic Service Learning</td>
<td>158</td>
</tr>
<tr>
<td>Blended Learning Opportunities</td>
<td>158</td>
</tr>
<tr>
<td>Credits for Prior Learning</td>
<td>158</td>
</tr>
<tr>
<td>Internship EDGE</td>
<td>162</td>
</tr>
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<td>Online Learning</td>
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### Section IV: Programs of Study

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Broward College

College Catalog 2015-2016
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### Social Behavioral Science & Human Services

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### Section V: Course Descriptions

- Statewide Course Numbering System (SCNS) Statement
- Alphabetical listing of all college credit and clock hour courses offered

### Section VI: Appendices

- Appendix A: Course Information Table
- Appendix B: General Education Course Matrix and Course Listing by Area/Group
- Appendix C: Health Science Admissions Requirements
- Appendix D: High School and Technical College Articulation Agreement Matrices
- Appendix E: Administrator and Faculty Directory
PROGRAMS OF STUDY
Programs of Study and Career Pathways

Now that you’ve decided on Broward College, what will you study?

Broward College offers a wide range of more than 100 degrees and certificates with day and evening classes and numerous online options. With three campuses and six centers in Broward County, you can achieve your higher education goals without commuting too far from home.

In 2013, Florida’s legislatures created 8 Career Pathways (formally known as Meta-Majors) to support student success and completion in postsecondary education. The 8 Career Pathways are:

1. Arts, Humanities, Communication, & Design (AHCD)
2. Business
3. Education
4. Health Sciences
5. Industry, Manufacturing, Construction, & Transportation (IMCT)
6. Public Safety
7. Science, Engineering, Math, & Technology (STEM)
8. Social Behavioral Sciences & Human Services (SBSHS)

A complete list of the programs offered at BC is provided in this section. However, to assist you in picking a program of study, the individual program sheets are organized by Career Pathway.

Pick a program today and meet with your academic advisor to create an educational plan that suits you perfectly!
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Arts, Humanities, Communication & Design (AHCD)

Get ready to take the stage with your ability to perform, publish, design, and entertain. You can find your career in the arts, humanities, communication & design field by investing in your education at Broward College. Take your creativity to the next level and start your career path today.

Articulation Agreements
Broward College has numerous articulation agreements with our local high schools and Technical Colleges. Students may be able to earn college credit for select programs completed at the secondary and postsecondary level. The programs listed below with an asterisk (*) have a current articulation agreement. For more information about articulation agreements, please contact the Career and Technical Education office at 954-201-7830. You can also find information online at www.broward.edu/careerpath

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</table>
Program Description: The Associate of Arts (AA) degree is the traditional transfer degree. Students who earn the AA are able to remain at Broward College, transfer to another state college, or a state university in order to continue their education and pursue a baccalaureate degree.

Career Pathway: Arts, Humanities, Communication & Design (AHCD)

Program Entrance Requirements: HS Diploma or GED

Additional Program Information: The Associate of Arts degree includes 36 credit hours of General Education and an additional 24 credit hours of electives. The elective credit hours should be selected based on the student's transfer major. Students are encouraged to review the state’s Common Course Prerequisite Manual (www.flvc.org/partner-portal/common-prerequisite-manual) for additional guidance.

Art/Design Student Advising
Prior to seeking general academic advisement on their home campuses, AA students majoring in art must first seek advisement on the visual art/design course of study through the office of the Visual & Performing Arts Department on Central Campus (Building 4, Room 130) or on South Campus (Building 71, Room 105).

Location(s): Courses are offered at all college locations, including online. Please consult the course schedule for specific semester locations.

Bachelor Degree Majors Include:

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Recommended First Semester Courses

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<tr>
<td>EVR1001 3</td>
<td>EVR1001** 3 Environment Science</td>
</tr>
<tr>
<td>SPC1608 or SPC1024</td>
<td>SPC1608 or SPC1024 Introduction to Public Speaking</td>
</tr>
<tr>
<td></td>
<td>SPC1608 or SPC1024 Introduction to Speech Communications 3</td>
</tr>
<tr>
<td>ARH2000 3</td>
<td>ARH2000 3 Art Appreciation</td>
</tr>
</tbody>
</table>

*The specific English and Math course will depend on the student’s test score.
**Registration depends on the student’s test score.
- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

If the student attends part-time (less than 12 credits), it is highly recommended that the student complete English and Math in the first term.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Associate of Science in Graphic Design
Program Code 2192

Program Description: The Graphic Design Program is designed to prepare students for the rapidly changing computer driven graphic design industry. Primary job titles include, Web Designer, Graphic Artist, Publication Designer, Illustrator, Packaging Designer, and Advertising Creative.

Career Pathway: Arts, Humanities, Communication & Design (AHCD)

Program Entrance Requirements: HS Diploma or GED

Additional Program Information: Each class is limited to 17 students. The capstone class is an internship, which requires 256 hours in a Graphic Design position. Placement help is available.

Location(s): The General Education and Art courses are offered at all BC locations. However, the core Graphic Design (GRA and PGY) courses are only offered at the Willis Holcombe Center in Downtown Fort Lauderdale. Please consult the course schedule for specific semester locations.

Contact information: Program contact information can be found at http://www.broward.edu/academics/programs/graphicdesign/Pages/default.aspx

Related Programs at Broward College:
Graphic Design Production Technical Certificate (6289)
Graphic Design Support Technical Certificate (6290)

<table>
<thead>
<tr>
<th>General Education Credit Hours</th>
<th>18</th>
<th>GRA1201C</th>
<th>Typographic Design</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC1101</td>
<td>Composition I</td>
<td>3</td>
<td>GRA1144C</td>
<td>Web Design 1</td>
</tr>
<tr>
<td>PSY2012</td>
<td>General Psychology</td>
<td>3</td>
<td>PGY1802C</td>
<td>Digital Photography</td>
</tr>
<tr>
<td>ART2051</td>
<td>Art History II</td>
<td>3</td>
<td>GRA2121C</td>
<td>Publication Design</td>
</tr>
<tr>
<td>Mathematics</td>
<td>3</td>
<td>GRA2171C</td>
<td>Branding &amp; Ad Design</td>
<td>3</td>
</tr>
<tr>
<td>Biological/Physical Science</td>
<td>3</td>
<td>GRA2157C</td>
<td>Illustration 2</td>
<td>3</td>
</tr>
<tr>
<td>Speech Communications</td>
<td>3</td>
<td>GRA2754C</td>
<td>Web Design 2</td>
<td>3</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Core Requirements Credit Hours</th>
<th>46</th>
<th>GRA2185C</th>
<th>Design Production</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART1201C</td>
<td>2-D Design</td>
<td>3</td>
<td>GRA2425C</td>
<td>Portfolio and Business of Design</td>
</tr>
<tr>
<td>ART1300C*</td>
<td>Drawing I</td>
<td>3</td>
<td>GRA2940C</td>
<td>Graphic Design Internship</td>
</tr>
<tr>
<td>GRA1110C</td>
<td>Applied Design 1</td>
<td>3</td>
<td>GRA1120C</td>
<td>Illustration Design 1</td>
</tr>
<tr>
<td>PGY1801C</td>
<td>Photoshop Design</td>
<td>3</td>
<td>GRA1151C</td>
<td>Typography Design</td>
</tr>
<tr>
<td>GRA2151C</td>
<td>Illustration Design 1</td>
<td>3</td>
<td>Total Program Credit Hours</td>
<td>64</td>
</tr>
</tbody>
</table>
Associate of Science Graphic Design  
Program Code 2192

Recommended Course Sequencing

**First Year Term I**
- ART1201C  2-D Design  3
- ART1300C*  Drawing I  3
- ARH2051  Art History II  3
- ENC1101C  Composition I  3
  **Total Term Credit Hours**  12

**First Year Term II**
- GRA1110C  Applied Design 1  3
- PGY1801C  Photoshop Design  3
- GRA1151C  Illustration Design 1  3
- GRA1201C  Typographic Design  3
- GRA1144C  Web Design 1  3
  **Total Term Credit Hours**  15

**First Year Term III**
- SPC1024  Intro to Speech Communication or
  SPC1608  Introduction to Public Speaking  3
- PSY2012  General Psychology  3
- GE Course  General Education Mathematics  3
  **Total Term Credit Hours**  9

**Second Year Term I**
- PGY1802C  Digital Photography  3
- GRA2121C  Publication Design  3
- GRA2171C  Branding & Ad Design  3
- GRA2157C  Illustration 2  3
- GRA2754C  Web Design 2  3
  **Total Term Credit Hours**  15

**Second Year Term II**
- GE Course  General Education Science  3
- GRA2180C  Applied Design 2  3
- GRA2185C  Design Production  3
- GRA2157C  Portfolio & Business of Design  3
  **Total Term Credit Hours**  12

**Second Year Term III**
- GRA2940C  Graphic Design Internship  1
  **Total Term Credit Hours**  1
  **Total Program Credits**  64

Notes:
*Student may have to take MAT1033 or STA1001 based on placement score. If the student does not need MAT1033 or STA1001, the student must take ART1300C.*
- Completion of the Graphic Design Program will satisfy the College’s computer literacy requirement.
- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.
- **Students are strongly encouraged to meet with an advisor to create an educational plan.**
Associate of Science in Music Technology  
Program Code 2206

Program Description: The Associate of Science degree in Music Technology is designed for students who intend to seek employment in the commercial music field and for those who are presently employed in the music technology field and desire advancement. Some of the careers, to which this sequence may lead, are recording engineer, sound designer, live sound reinforcement engineer and producer.

Career Pathway: Arts, Humanities, Communication & Design (AHCD)

Program Entrance Requirements:
1) A proficiency level equal to MUT1001 (Fundamentals of Music). Students are recommended to take MUT1001 if their proficiency level does not meet the requirement.
2) A proficiency level of MAT1033 (Intermediate Algebra) or STA1001 (Pathway to Statistics). Students that do not meet this proficiency level will be required to take MAT1033 or STA1001.

The MUT1001, MAT1033, STA1001 courses are not part of the program of study. Therefore, students may not be eligible for federal financial aid support for these specific courses.

Additional Program Information: Students are required to take an Internship component as part of the program.

Location(s): The General Education courses can be completed at any BC location. However, the core Music Technology courses are only offered at the A. Hugh Adams Central Campus. Please consult the course schedule for specific semester locations.

Contact information: Program contact information can be found at http://www.broward.edu/academics/programs/vpa/Pages/music-technology.aspx.

Related Programs at Broward College:
Music Technology Technical Certificate (6309)

<table>
<thead>
<tr>
<th>General Education Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC1101 Composition I</td>
<td>3</td>
</tr>
<tr>
<td>MUH2111 Music History I</td>
<td>3</td>
</tr>
<tr>
<td>Social/Behavioral Science</td>
<td>3</td>
</tr>
<tr>
<td>Biological/Physical Science</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>Speech Communications</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Core Requirements Credit Hours</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS1360 Introduction to Music Technology</td>
<td>3</td>
</tr>
<tr>
<td>MUT1111 Music Theory I</td>
<td>3</td>
</tr>
<tr>
<td>MUT1241 Sight Singing</td>
<td>1</td>
</tr>
<tr>
<td>MVK1111 Piano Class</td>
<td>1</td>
</tr>
<tr>
<td>MUS2342C Digital Audio I</td>
<td>3</td>
</tr>
<tr>
<td>MUS2344C Midi Systems</td>
<td>3</td>
</tr>
<tr>
<td>MUT1112 Theory II</td>
<td>3</td>
</tr>
<tr>
<td>MUT1242 Sight Singing II</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Specialized Course Credit Hours</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applied Music Elective*</td>
<td>1</td>
</tr>
<tr>
<td>Applied Music Elective*</td>
<td>1</td>
</tr>
<tr>
<td>Music Ensemble Elective**</td>
<td>1</td>
</tr>
</tbody>
</table>

| Total Program Credit Hours                       | 64           |

Broward College 178 College Catalog 2015-2016
# Associate of Science in Music Technology

**Program Code 2206**

## Recommended Course Sequencing

### First Year Term I

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS1360</td>
<td>Introduction to Music Technology</td>
<td>3</td>
</tr>
<tr>
<td>MUT1111</td>
<td>Music Theory I</td>
<td>3</td>
</tr>
<tr>
<td>MUT1241</td>
<td>Sight Singing</td>
<td>1</td>
</tr>
<tr>
<td>Elective*</td>
<td>Applied Music Elective</td>
<td>1</td>
</tr>
<tr>
<td>MVK1111</td>
<td>Piano Class</td>
<td>1</td>
</tr>
<tr>
<td>MGF1106</td>
<td>Mathematics for Liberal Arts I or</td>
<td>3</td>
</tr>
<tr>
<td>MGF1107</td>
<td>Mathematics for Liberal Arts II</td>
<td>3</td>
</tr>
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</table>

**Total Term Credit Hours**: 12

### First Year Term II

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS2342C</td>
<td>Digital Audio I</td>
<td>3</td>
</tr>
<tr>
<td>MUS2344C</td>
<td>Midi Systems</td>
<td>3</td>
</tr>
<tr>
<td>MUT1112</td>
<td>Theory II</td>
<td>3</td>
</tr>
<tr>
<td>MUT1242</td>
<td>Sight Singing II</td>
<td>1</td>
</tr>
<tr>
<td>Elective*</td>
<td>Any Applied Music Class</td>
<td>1</td>
</tr>
<tr>
<td>MVK2221</td>
<td>Secondary Piano</td>
<td>1</td>
</tr>
<tr>
<td>Elective**</td>
<td>Music Ensemble Elective</td>
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</table>

**Total Term Credit Hours**: 13

### First Year Term III

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC1101</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>GE Course</td>
<td>General Education Social/Behavioral Science</td>
<td>3</td>
</tr>
<tr>
<td>GE Course</td>
<td>General Education Science</td>
<td>3</td>
</tr>
<tr>
<td>SPC1024</td>
<td>Introduction to Speech Communications or</td>
<td>3</td>
</tr>
<tr>
<td>SPC1608</td>
<td>Introduction to Public Speaking</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Term Credit Hours**: 12

### Second Year Term I

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUM1600C</td>
<td>Introduction to Rec. Studio Procedures</td>
<td>3</td>
</tr>
<tr>
<td>MUS2348C</td>
<td>Digital Audio Music Prod II</td>
<td>3</td>
</tr>
<tr>
<td>MUM2700</td>
<td>Music Business</td>
<td>3</td>
</tr>
<tr>
<td>MUH2111</td>
<td>Music History I</td>
<td>3</td>
</tr>
<tr>
<td>MUS2332C</td>
<td>Live Sound Reinforcement</td>
<td>3</td>
</tr>
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</table>

**Total Term Credit Hours**: 15

### Second Year Term II

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUM2601C</td>
<td>Recording Studio Techniques II</td>
<td>3</td>
</tr>
<tr>
<td>MUM2730</td>
<td>Music Marketing</td>
<td>3</td>
</tr>
<tr>
<td>MUS2349C</td>
<td>Advanced Projects in Music Production</td>
<td>3</td>
</tr>
<tr>
<td>MUS2940</td>
<td>Internship</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Term Credit Hours**: 12

**Total Program Credit Hours**: 64

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**Note:**

* Applied Music Elective – any course with a MVB, MVJ, MVK, MVO, MVP, MVS, MVV, MVW prefix

** Music Ensemble Elective - Any course with MUN prefix

- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

Students are strongly encouraged to meet with an advisor to create an educational plan.
**Associate of Science in Digital Media/Multimedia Technology**  
**Program Code 2216**

**Program Description:** Students will learn graphic design, video production, video effect, audio production, 3D animation, 2D animation, and multimedia applications. Students will also become skilled in designing and maintaining websites, creating dynamic content and producing effective interface design for the web.

**Career Pathway:** Arts, Humanities, Communication & Design (AHCD)

**Program Entrance Requirements:** HS Diploma or GED

**Additional Program Information:** Coursework is comprehensive with the use of computers, designing and arranging art, drawings, photos, text, and other visual resources. All students are required to do an internship before graduation.

**Related Industry Certifications:** Upon completing this program, graduates will be eligible to pursue the following industry certifications/licenses:
- Adobe Certifications
- Autodesk Certifications

**Location(s):** General Education courses can be taken at any BC location. The core Digital Media/Multimedia Technology (DIG) courses are only offered at the Judson A. Samuels South Campus. Please consult the course schedule for specific semester locations.

**Contact information:** Program contact information can be found at [http://www.broward.edu/academics/programs/multimedia/Pages/default.aspx](http://www.broward.edu/academics/programs/multimedia/Pages/default.aspx).

**Related Programs at Broward College:**
- Digital Media Web Production Technical Certificate (6286)
- Digital Media/Multimedia Production Technical Certificate (6287)

---

**General Education Credit Hours**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC1101</td>
<td>English Composition I</td>
<td>3</td>
</tr>
<tr>
<td>Social/Behavioral Science</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Biological/Physical Science</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Speech Communication</td>
<td>3</td>
<td></td>
</tr>
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</table>

**Core Requirements Credit Hours**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGS1060C</td>
<td>Computer and Internet Literacy</td>
<td>3</td>
</tr>
<tr>
<td>DIG2100C</td>
<td>Web Development 1</td>
<td>3</td>
</tr>
<tr>
<td>DIG2115C</td>
<td>Digital Imaging Fundamentals Using Photoshop</td>
<td>3</td>
</tr>
<tr>
<td>DIG2132C</td>
<td>Digital Art &amp; Design with Illustrator</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total Program Credit Hours</strong></td>
<td><strong>64</strong></td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIG2101C</td>
<td>Web Development 2 Using Dreamweaver</td>
<td>3</td>
</tr>
<tr>
<td>DIG2280C</td>
<td>Digital Video/Audio Editing</td>
<td>3</td>
</tr>
<tr>
<td>DIG2303C</td>
<td>3D Animation II</td>
<td>3</td>
</tr>
<tr>
<td>DIG2292C</td>
<td>Digital Post Production with After Effects</td>
<td>3</td>
</tr>
<tr>
<td>DIG2302C</td>
<td>3D Animation I</td>
<td>3</td>
</tr>
<tr>
<td>DIG2500C</td>
<td>Multimedia Authoring</td>
<td>3</td>
</tr>
<tr>
<td>DIG2304C</td>
<td>3D Animation III</td>
<td>3</td>
</tr>
<tr>
<td>DIG2940</td>
<td>Internship in Digital Media</td>
<td>4</td>
</tr>
<tr>
<td>DIG2303C</td>
<td>Digital Media/Multimedia Elective*</td>
<td>3</td>
</tr>
</tbody>
</table>
## Associate of Science in Digital Media/Multimedia Technology

**Program Code 2216**

### Recommended Course Sequencing

#### First Year Term I

<table>
<thead>
<tr>
<th>GE Course</th>
<th>General Education Humanities</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGS1060C</td>
<td>Computer and Internet Literacy</td>
<td>3</td>
</tr>
<tr>
<td>DIG2132C</td>
<td>Digital Art &amp; Design with Illustrator</td>
<td>3</td>
</tr>
<tr>
<td>DIG2100C</td>
<td>Web Development 1</td>
<td>3</td>
</tr>
<tr>
<td>DIG2115C</td>
<td>Digital Imaging Fundamentals Using Photoshop</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Term Credit Hours** **15**

#### First Year Term II

<table>
<thead>
<tr>
<th>ENC1101</th>
<th>English Composition I</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE Course</td>
<td>General Education Social/Behavioral Science</td>
<td>3</td>
</tr>
<tr>
<td>Elective*</td>
<td>Digital Media/Multimedia Elective</td>
<td>3</td>
</tr>
<tr>
<td>DIG2302C</td>
<td>3D Animation I</td>
<td>3</td>
</tr>
<tr>
<td>DIG2101C</td>
<td>Web Development 2 Using Dreamweaver</td>
<td>3</td>
</tr>
<tr>
<td>DIG2116C</td>
<td>Digital Imaging Advanced</td>
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</table>

**Total Term Credit Hours** **18**

#### Second Year Term I

<table>
<thead>
<tr>
<th>SPC1608</th>
<th>Introduction to Public Speaking or</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPC1024</td>
<td>Introduction to Speech Communication</td>
<td>3</td>
</tr>
<tr>
<td>DIG2500C</td>
<td>Multimedia Authoring</td>
<td>3</td>
</tr>
<tr>
<td>DIG2280C</td>
<td>Digital Video/Audio Editing</td>
<td>3</td>
</tr>
<tr>
<td>DIG2303C</td>
<td>3D Animation II</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Term Credit Hours** **15**

#### Second Year Term II

<table>
<thead>
<tr>
<th>DIG2292C</th>
<th>Digital Post Production with After Effects</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE Course</td>
<td>General Education Science</td>
<td>3</td>
</tr>
<tr>
<td>DIG2580C</td>
<td>Digital Media Portfolio</td>
<td>3</td>
</tr>
<tr>
<td>DIG2304C</td>
<td>3D Animation III</td>
<td>3</td>
</tr>
<tr>
<td>DIG2940</td>
<td>Internship in Digital Media</td>
<td>4</td>
</tr>
</tbody>
</table>

**Total Term Credit Hours** **16**

**Total Program Semester Hours** **64**

### Notes:

*Program elective – Student may have to take MAT1033 or STA1001 based on placement score. If the student does not need MAT1033 or STA1001, the student must take DIG2109C, DIG2311C, or CGS2554C.  
- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.  

**Students are strongly encouraged to meet with an advisor to create an educational plan.**
Associate of Science in Film Production Technology
Program Code 2510

Program Description: The Associate of Science degree in Film Production Technology is for students who seek entry-level employment in the field of film and video production and desire advancement. Some careers, to which this sequence may lead, are camera operator, video editor, film production crew, sound editor, film and video producer, director and cinematographer.

Career Pathway: Arts, Humanities, Communication, & Design (AHCD)

Program Entrance Requirements: HS Diploma or GED

Additional Program Information: N/A

Related Industry Certifications: Upon completing this program, graduates will be eligible to sit for the following industry certifications/licenses: Adobe Certified Expert certification.

Location(s): The General Education courses are offered at all BC locations. However, the core Film Production (FIL) courses are only offered at the A. Hugh Adams Central Campus. Please consult the course schedule for specific semester locations.

Contact information: Prior to seeking general academic advisement on their home campuses, AS students majoring in Film Production Technology must first seek advisement through the office of the Visual & Performing Arts Department on Central Campus (Building 4, Room 130). Additional program information can be found at http://www.broward.edu/academics/programs/vpa/Pages/default.aspx

Related Programs at Broward College:
Film Production Fundamentals Technical Certificate (6343)
Motion Picture Production Technical Certificate (6344)
Motion Picture Post Production Technical Certificate (6345)
Motion Picture Production Management Technical Certificate (6346)

<table>
<thead>
<tr>
<th>General Education Credit Hours</th>
<th>ENC1101 Composition I</th>
<th>Humanities</th>
<th>Social/Behavioral Science</th>
<th>Biological/Physical Science</th>
<th>Mathematics</th>
<th>Speech Communications</th>
<th>Elective Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>18</td>
<td>3 FIL2515C</td>
<td>3 FIL1522C</td>
<td>3 FIL2537C</td>
<td>3 FIL2471C</td>
<td>3 FIL2572C</td>
<td>3 Elective*</td>
<td>9</td>
</tr>
<tr>
<td>Core Requirements Credit Hours</td>
<td>FIL1100 Screenwriting I</td>
<td>3 Elective*</td>
<td>3 FIL2647 Film Producing and Production Management</td>
<td>3 FIL1420C Film Production I</td>
<td>4 FIL2432C Film Production II</td>
<td>4 FIL2438C Film Production III</td>
<td>9</td>
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</tbody>
</table>

Total Program Credit Hours 64
# Associate of Science in Film Production Technology

**Program Code 2510**

## Recommended Course Sequencing

### First Year Term I

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>FIL1420C Film Production I</td>
<td>4</td>
</tr>
<tr>
<td>FIL1552C Film Post Production I: Editing</td>
<td>3</td>
</tr>
<tr>
<td>ENC1101 English Composition</td>
<td>3</td>
</tr>
<tr>
<td>Elective*</td>
<td>3</td>
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</table>

**Total Term Credit Hours: 13**

### First Year Term II

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIL1100 Screenwriting I</td>
<td>3</td>
</tr>
<tr>
<td>FIL2432C Film Production II</td>
<td>4</td>
</tr>
<tr>
<td>FIL2537C Film Post Production II: Sound Design</td>
<td>3</td>
</tr>
<tr>
<td>GE Course General Education Mathematics</td>
<td>3</td>
</tr>
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**Total Term Credit Hours: 13**

### First Year Term III

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIL2647 Film Producing and Production Management</td>
<td>3</td>
</tr>
<tr>
<td>GE Course General Education Humanities</td>
<td>3</td>
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**Total Term Credit Hours: 6**

### Second Year Term I

<table>
<thead>
<tr>
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<tr>
<td>FIL1131 Screenwriting II</td>
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</tr>
<tr>
<td>FIL2438C Film Production III</td>
<td>4</td>
</tr>
<tr>
<td>GE Course General Education Social/Behavior Science</td>
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**Total Term Credit Hours: 13**

### Second Year Term II

<table>
<thead>
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<tbody>
<tr>
<td>FIL2515C Film Production IV</td>
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</tr>
<tr>
<td>FIL2471C Film Post Production III: Visual Effects</td>
<td>3</td>
</tr>
<tr>
<td>GE Course General Education Science</td>
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</tr>
<tr>
<td>Elective*</td>
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**Total Term Credit Hours: 13**

### Second Year Term III

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<thead>
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<tr>
<td>FIL2572C Film Post Production IV: Advanced Post</td>
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<tr>
<td>SPC1608 Public Speaking or SPC1024 Introduction to Speech Communications</td>
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</table>

**Total Term Credit Hours: 6**

**Total Program Credits: 64**

**Notes:**

* Student may have to take MAT1033 or STA1001 based on placement score. The student may have to also take CGS1060C if unable to successfully pass the Computer Competency Test. If the student does not need MAT1033, STA1001 or CGS1060C, the student must take Film electives. Film Electives are satisfied by taking any of the following courses: FIL2000, FIL2611, or FIL1456C.

- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Digital Media Web Production Technical Certificate  
Program Code 6286

Program Description: This program is designed to prepare students for initial employment as Web production assistants, Web production artists, or to provide supplemental training for those already employed in the field. This basic-to-intermediate certificate provides students with the computer, digital media, and graphic production skills needed to create web sites.

Career Pathway: Arts, Humanities, Communication & Design (AHCD)

Program Entrance Requirements: HS Diploma or GED

Additional Program Information: Coursework is comprehensive with the use of computers, designing and arranging art, drawings, photos, text, and other visual resources.

Location(s): The core Digital Media/Multimedia Technology (DIG) courses are only offered at the Judson A. Samuels South Campus. Please consult the course schedule for specific semester locations.

Contact Information: Program contact information can be found at http://www.broward.edu/academics/programs/multimedia/Pages/default.aspx.

Related Programs at Broward College:
Digital Media/Multimedia Technology Associate of Science (2216)
Digital Media/Multimedia Production Technical Certificate (6287)

Required Courses
DIG2100C  Web Development I  3
DIG2115C  Digital Imaging Fundamentals Using Photoshop  3
DIG2132C  Digital Art & Design with Illustrator  3
DIG2101C  Web Development 2 Using Dreamweaver  3
DIG2116C  Digital Imaging Advanced  or  
DIG2109C  Digital Publishing with InDesign  3

Total Program Credit Hours  15

Notes:
- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Digital Media/Multimedia Production Technical Certificate
Program Code 6287

Program Description: This program is designed to prepare students for initial employment as Digital Media/Multimedia Production Technicians or Digital Media/Multimedia Developers, or to provide supplemental training for those already employed in the field. This basic-to-intermediate certificate provides students with the computer, production, and digital media skills needed to create digital media/multimedia projects.

Career Pathway: Arts, Humanities, Communication & Design (AHCD)

Program Entrance Requirements: HS Diploma or GED

Additional Program Information: Coursework is comprehensive with the use of computers, designing and arranging art, drawings, photos, text, and other visual resources. Students are able to attain this certificate while completing an A.S. degree in Digital Media/Multimedia Technology.

Related Industry Certifications: N/A

Location(s): General Education courses can be taken at any college location. The core courses for the Digital Media/Multimedia Technology program are only offered at the Judson A. Samuels South Campus. Please consult the course schedule for specific semester locations.

Related Programs at Broward College:
Digital Media/Multimedia Technology Associate in Science (2216)
Digital Media Web Production Technical Certificate (6286)

Required Courses

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<td>DIG2100C</td>
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<tr>
<td>DIG2115C</td>
<td>Digital Imaging Fundamentals Using Photoshop</td>
<td>3</td>
</tr>
<tr>
<td>DIG2280C</td>
<td>Digital Video/Audio Editing</td>
<td>3</td>
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<tr>
<td>DIG2500C</td>
<td>Multimedia Authoring</td>
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<tr>
<td>DIG2302C</td>
<td>3D Animation I</td>
<td>3</td>
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</table>

Total Program Credit Hours 15

Notes:
- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Program Description: The Graphic Design Program, offered at the Willis Holcombe Center (Downtown), is designed to prepare students for the rapidly changing computer driven graphic design industry. The Production Certificate prepares the student for the primary job titles including, Graphic Artist, Publication Designer, Junior Designer. It is a subset of the Graphic Design Associate of Science degree.

Career Pathway: Arts, Humanities, Communication & Design (AHCD)

Program Entrance Requirements: HS Diploma or GED

Additional Program Information: Each class is limited to 17 students.

Location(s): The Art courses are offered at all BC locations. However, the core Graphic Design (GRA and PGY) courses are only offered at the Willis Holcombe Center in Downtown Fort Lauderdale. Please consult the course schedule for specific semester locations.

Contact information: Program contact information can be found at http://www.broward.edu/academics/programs/graphicdesign/Pages/default.aspx.

Related Programs at Broward College:
Graphic Design Technology Associate of Science (2192)
Graphic Design Support Technical Certificate (6290)

<table>
<thead>
<tr>
<th>Required Courses</th>
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<tr>
<td>ART1201C 2-D Design</td>
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<tr>
<td>ART1300C Drawing</td>
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<td>PGY1801C Photoshop Design</td>
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<tr>
<td>GRA1151C Illustration Design 1</td>
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<td></td>
</tr>
<tr>
<td>GRA1201C Typographic Design</td>
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<td>GRA1144C Web Design 1</td>
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<td>GRA2121C Publication Design</td>
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</table>

Total Program Credit Hours 21

Notes:
- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Graphic Design Support Technical Certificate  
Program Code 6290

Program Description: The Graphic Design Program, offered at the Willis Holcombe Center (Downtown), is designed to prepare students for the rapidly changing computer driven graphic design industry. The Support Certificate prepares the student for the primary job titles including, Junior Designer, Application specialist. It is a subset of the Graphic Design Associate of Science degree.

Career Pathway: Arts, Humanities, Communication & Design (AHCD)

Program Entrance Requirements: HS Diploma or GED

Additional Program Information: Each class is limited to 17 students.

Location(s): The Art courses are offered at all BC locations. However, the core Graphic Design (GRA and PGY) courses are only offered at the Willis Holcombe Center in Downtown Fort Lauderdale. Please consult the course schedule for specific semester locations.

Contact information: Program contact information can be found at http://www.broward.edu/academics/programs/graphicdesign/Pages/default.aspx.

Related Programs at Broward College:
Graphic Design Production Technical Certificate (6289)
Graphic Design Technology Associate of Science (2192)

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ART1201C</td>
<td>2-D Design</td>
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<td>ART1300C</td>
<td>Drawing</td>
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<td>PGY1801C</td>
<td>Photoshop Design</td>
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<tr>
<td>GRA1151C</td>
<td>Illustration Design 1</td>
<td>3</td>
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<tr>
<td>GRA2121C</td>
<td>Publication Design</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Program Credit Hours 15

Notes:
- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Audio Technology Technical Certificate  
Program Code 6309

**Program Description:** The purpose of this program is to prepare students for initial employment as a sound technician or recording technician, or to provide supplemental training for persons previously or currently employed in these occupations. The content includes, but is not limited to, set up and configuration of a computer for audio applications, and the operation of basic reproduction, reinforcement and recording audio equipment.

**Career Pathway:** Arts, Humanities, Communication & Design (AHCD)

**Program Entrance Requirements:** HS Diploma or GED

**Additional Program Information:** N/A

**Location(s):** The Audio Technology courses are only offered at the A. Hugh Adams Central Campus. Please consult the course schedule for specific semester locations.

**Contact information:** Program contact information can be found at http://www.broward.edu/academics/programs/vpa/Pages/music-technology.aspx.

**Related Programs at Broward College:**
Music Technology Associate of Science (2206)

---

**Required Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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</thead>
<tbody>
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<td>MUS1360</td>
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<td>MUS2342C</td>
<td>Digital Audio I</td>
<td>3</td>
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<tr>
<td>MUS2344C</td>
<td>Introduction to Midi Systems and Sound Design</td>
<td>3</td>
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<tr>
<td>MUM1600C</td>
<td>Introduction to Recording Studio Procedures</td>
<td>3</td>
</tr>
<tr>
<td>MUS2348C</td>
<td>Digital Audio Music Production II</td>
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</table>

**Total Program Credit Hours** 15

**Notes:**
- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

**Students are strongly encouraged to meet with an advisor to create an educational plan.**
Film Production Fundamentals Technical Certificate  
Program Code 6343

**Program Description:** This program is designed to prepare students for initial employment as Film Production Technicians, Grips, Lighting Technicians, Video Editor, Camera Operators and other entry-level positions, or to provide supplemental training for those already employed in the field. This basic-to-intermediate certificate provides students with the computer-based editing and production skills needed to create film and video projects.

**Career Pathway:** Arts, Humanities, Communication, & Design (AHCD)

**Program Entrance Requirements:** HS Diploma or GED

**Additional Program Information:** This certificate program’s courses are contained within the structure of the Film Production Technology AS degree.

**Related Industry Certifications:** Upon completing this program, graduates will be eligible to sit for the following industry certifications/licenses: Adobe Certified Expert certification.

**Location(s):** The core Film Production (FIL) courses are only offered at the A. Hugh Adams Central Campus. Please consult the course schedule for specific semester locations.

**Contact information:** Prior to seeking general academic advisement on their home campuses, AS students majoring in Film Production Technology must first seek advisement through the office of the Visual & Performing Arts Department on Central Campus (Building 4, Room 130). Additional program information can be found at [http://www.broward.edu/academics/programs/vpa/Pages/default.aspx](http://www.broward.edu/academics/programs/vpa/Pages/default.aspx)

**Related Programs at Broward College:**
Film Production Technology Associate of Science (2510)  
Motion Picture Production Technical Certificate (6344)  
Motion Picture Post Production Technical Certificate (6345)  
Motion Picture Production Management Technical Certificate (6346)

<table>
<thead>
<tr>
<th>Required Courses</th>
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<tbody>
<tr>
<td>FIL1100 Screenwriting I</td>
<td>3</td>
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<tr>
<td>FIL2647 Film Producing and Production Management</td>
<td>3</td>
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<tr>
<td>FIL1420C Film Production I</td>
<td>4</td>
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<tr>
<td>FIL2432C Film Production II</td>
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<tr>
<td>FIL2438C Film Production III</td>
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<tr>
<td>FIL1552C Film Post Production I: Editing</td>
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<td>FIL2537C Film Post Production II: Sound Design</td>
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</table>

**Total Program Credit Hours** 24

**Notes:**
- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

**Students are strongly encouraged to meet with an advisor to create an educational plan.**
Motion Picture Production Technical Certificate  
Program Code 6344

Program Description: This program is designed to prepare students for initial employment as Film Production Technicians, Grips, Lighting Technicians, Camera Operators and other entry-level positions, or to provide supplemental training for those already employed in the field. This basic-to-intermediate certificate provides students with the production skills needed to create film and video projects.

Career Pathway: Arts, Humanities, Communication, & Design (AHCD)

Program Entrance Requirements: HS Diploma or GED

Additional Program Information: This certificate program’s courses are contained within the structure of the Film Production Technology AS degree.

Related Industry Certifications: N/A

Location(s): The core Film Production (FIL) courses are only offered at the A. Hugh Adams Central Campus. Please consult the course schedule for specific semester locations.

Contact information: Prior to seeking general academic advisement on their home campuses, AS students majoring in Film Production Technology must first seek advisement through the office of the Visual & Performing Arts Department on Central Campus (Building 4, Room 130). Additional program information can be found at http://www.broward.edu/academics/programs/vpa/Pages/default.aspx

Related Programs at Broward College:
Film Production Technology Associate of Science (2510)
Film Production Fundamentals Technical Certificate (6343)
Motion Picture Post Production Technical Certificate (6345)
Motion Picture Production Management Technical Certificate (6346)

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Credit Hours</th>
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<tr>
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<tr>
<td>FIL2432C Film Production II</td>
<td>4</td>
</tr>
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<td>FIL2438C Film Production III</td>
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</tr>
<tr>
<td>FIL2515C Film Production IV</td>
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</table>

Total Program Credit Hours 16

Notes:
- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Motion Picture Post Production Technical Certificate
Program Code 6345

Program Description: This program is designed to prepare students for initial employment as Film and Video Editor, Sound Editor/Designer and other entry-level positions, or to provide supplemental training for those already employed in the field. This basic-to-intermediate certificate provides students with the computer-based video and audio post production skills needed to create film and video projects.

Career Pathway: Arts, Humanities, Communication, & Design (AHCD)

Program Entrance Requirements: HS Diploma or GED

Additional Program Information: This certificate program’s courses are contained within the structure of the Film Production Technology AS degree.

Related Industry Certifications: Upon completing this program, graduates will be eligible to sit for the following industry certifications/licenses: Adobe Certified Expert certification.

Location(s): The core Film Production (FIL) courses are only offered at the A. Hugh Adams Central Campus. Please consult the course schedule for specific semester locations.

Contact information: Prior to seeking general academic advisement on their home campuses, AS students majoring in Film Production Technology must first seek advisement through the office of the Visual & Performing Arts Department on Central Campus (Building 4, Room 130). Additional program information can be found at http://www.broward.edu/academics/programs/vpa/Pages/default.aspx

Related Programs at Broward College:
Film Production Technology Associate of Science (2510)
Film Production Fundamentals Technical Certificate (6343)
Motion Picture Production Technical Certificate (6344)
Motion Picture Production Management Technical Certificate (6346)

<table>
<thead>
<tr>
<th>Required Courses</th>
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</thead>
<tbody>
<tr>
<td>FIL1420C Film Production I</td>
<td>4</td>
</tr>
<tr>
<td>FIL1552C Film Post Production I: Editing</td>
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<tr>
<td>FIL2537C Film Post Production II: Sound Design</td>
<td>3</td>
</tr>
<tr>
<td>FIL2471C Film Post Production III: Visual Effects</td>
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<tr>
<td>FIL2572C Film Post Production IV: Advanced Post</td>
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</tbody>
</table>

Total Program Credit Hours 16

Notes:
- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Motion Picture Production Management Technical Certificate
Program Code 6346

Program Description: This program is designed to prepare students for initial employment as a Production Assistant, Production Coordinator and other entry-level positions, or to provide supplemental training for those already employed in the field. This basic-to-intermediate certificate provides students with the producing and production management skills needed to create film and video projects.

Career Pathway: Arts, Humanities, Communication, & Design (AHCD)

Program Entrance Requirements: HS Diploma or GED

Additional Program Information: This certificate program’s courses are contained within the structure of the Film Production Technology AS degree.

Related Industry Certifications: Upon completing this program, graduates will be eligible to sit for the following industry certifications/licenses: Adobe Certified Expert certification.

Location(s): The core Film Production (FIL) courses are only offered at the A. Hugh Adams Central Campus. Please consult the course schedule for specific semester locations.

Contact information: Prior to seeking general academic advisement on their home campuses, AS students majoring in Film Production Technology must first seek advisement through the office of the Visual & Performing Arts Department on Central Campus (Building 4, Room 130). Additional program information can be found at http://www.broward.edu/academics/programs/vpa/Pages/default.aspx

Related Programs at Broward College:
Film Production Technology Associate of Science (2510)
Film Production Fundamentals Technical Certificate (6343)
Motion Picture Production Technical Certificate (6344)
Motion Picture Post Production Technical Certificate (6345)

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>FIL1100</td>
<td>Screenwriting I</td>
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<tr>
<td>FIL1420C</td>
<td>Film Production I</td>
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</tr>
<tr>
<td>FIL1552C</td>
<td>Film Post Production I: Editing</td>
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<td>FIL2537C</td>
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<tr>
<td>FIL2647</td>
<td>Film Producing and Production Management</td>
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</table>

Total Program Credit Hours 16

Notes:
- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Florida Education and Training Placement Information Program (FETPIP) Data

Arts, Humanities, Communication, & Design (AHCD)

<table>
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<th>Program Title</th>
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<th>2011-12 FETPIP Current Placement Rate</th>
<th>2012-13 FETPIP Current Placement Rate</th>
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</tr>
<tr>
<td>Internet Services Technology</td>
<td>AS</td>
<td>2196</td>
<td>1511080102</td>
<td>100%</td>
<td>100%</td>
<td>0%</td>
<td>100%</td>
</tr>
</tbody>
</table>
Business

What’s your passion? Are you a strategic thinker, do you have a knack for selling or are you more analytical and structured? If this sounds like you, you need to explore the options Broward College has for you in the business field. In today’s fast-paced environment a degree or a certificate from Broward College is what could set you apart from the rest of the crowd.

Articulation Agreements
Broward College has numerous articulation agreements with our local high schools and Technical Colleges. Students may be able to earn college credit for select programs completed at the secondary and postsecondary level. The programs listed below with an asterisk (*) have a current articulation agreement. For more information about articulation agreements, please contact the Career and Technical Education office at 954-201-7830. You can also find information online at www.broward.edu/careerpath

<table>
<thead>
<tr>
<th>Program Code</th>
<th>Program Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>1010</td>
<td>Associate of Arts</td>
</tr>
<tr>
<td>2100</td>
<td>Accounting Technology</td>
</tr>
<tr>
<td>2119</td>
<td>Business Administration</td>
</tr>
<tr>
<td>2121</td>
<td>Hospitality and Tourism Management*</td>
</tr>
<tr>
<td>2126</td>
<td>Marketing Management*</td>
</tr>
<tr>
<td>2172</td>
<td>Paralegal Studies</td>
</tr>
<tr>
<td>2203</td>
<td>Culinary Arts Management*</td>
</tr>
<tr>
<td>2508</td>
<td>Business Analytics</td>
</tr>
<tr>
<td>22112</td>
<td>Medical Office*</td>
</tr>
<tr>
<td>22113</td>
<td>Office Management*</td>
</tr>
<tr>
<td>T100</td>
<td>Supervision and Management</td>
</tr>
<tr>
<td>6240</td>
<td>Marketing Operations</td>
</tr>
<tr>
<td>6279</td>
<td>Office Support</td>
</tr>
<tr>
<td>6280</td>
<td>Office Specialist</td>
</tr>
<tr>
<td>6281</td>
<td>Medical Office Management</td>
</tr>
</tbody>
</table>

Median Earnings (for Broward County)

- Bookkeeper: $16.43/hr
- Paralegal: $20.39/hr
- First-Line Supervisor of Transportation: $26.66/hr
<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>6288</td>
<td>Business Specialist</td>
</tr>
<tr>
<td>6300</td>
<td>Guest Services Specialist</td>
</tr>
<tr>
<td>6301</td>
<td>Food and Beverages Management</td>
</tr>
<tr>
<td>6302</td>
<td>Rooms Division Management</td>
</tr>
<tr>
<td>6311</td>
<td>Entrepreneurship</td>
</tr>
<tr>
<td>6312</td>
<td>Event Management</td>
</tr>
<tr>
<td>6320</td>
<td>Business Operations</td>
</tr>
<tr>
<td>6323</td>
<td>Accounting Technology Operations</td>
</tr>
<tr>
<td>6324</td>
<td>Accounting Technology Specialist</td>
</tr>
<tr>
<td>62140</td>
<td>Accounting Technology Management</td>
</tr>
<tr>
<td>62671</td>
<td>Business Management</td>
</tr>
</tbody>
</table>
Associate of Arts
Program Code 1010

Program Description: The Associate of Arts (AA) degree is the traditional transfer degree. Students who earn the AA are able to remain at Broward College, transfer to another state college, or a state university in order to continue their education and pursue a baccalaureate degree.

Career Pathway: Business

Program Entrance Requirements: HS Diploma or GED

Additional Program Information: The Associate of Arts degree includes 36 credit hours of General Education and an additional 24 credit hours of electives. The elective credit hours should be selected based on the student’s transfer major. Students are encouraged to review the state’s Common Course Prerequisite Manual (www.flvc.org/partner-portal/common-prerequisite-manual) for additional guidance.

Location(s): Courses are offered at all college locations, including online. Please consult the course schedule for specific semester locations.

Bachelor Degree Majors Include:

<table>
<thead>
<tr>
<th>at Broward College</th>
<th>at a Transfer Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exceptional Student Education</td>
<td>Accounting</td>
</tr>
<tr>
<td>Middle Grades General Science Education</td>
<td>Advertising</td>
</tr>
<tr>
<td>Secondary Biology Education</td>
<td>Business</td>
</tr>
<tr>
<td>Middle Grades Mathematics Education</td>
<td>Economics</td>
</tr>
<tr>
<td>Secondary Mathematics Education</td>
<td>Finance</td>
</tr>
<tr>
<td>Environmental Science - Biosecurity</td>
<td>Management</td>
</tr>
<tr>
<td>Environmental Science - Physical Science</td>
<td>Hospitality Administration</td>
</tr>
<tr>
<td>Supervision and Management</td>
<td>Leisure Service Management</td>
</tr>
<tr>
<td>Technology Management</td>
<td>Public Administration</td>
</tr>
<tr>
<td>Information Technology</td>
<td>Real Estate</td>
</tr>
<tr>
<td>Supply Chain Management</td>
<td>Urban and Regional Planning</td>
</tr>
</tbody>
</table>

Recommended First Semester Courses

Exempt Students | Non-Exempt Students
ENC1101 Composition I 3 | ENC XXXX* 3
MAT/STA/MAC XXXX* 3 | MAT/STA/MAC XXXX* 3
CGS1060C Computer and Internet Literacy 3 | CGS1060C Computer and Internet Literacy 3
GEB1011 Introduction to Business 3 | GEB1011 Introduction to Business 3
ACG2001 Principles of Accounting 3 | ACG2001 Principles of Accounting 3
ECO2013 Principles of Macroeconomics 3 | ECO2013** Principles of Macroeconomics 3

*The specific English and Math course will depend on the student’s test score.
**Registration depends on the student’s test score.
- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

If the student attends part-time (less than 12 credits), it is highly recommended that the student complete English and Math in the first term.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Associate of Science in Accounting Technology
Program Code 2100

Program Description: The Associate of Science degree in Accounting Technology is designed for students who intend to seek employment in the accounting field and for those who are presently employed in accounting and desire advancement.

Career Pathway: Business

Program Entrance Requirements: HS Diploma or GED

Additional Program Information: N/A

Related Industry Certifications: Upon completing this program, graduates will be eligible to sit for the following industry certifications/licenses:
- QuickBooks Certified User

Location(s): All courses are offered at all BC locations. Please consult the course schedule for specific semester locations.

Contact information: Program contact information can be found at http://www.broward.edu/academics/programs/accounting/Pages/default.aspx.

Related Programs at Broward College:
Accounting Applications Technical Certificate (62140)
Accounting Technology Operations Technical Certificate (6323)
Accounting Technology Specialist Technical Certificate (6324)

<table>
<thead>
<tr>
<th>General Education Credit Hours</th>
<th>18</th>
<th>ENC1101 Composition I</th>
<th>3</th>
<th>CGS1060C Computer and Internet Literacy</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECO2013 Principles of Economics I</td>
<td>3</td>
<td>GEB1011 Introduction to Business</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td>3</td>
<td>OST2335 Communications in the Workplace</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biological/Physical Science</td>
<td>3</td>
<td>TAX2000 Income Tax I</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
<td>3</td>
<td>TAX2010 Income Tax II</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Speech Communications</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Core Requirements Credit Hours</th>
<th>36</th>
<th>ACG2001 Principles of Accounting I</th>
<th>3</th>
<th>Business Elective*</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACG2011 Principles of Accounting II</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACG2071 Managerial Accounting</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACG2100 Intermediate Accounting I</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACG2110 Intermediate Accounting II</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACG2450C Computerized Accounting Applications</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Specialized Course Credit Hours | 6 | Total Program Credit Hours | 60 |
## Associate of Science in Accounting Technology
### Program Code 2100

### Recommended Course Sequencing

#### First Year Term I
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACG2001</td>
<td>Principles of Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>CGS1060C</td>
<td>Computer and Internet Literacy</td>
<td>3</td>
</tr>
<tr>
<td>GEB1011</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>Elective*</td>
<td>Business Elective</td>
<td>3</td>
</tr>
<tr>
<td>GE Course</td>
<td>General Education Mathematics</td>
<td>3</td>
</tr>
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</table>

**Total Term Credit Hours** 15

#### First Year Term II
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACG2011</td>
<td>Principles of Accounting II</td>
<td>3</td>
</tr>
<tr>
<td>TAX2000</td>
<td>Income Tax I</td>
<td>3</td>
</tr>
<tr>
<td>BUL2241</td>
<td>Business Law I</td>
<td>3</td>
</tr>
<tr>
<td>OST2335</td>
<td>Communications in the Workforce</td>
<td>3</td>
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</tbody>
</table>

**Total Term Credit Hours** 12

#### First Year Term III
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACG2071</td>
<td>Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>Elective*</td>
<td>Business Elective</td>
<td>3</td>
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</table>

**Total Term Credit Hours** 6

#### Second Year Term I
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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</thead>
<tbody>
<tr>
<td>ACG2100</td>
<td>Intermediate Accounting I</td>
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</tr>
<tr>
<td>TAX2010</td>
<td>Income Tax II</td>
<td>3</td>
</tr>
<tr>
<td>ENC1101</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>ECO2013</td>
<td>Principles of Economics I</td>
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</tbody>
</table>

**Total Term Credit Hours** 12

#### Second Year Term II
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACG2110</td>
<td>Intermediate Accounting II</td>
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</tr>
<tr>
<td>GE Course</td>
<td>General Education Science</td>
<td>3</td>
</tr>
<tr>
<td>ACG2450C</td>
<td>Computerized Accounting Applications</td>
<td>3</td>
</tr>
<tr>
<td>GE Course</td>
<td>General Education Humanities</td>
<td>3</td>
</tr>
<tr>
<td>SPC1608</td>
<td>Public Speaking <strong>or</strong></td>
<td></td>
</tr>
<tr>
<td>SPC1024</td>
<td>Intro to Speech Communications</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Term Credit Hours** 15

**Total Program Credit Hours** 60

### Notes:
*Student may have to take MAT1033 or STA1001 based on placement score. If the student does not need MAT1033 or STA1001, the student must take a Business elective. Business Electives are satisfied by taking any of the following courses: ECO2023, FIN1100, GEB2112, MAN2021, MAN2604, MAR1011, MNA1161, and REE1040.

- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

**Students are strongly encouraged to meet with an advisor to create an educational plan.**
Associate of Science in Business Administration  
Program Code 2119

Program Description: The Associate of Science degree in Business Administration trains individuals to assume management or supervisory positions in business, industry, and government. It provides basic skills in a broad range of business functions including accounting, computer usage, management, and marketing.

Career Pathway: Business

Program Entrance Requirements: HS Diploma or GED

Additional Program Information: Internship Information  
http://broward.edu/studentresources/career/Pages/internships.aspx

Location(s): All courses are offered at all BC locations. Please consult the course schedule for specific semester locations.

Contact Information: Program contact information can be found at  
http://www.broward.edu/academics/programs/business/Pages/default.aspx

Related Programs at Broward College:
Business Management Technical Certificate (62671)  
Business Specialist Technical Certificate (6288)  
Business Operations Technical Certificate (6320)

<table>
<thead>
<tr>
<th>General Education Credit Hours</th>
<th>18</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC1101 Composition I</td>
<td>3</td>
</tr>
<tr>
<td>ECO2013 Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>MAC1105 College Algebra</td>
<td>3</td>
</tr>
<tr>
<td>Humanities</td>
<td>3</td>
</tr>
<tr>
<td>Biological/Physical Science</td>
<td>3</td>
</tr>
<tr>
<td>Speech Communications</td>
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<td>Core Requirements Credit Hours</td>
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<td>ACG2001 Principles of Accounting I</td>
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<tr>
<td>ACG2011 Principles of Accounting II</td>
<td>3</td>
</tr>
<tr>
<td>ACG2071 Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>CGS1060C Computer and Internet Literacy</td>
<td>3</td>
</tr>
<tr>
<td>ECO2023 Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>STA2023 Statistics</td>
<td>3</td>
</tr>
<tr>
<td>BUL2241 Business Law I</td>
<td>3</td>
</tr>
<tr>
<td>OST2335 Communication in the Workforce</td>
<td>3</td>
</tr>
<tr>
<td>CGS1510C Electronic Spreadsheet or</td>
<td></td>
</tr>
<tr>
<td>CTS1225C Excel Spreadsheet</td>
<td>3</td>
</tr>
<tr>
<td>MAR1011 Principles of Marketing or</td>
<td></td>
</tr>
<tr>
<td>GEB1011 Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>Elective* Business Elective</td>
<td>3</td>
</tr>
<tr>
<td>Specialization Credit Hours</td>
<td>9</td>
</tr>
<tr>
<td>(choose one specialization; must complete 9 credits)</td>
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</tr>
<tr>
<td>Banking</td>
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</tr>
<tr>
<td>ECO2220 Money and Banking</td>
<td>3</td>
</tr>
<tr>
<td>FIN1100 Personal Finance</td>
<td>3</td>
</tr>
<tr>
<td>MAN2021 Introduction to Management</td>
<td>3</td>
</tr>
<tr>
<td>Customer Service/Retail/Sales</td>
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</tr>
<tr>
<td>MKA1021 Salesmanship</td>
<td>3</td>
</tr>
<tr>
<td>MKA1511 Advertising</td>
<td>3</td>
</tr>
<tr>
<td>MNA1161 Introduction to Customer Service</td>
<td>3</td>
</tr>
<tr>
<td>Management</td>
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<tr>
<td>MAN2021 Introduction to Management</td>
<td>3</td>
</tr>
<tr>
<td>MAN2604 International Business Env.</td>
<td>3</td>
</tr>
<tr>
<td>MNA2345 Principles of Supervision</td>
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</table>

Total Program Credit Hours | 60
# Associate of Science in Business Administration
## Program Code 2119

### Recommended Course Sequencing

#### First Year Term I
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC1101</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>MAC1105</td>
<td>College Algebra</td>
<td>3</td>
</tr>
<tr>
<td>GEB1011</td>
<td>Introduction to Business</td>
<td></td>
</tr>
<tr>
<td>or</td>
<td>MAR1011 Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>SPC1024</td>
<td>Introduction to Speech Communications</td>
<td>or</td>
</tr>
<tr>
<td>or</td>
<td>SPC1608 Introduction to Public Speaking</td>
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</table>

**Total Term Credits Hours** 12

#### First Year Term II
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACG2001</td>
<td>Principles of Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>GE Course</td>
<td>General Education Humanities</td>
<td>3</td>
</tr>
<tr>
<td>STA2023</td>
<td>Statistics</td>
<td>3</td>
</tr>
<tr>
<td>CGS1060C</td>
<td>Computer and Internet Literacy</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Term Credits Hours** 12

#### First Year Term III
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACG2011</td>
<td>Principles of Accounting II</td>
<td>3</td>
</tr>
<tr>
<td>BUL2241</td>
<td>Business Law I</td>
<td>3</td>
</tr>
<tr>
<td>ECO2013</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>OST2335</td>
<td>Communication in the Workforce</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Term Credits Hours** 12

#### Second Year Term I
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACG2071</td>
<td>Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>Specialization Course</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ECO2023</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>CGS1510C</td>
<td>Electronic Spreadsheet</td>
<td></td>
</tr>
<tr>
<td>or</td>
<td>CTS1225C Excel Spreadsheet</td>
<td></td>
</tr>
</tbody>
</table>

**Total Term Credits Hours** 12

#### Second Year Term II
| Specialization Course |                    | 3       |
| GE Course             | General Education Science | 3       |
| Specialization Course |                    | 3       |
| Elective*             | Business Elective      | 3       |

**Total Term Credits Hours** 12

**Total Program Credit Credits** 60

### Notes:
*Program electives – Student may have to take MAT1033 or STA1001 based on placement score. If the student does not need MAT1033 or STA1001, the student must take a Business elective -any ACG, GEB, MKA, MNA, MAN, MAR, TRA, FIN, BUL, RMI, or ECO course.

- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

**Students are strongly encouraged to meet with an advisor to create an educational plan.**
**Associate of Science in Hospitality and Tourism Management**  
**Program Code 2121**

**Program Description:** The Hospitality and Tourism Management programs, offered at A. Hugh Adams Central Campus, emphasize the development of management skills needed in the hospitality industry. The general education requirements of the program develop students' abilities in leadership, communications, and interpersonal skills.

**Career Pathway:** Business

**Program Entrance Requirements:** HS Diploma or GED

**Additional Program Information:** Internship Information  
[http://broward.edu/studentresources/career/Pages/internships.aspx](http://broward.edu/studentresources/career/Pages/internships.aspx)

**Location(s):** While most of the program can be completed at any BC location, the Hospitality (HFT) courses are only offered at the A. Hugh Adams Central Campus. Please consult the course schedule for specific semester locations.

**Contact information:** Program contact information can be found at  
[http://www.broward.edu/academics/programs/hospitality/Pages/default.aspx](http://www.broward.edu/academics/programs/hospitality/Pages/default.aspx)

**Related Programs at Broward College:**  
- Food & Beverages Management Technical Certificate (6301)  
- Guest Services Specialist Technical Certificate (6300)  
- Rooms Division Management Technical Certificate (6302)  
- Event Management Technical Certificate (6312)

---

**General Education Credit Hours**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC1101</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>ECO2013</td>
<td>Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>Humanities</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Biological/Physical Science</td>
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<tr>
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<tr>
<td>Mathematics</td>
<td></td>
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<tr>
<td>Speech Communications</td>
<td></td>
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</table>

**Total General Education Credit Hours**

19

**Specialized Requirements Credit Hours**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
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<tbody>
<tr>
<td>HFT2600</td>
<td>Hospitality Law</td>
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<tr>
<td>BUL2241</td>
<td>Business Law 1</td>
<td>3</td>
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<tr>
<td>MAN2021</td>
<td>Intro to Management</td>
<td>3</td>
</tr>
<tr>
<td>MNA2345</td>
<td>Principles of Supervision</td>
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<tr>
<td>HFT2220</td>
<td>Organization and Personnel Management</td>
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<tr>
<td>HFT1210</td>
<td>Supervisory Development</td>
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**Total Specialized Requirements Credit Hours**

18

**Core Requirements Credit Hours**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
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<tr>
<td>ENC1102</td>
<td>Composition II</td>
<td>3</td>
</tr>
<tr>
<td>GEB1011</td>
<td>Intro to Business</td>
<td>3</td>
</tr>
<tr>
<td>HFT2250</td>
<td>Hotel Management</td>
<td>3</td>
</tr>
<tr>
<td>ECO2023</td>
<td>Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>HFT1050</td>
<td>Intro to Tourism Industries</td>
<td>3</td>
</tr>
<tr>
<td>CGS1060C</td>
<td>Computer and Internet Literacy</td>
<td>3</td>
</tr>
<tr>
<td>HFT2410</td>
<td>Front Office Systems/Procedures</td>
<td>3</td>
</tr>
<tr>
<td>Elective*</td>
<td>Business Elective</td>
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<tr>
<td>Elective*</td>
<td>Business Elective</td>
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</table>

**Total Core Requirements Credit Hours**

27

**Complete 1 of the following courses:**

**Complete 2 of the following courses:**

**Elective Any MKA course**

**Elective Any MAR course**

**Total Program Credit Hours**

64
Associate of Science in Hospitality and Tourism Management  
Program Code 2121

**Recommended Course Sequencing**

**First Year Term I**  
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ENC1101</td>
<td>Composition I</td>
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<tr>
<td>GE Course</td>
<td>General Education Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>HFT1050</td>
<td>Introduction to Tourism Industries</td>
<td>3</td>
</tr>
<tr>
<td>SPC1024</td>
<td>Introduction to Speech Communications or</td>
<td>3</td>
</tr>
<tr>
<td>SPC1608</td>
<td>Introduction to Public Speaking</td>
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**Total Term Credits Hours**  
12

**First Year Term II**  
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<thead>
<tr>
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</thead>
<tbody>
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<td>Composition II</td>
<td>3</td>
</tr>
<tr>
<td>GE Course</td>
<td>General Education Science</td>
<td>3</td>
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<tr>
<td>GE Course</td>
<td>General Education Science Lab</td>
<td>1</td>
</tr>
<tr>
<td>HFT2250</td>
<td>Hotel Management</td>
<td>3</td>
</tr>
<tr>
<td>CGS1060C</td>
<td>Computer and Internet Literacy</td>
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**Total Term Credits Hours**  
13

**First Year Term III**  
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ECO2013</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>HFT1210</td>
<td>Supervisory Development</td>
<td>3</td>
</tr>
<tr>
<td>HFT2410</td>
<td>Front Office Systems/Procedures</td>
<td>3</td>
</tr>
<tr>
<td>GEB1011</td>
<td>Introduction to Business</td>
<td>3</td>
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</table>

**Total Term Credits Hours**  
12

**Second Year Term I**  
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECO2023</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>HFT2220</td>
<td>Organization and Personnel Management</td>
<td>3</td>
</tr>
<tr>
<td>HFT2460</td>
<td>Financial Management</td>
<td>3</td>
</tr>
<tr>
<td>HFT2511</td>
<td>Convention and Group Business Marketing Management</td>
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**Total Term Credits Hours**  
12

**Second Year Term II**  
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>HFT2500</td>
<td>Marketing</td>
<td>3</td>
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<tr>
<td>HFT2600</td>
<td>Hospitality Law</td>
<td>3</td>
</tr>
<tr>
<td>GE Course</td>
<td>General Education Humanities</td>
<td>3</td>
</tr>
<tr>
<td>Elective*</td>
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<td>3</td>
</tr>
<tr>
<td>Elective*</td>
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</table>

**Total Term Credits Hours**  
15

**Total Program Credit Hours**  
64

**Notes:**
*Program electives – Student may have to take MAT1033 or STA1001 based on placement score. If the student does not need MAT1033 or STA1001, the student must take a Business elective -any ACG, GEB, MKA, MNA, MAN, MAR, FIN, FSS, HFT, BUL, or ECO course.

- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Associate of Science in Marketing Management  
Program Code 2126

Program Description: The Associate of Science degree in Marketing Management, offered at all BC locations, emphasizes the development of management and leadership skills needed in marketing occupations such as advertising, selling, entrepreneurship, and international business. This program may enable students to transfer to senior institutions that offer a bachelor’s degree in marketing.

Career Pathway: Business

Program Entrance Requirements: HS Diploma or GED

Additional Program Information: It is highly recommended that MAR1011, ACG2001, GEB1011 and MAN2021 be taken first to prepare the student for the more advanced courses.

Location(s): All courses are offered at all BC locations. Please consult the course schedule for specific semester locations.

Contact Information: Program contact information can be found at http://www.broward.edu/academics/programs/Pages/business.aspx

Related Programs at Broward College:
Marketing Operations Technical Certificate (6240)

<table>
<thead>
<tr>
<th>General Education Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>ENC1101 Composition I</td>
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<tr>
<td>ECO2013 Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics</td>
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</tr>
<tr>
<td>Humanities</td>
<td>3</td>
</tr>
<tr>
<td>Biological/Physical Science</td>
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<tr>
<td>Speech Communications</td>
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<table>
<thead>
<tr>
<th>Core Requirements Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>ACG2001 Principles of Accounting I</td>
<td>3</td>
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<tr>
<td>GEB2112 Entrepreneurship</td>
<td>3</td>
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<tr>
<td>MKA2042 Retailing</td>
<td>3</td>
</tr>
<tr>
<td>CGS1060C Computer and Internet Literacy</td>
<td>3</td>
</tr>
<tr>
<td>MKA1511 Advertising</td>
<td>3</td>
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</tbody>
</table>

| MKA1021 Salesmanship             | 3  |
| MKA1930 Seminar I: Marketing in Perspective | 3 |
| MNA1161 Introduction to Customer Service | 3 |
| MAN2021 Introduction to Management | 3 |
| MAR1011 Principles of Marketing  | 3  |
| GEB1011 Introduction to Business | 3  |
| Elective* Business Elective      | 3  |
| Elective* Business Elective      | 3  |
| Elective* Business Elective      | 3  |

Total Program Credit Hours: 60
### Recommended Course Sequencing

#### First Year Term I
- **ENC1101** Composition I 3
- **GE Course** General Education Humanities 3
- **GE Course** General Education Mathematics 3
- **GEB1011** Introduction to Business 3

**Total Term Credits Hours**: 12

#### First Year Term II
- **SPC1024** Introduction to Speech Communications **or** 3
- **SPC1608** Introduction to Public Speaking
- **ECO2013** Principles of Macroeconomics 3
- **GE Course** General Education Science 3
- **MAR1011** Principles of Marketing 3

**Total Term Credits Hours**: 12

#### First Year Term III
- **ACG2001** Principles of Accounting I 3
- **CGS1060C** Computer and Internet Literacy 3
- **MAN2021** Introduction to Management 3
- **MKA1930** Seminar I: Marketing in Perspective 3

**Total Term Credits Hours**: 12

#### Second Year Term I
- **MKA2042** Retailing 3
- **MNA1161** Introduction to Customer Service 3
- **MKA1511** Advertising 3
- **MKA1021** Salesmanship 3

**Total Term Credits Hours**: 12

#### Second Year Term II
- **GEB2112** Entrepreneurship 3
- **Elective** Business Elective 3
- **Elective** Business Elective 3
- **Elective** Business Elective 3

**Total Term Credits Hours**: 12

**Total Program Credit Credits**: 60

### Notes:
*Program electives – Student may have to take MAT1033 or STA1001 based on placement score. If the student must take MAT1033 or STA1001, the student will have to take two additional business electives from the list provided. If the student does not need MAT1033 or STA1001, the student must take three courses from the list provided. BUL2241, BUL2242, ECO2023, FIN1100, FIN2051, MAN2604, MAR2141, MKA2931, MNA1821C, QMB1001, GEB2949.*

- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

**Students are strongly encouraged to meet with an advisor to create an educational plan.**
Associate of Science in Paralegal Studies
Program Code 2172

Program Description: The Associate of Science degree in Paralegal Studies (Legal Assisting) is a program designed for students seeking a career in a law-related field as a paraprofessional. The program is approved by the American Bar Association (ABA). Upon successful completion of this program, a student will be able to work under the supervision of an attorney and perform many vital functions as a paralegal. Paralegals may be responsible for interviewing, investigation, research, document preparation, and other tasks. They cannot, however, engage in the actual practice of law by doing such activities as giving legal advice, setting fees, negotiating, or representing clients in court. Paralegals work in law firms, legal departments of major corporations, government agencies (federal, state and local), real estate departments of large businesses, trust departments of banks, brokerage houses, and insurance companies.

Career Pathway: Business

Program Entrance Requirements: HS Diploma or GED

Additional Program Information:

Transfer Credits
Broward College’s Paralegal Studies Program honors credits for courses taken at other institutions that are fully accredited by a regional or national accrediting agency recognized by the United States Department of Education, participate in the Florida statewide course numbering system, and are judged by the appropriate common course designation and numbering system faculty task forces to be academically equivalent to legal specialty courses offered at Broward College. All other legal specialty courses that are completed and transcripted from either an accredited institution or an ABA-approved program will be evaluated by the Program Manager for specific course equivalencies and how accepted credit(s) will be applied toward specific degree requirements. No student shall be awarded credit for legal specialty courses by exam or experiential learning.

Program Graduation Requirements
- Meet BC’s graduation requirements as listed in the Academic Programs and Graduation Requirements section of the College Catalog.
- Completion of 64 semester credit hours curriculum plan listed below with a degree GPA of 2.0 or higher.
- Complete all courses with a grade of “C” or higher.
- At least 25% of the total credits for the Associate of Science Degree in Paralegal Studies must be earned at Broward College, of which at least 12 credit hours must comprise Broward College legal specialty courses.

Internships
The Paralegal Studies Program offers the possibility of participating in an internship as a Program elective. For specific information, please contact the Program Manager or a Program advisor.
Associate of Science in Paralegal Studies  
Program Code 2172

**Location(s):** While most of the program can be completed at any BC location, the Paralegal Studies (PLA) courses are only offered at the Judson A. Samuels South Campus, the North Campus, and the Willis Holcombe Center. Please consult the course schedule for specific semester locations.

**Contact information:** Program contact information can be found at http://www.broward.edu/academics/programs/paralegalstudies/Pages/default.aspx

**Related Industry Certifications:** Upon completing this program, graduates will be eligible to sit for the following industry certifications:
- The Certified Paralegal Exam (CP exam) through the Association of Legal Assistants/Paralegals (NALA)
- The Paralegal CORE Competency Exam (PCCE) through the National Federation of Paralegal Associations (NFPA)

**Related Programs at Broward College:** N/A

<table>
<thead>
<tr>
<th>General Education Credit Hours</th>
<th>18</th>
<th>PLA1201</th>
<th>Civil Litigation</th>
<th>3</th>
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</thead>
<tbody>
<tr>
<td>ENC1101  Composition I</td>
<td>3</td>
<td>PLA1303</td>
<td>Criminal Litigation</td>
<td>3</td>
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<tr>
<td>PSY2012  General Psychology or</td>
<td>3</td>
<td>PLA1435</td>
<td>Corporations</td>
<td>3</td>
</tr>
<tr>
<td>SYG2000  Principles of Sociology</td>
<td>3</td>
<td>PLA1600</td>
<td>Probate Practice</td>
<td>3</td>
</tr>
<tr>
<td>SPC1608  Public Speaking</td>
<td>3</td>
<td>PLA1610</td>
<td>Procedures for Real Estate</td>
<td>3</td>
</tr>
<tr>
<td>Biological/Physical Science</td>
<td>3</td>
<td></td>
<td>Title Closing</td>
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<td>Mathematics</td>
<td>3</td>
<td>PLA1800</td>
<td>Domestic Relations</td>
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<td>Humanities</td>
<td>3</td>
<td>PLA1841</td>
<td>Immigration Law</td>
<td>3</td>
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<td></td>
<td></td>
<td>PLA2114</td>
<td>Legal Writing and Drafting</td>
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<tr>
<td></td>
<td></td>
<td>PLA2466</td>
<td>Debtor/Creditor Relations</td>
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<tr>
<td>Core Requirements Credit Hours</td>
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<td>PLA2762C</td>
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<td>CGS1060C  Computer and Internet Literacy</td>
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<td>Paralegal Studies Elective</td>
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<tr>
<td>OST1103C  Basic Keyboarding I</td>
<td>1</td>
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<td>BUL2241  Business Law I</td>
<td>3</td>
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<td>PLA1003  Intro to Paralegal Studies</td>
<td>3</td>
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<tr>
<td>PLA1104  Law Library</td>
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<tr>
<td><strong>Total Program Credit Hours</strong></td>
<td>64</td>
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**Associate of Science in Paralegal Studies**  
Program Code 2172

### Recommended Course Sequencing

**First Year Term I**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ENC1101</td>
<td>English Composition I</td>
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<tr>
<td>CGS1060C</td>
<td>Computer and Internet Literacy</td>
<td>3</td>
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<td>BUL2241</td>
<td>Business Law I</td>
<td>3</td>
</tr>
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<td>PLA1003</td>
<td>Introduction to Paralegal Studies</td>
<td>3</td>
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<tr>
<td>PLA1104</td>
<td>Law Library</td>
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**Total Term Credits Hours** 15

**First Year Term II**

<table>
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<th>Course Title</th>
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<tbody>
<tr>
<td>SPC1608</td>
<td>Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>PLA1303</td>
<td>Criminal Litigation</td>
<td>3</td>
</tr>
<tr>
<td>PLA1435</td>
<td>Corporations</td>
<td>3</td>
</tr>
<tr>
<td>PLA1201</td>
<td>Civil Litigation</td>
<td>3</td>
</tr>
<tr>
<td>PLA2114</td>
<td>Legal Writing and Drafting</td>
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**Total Term Credits Hours** 15

**First Year Term III**

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<tr>
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<tr>
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<td>Basic Keyboarding I</td>
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<tr>
<td>GE Course</td>
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**Total Term Credits Hours** 4

**Second Year Term I**

<table>
<thead>
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<th>Course Title</th>
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<td>Elective*</td>
<td>Paralegal Studies Elective</td>
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<tr>
<td>PLA1841</td>
<td>Immigration Law</td>
<td>3</td>
</tr>
<tr>
<td>PLA2762C</td>
<td>Paralegal Office Systems</td>
<td>3</td>
</tr>
<tr>
<td>PLA1610</td>
<td>Procedures for Real Estate Title Closing</td>
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</tr>
<tr>
<td>PSY2012</td>
<td>General Psychology or</td>
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</tr>
<tr>
<td>SYG2000</td>
<td>Principles of Sociology</td>
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**Total Term Credits Hours** 15

**Second Year Term II**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tr>
<td>PLA1600</td>
<td>Probate Practice</td>
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<td>PLA1800</td>
<td>Domestic Relations</td>
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<td>PLA2466</td>
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<td>General Education Science</td>
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<tr>
<td>GE Course</td>
<td>General Education Mathematics</td>
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</tbody>
</table>

**Total Term Credits Hours** 15

**Total Program Credits Hours** 64

**Notes:**
- Program elective – Student may have to take MAT1033 or STA1001 based on placement score. If the student does not need MAT1033 or STA1001, the student must take one of the following approved Paralegal Electives – BUL2242, CJL1062, ECO2013, FIN1100, OST2335, PLA2930, PLA2940, QMB1001, SPN1000.
- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

Students are strongly encouraged to meet with an advisor to create an educational plan.
**Associate of Science in Culinary Arts Management**  
**Program Code 2203**

**Program Description:** The Associate of Science degree in Culinary Arts Management emphasizes the development of practical culinary and management skills.

**Career Pathway:** Business

**Program Entrance Requirements:** HS Diploma or GED

**Additional Program Information:** The program is a joint program between Broward College and Broward Technical Colleges (Atlantic, McFatter, and Sheridan Technical Colleges). Students who enroll in this program are required to complete the Commercial Foods & Culinary Arts program at one of the Broward Technical College, in which 36 college credits will be awarded toward the Culinary Arts Management AS degree at Broward College. Students are also required to complete the Broward College courses listed below.

**Location(s):** While most of the program can be completed at any BC location, the Hospitality (HFT) courses are only offered at the A. Hugh Adams Central Campus. Please consult the course schedule for specific semester locations. The Culinary Arts (FOS and FSS) courses are awarded once the student has completed the appropriate program at the Technical College.

**Contact information:** Program contact information can be found at [http://www.broward.edu/academics/programs/hospitality/Pages/default.aspx](http://www.broward.edu/academics/programs/hospitality/Pages/default.aspx)

**Related Programs at Broward College:** N/A

<table>
<thead>
<tr>
<th>General Education Credit Hours</th>
<th>18</th>
<th>Core Requirements Credit Hours</th>
<th>10</th>
<th>Technical Requirements Credit Hours</th>
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<tbody>
<tr>
<td>ENC1101 Composition I</td>
<td>3</td>
<td>HFT2460 Financial Management</td>
<td>3</td>
<td>HFT1210 Supervisory Management</td>
<td>3</td>
<td><strong>FOS2201</strong> Food Service Sanitation and Safety</td>
<td>3</td>
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<tr>
<td>ECO2013 Macroeconomics</td>
<td>3</td>
<td>CGS1060C Computer &amp; Internet Literacy</td>
<td>3</td>
<td>FSS1203C Supervisory Management</td>
<td>3</td>
<td>FSS2247C Baking and Pastries I</td>
<td>3</td>
</tr>
<tr>
<td>Humanities</td>
<td>3</td>
<td>Elective* Business Elective</td>
<td>3</td>
<td>FSS1240C Supervisory Management</td>
<td>3</td>
<td>FSS1240C Classical Cuisine</td>
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<tr>
<td>Mathematics</td>
<td>3</td>
<td>GEB2430 Business Ethics</td>
<td>1</td>
<td>FSS22242C International and Regional Foods</td>
<td>3</td>
<td>FSS22500 Food and Beverage Cost</td>
<td>3</td>
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<tr>
<td>Biological/Physical Science</td>
<td>3</td>
<td>Speech Communications</td>
<td>3</td>
<td>FSS2248C Garde Manger</td>
<td>3</td>
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</table>
Associate of Science in Culinary Arts Management  
Program Code 2203

Recommended Course Sequencing

<table>
<thead>
<tr>
<th>First Year Term I</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC1101 Composition I</td>
<td>3</td>
</tr>
<tr>
<td>GE Course General Education Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>SPC1024 Introduction to Speech Communication or SPC1608 Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>ECO2013 Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Term Credits</strong></td>
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<table>
<thead>
<tr>
<th>First Year Term II</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE Course General Education Humanities</td>
<td>3</td>
</tr>
<tr>
<td>GE Course General Education Science</td>
<td>3</td>
</tr>
<tr>
<td>CGS1060C Computer and Internet Literacy</td>
<td>3</td>
</tr>
<tr>
<td>Elective* Business Elective</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Term Credits</strong></td>
<td><strong>12</strong></td>
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</table>

<table>
<thead>
<tr>
<th>First Year Term III</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>HFT2460 Financial Management</td>
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<tr>
<td>GEB2430 Business Ethics</td>
<td>1</td>
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<tr>
<td><strong>Total Term Credits</strong></td>
<td><strong>4</strong></td>
</tr>
</tbody>
</table>

| Total Technical Credit Hours | 36 |
| Total Program Credit Credits | 64 |

Notes:

*Program electives – Student may have to take MAT1033 or STA1001 based on placement score. If the student does not need MAT1033 or STA1001, the student must take a Business elective - any ACG, GEB, MKA, MNA, MAN, MAR, FIN, FSS, HFT, BUL, or ECO course.

- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Associate of Science in Business Analytics
Program Code 2508

Program Description: The Associate of Science degree in Business Analytics, offered at all campuses, trains individuals to assume business analyst positions in business, industry, and government. It provides basic skills in a broad range of business functions including accounting, computer usage, data visualization, and database report creation.

Career Pathway: Business

Program Entrance Requirements: HS Diploma or GED

Additional Program Information: N/A

Related Industry Certifications: Upon completing this program, graduates may be eligible to sit for the following industry certifications/licenses: Oracle SQL Certified Expert, Tableau Desktop Qualified Associate, Excel Office Specialist, CIW Web Foundations Associate, and Google Analytics Individual Qualification.

Location(s): While most of the program can be completed at any BC location, some courses may only be offered at the A. Hugh Adams Central Campus. Please consult the course schedule for specific semester locations.

Contact information: Program contact information can be found at http://www.broward.edu/academics/programs/Pages/business.aspx

Related Programs at Broward College: N/A

<table>
<thead>
<tr>
<th>General Education Credit Hours</th>
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</tr>
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<tbody>
<tr>
<td>ENC1101 Composition I</td>
<td>3</td>
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<tr>
<td>SPC1608 Introduction to Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>ECO2013 Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>STA2023 Statistics</td>
<td>3</td>
</tr>
<tr>
<td>Biological/Physical Science</td>
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<tr>
<td>Humanities</td>
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<table>
<thead>
<tr>
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<tr>
<td>ENC1102 Composition II</td>
<td>3</td>
</tr>
<tr>
<td>ACG2001 Accounting 1</td>
<td>3</td>
</tr>
<tr>
<td>CGS1060C Computer and Internet Literacy</td>
<td>3</td>
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</table>

CGS1510C Electronic Spreadsheet 3
ECO2023 Microeconomics 3
QMB2302C Applied Business Analytics 3
MKA2701C Data Collection and Presentation 3
ECO2220 Money and Banking 3
MAR1011 Principles of Marketing 3
MAR2644C Data Based Marketing 3

Electives* Business Electives 6
Electives** Computer Science Electives 6

Total Program Credit Hours 60

Notes:
*Business Electives – Student may have to take MAT1033 or STA1001 based on placement score. If the student does not meet MAT1033 or STA1001, the course will count as an elective course. The student must take two Business electives -any ACG, GEB, MKA, MNA, MAN, MAR, TRA, FIN, FSS, FOS, HFT, ISM, MTB, QMB, OST, BUL, or ECO course.
**Computer Science Electives - The student must take two Computer Science electives -any CTS, CGS, CEN, or COP course. Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.
Students are strongly encouraged to meet with an advisor to create an educational plan.
**Associate of Science in Office Administration - Medical Office Specialization**

**Program Code**: 22112

**Program Description**: The Office Administration Associate of Science Degree emphasizes competencies used by various office support personnel. Students will have the opportunity to develop expert skills in keyboarding, software applications, business ethics and communications, and office management.

**Career Pathway**: Business

**Program Entrance Requirements**: HS Diploma or GED

**Additional Program Information**: N/A

**Related Industry Certifications**: Upon completing this program, graduates will be eligible to sit for the Microsoft Office Specialist certification in Word.

**Location(s)**: General Education courses can be taken at any BC location. The program specific courses are offered at the North Campus, the Judson A. Samuels South Campus, and BC Online. Please consult the course schedule for specific semester locations.

**Contact information**: Program contact information can be found at [http://www.broward.edu/academics/programs/office/Pages/default.aspx](http://www.broward.edu/academics/programs/office/Pages/default.aspx)

**Related Programs at Broward College**: Medical Office Management Technical Certificate (6281)  
Office Specialist Technical Certificate (6280)  
Office Support Technical Certificate (6279)

<table>
<thead>
<tr>
<th>General Education Credit Hours</th>
<th>Core Requirements Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC1101 Composition I 3</td>
<td>OST1100C Keyboarding and Document Processing I 3</td>
</tr>
<tr>
<td>PSY2012 General Psychology 3</td>
<td>OST2764C Information Word Process Applications 3</td>
</tr>
<tr>
<td>Humanities 3 3</td>
<td>OST2335 Communications in the Workforce 3</td>
</tr>
<tr>
<td>Biological/Physical Science 3</td>
<td>OST2501 Office Management 3</td>
</tr>
<tr>
<td>Mathematics 3 3</td>
<td>OST2053 Successful Job Search 1</td>
</tr>
<tr>
<td><strong>Total Program Credits 60</strong></td>
<td><strong>Medical Office Specialization 12</strong></td>
</tr>
</tbody>
</table>

- **Elective** – Students must select from one of the following approved courses: FIN1100, GEB1011, ACG2450C, MNA2345, or MAT1033.

Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements. **Students are strongly encouraged to meet with an advisor to create an educational plan.**

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Broward College

211

College Catalog 2015-2016
Associate of Science in Office Administration – Office Management Specialization  
Program Code 22113

Program Description: The Office Administration Associate of Science Degree emphasizes competencies used by various office support personnel. Students will have the opportunity to develop expert skills in keyboarding, software applications, business ethics and communications, and office management.

Career Pathway: Business

Program Entrance Requirements: HS Diploma or GED

Additional Program Information: N/A

Related Industry Certifications: Upon completing this program, graduates will be eligible to sit for the Microsoft Office Specialist certification in Word.

Location(s): General Education courses can be taken at any BC location. The program specific courses are offered at the North Campus, the Judson A. Samuels South Campus, and BC Online. Please consult the course schedule for specific semester locations.

Contact information: Program contact information can be found at http://www.broward.edu/academics/programs/office/Pages/default.aspx

Related Programs at Broward College:
Medical Office Management Technical Certificate (6281)
Office Specialist Technical Certificate (6280)
Office Support Technical Certificate (6279)

<table>
<thead>
<tr>
<th>General Education Credit Hours</th>
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<th>Applications</th>
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<tr>
<td>ENC1101 Composition I</td>
<td>3</td>
<td>OST2764C</td>
<td>Information Word Process</td>
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<tr>
<td>PSY2012 General Psychology</td>
<td>3</td>
<td>OST2335</td>
<td>Communications in the Workforce</td>
</tr>
<tr>
<td>Humanities</td>
<td>3</td>
<td>OST2501</td>
<td>Office Management</td>
</tr>
<tr>
<td>Biological/Physical Science</td>
<td>3</td>
<td>OST2053</td>
<td>Successful Job Search</td>
</tr>
<tr>
<td>Mathematics</td>
<td>3</td>
<td>OST2949</td>
<td>Co-op or Elective**</td>
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<table>
<thead>
<tr>
<th>Core Requirements Credit Hours</th>
<th>33</th>
<th>Office Management Specialization</th>
<th>12</th>
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</thead>
<tbody>
<tr>
<td>OST1100C Keyboarding and Document Processing I</td>
<td>3</td>
<td>MAN2021 Introduction to Management</td>
<td>3</td>
</tr>
<tr>
<td>CGS1060C* Computer and Internet Literacy</td>
<td>3</td>
<td>CGS1540C Database Management</td>
<td>3</td>
</tr>
<tr>
<td>GEB2430 Business Ethics</td>
<td>1</td>
<td>OST1811C Desktop Publishing</td>
<td>3</td>
</tr>
<tr>
<td>QMB1001 Business Math</td>
<td>3</td>
<td>CGS1510C Electronic Spreadsheet</td>
<td>3</td>
</tr>
<tr>
<td>OST1330 Business English</td>
<td>1</td>
<td>Accounting Survey</td>
<td>3</td>
</tr>
<tr>
<td>OST1355 Records Management</td>
<td>3</td>
<td>Accounting Survey</td>
<td>3</td>
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<tr>
<td>ACG1003 Accounting Survey</td>
<td>3</td>
<td>Accounting Survey</td>
<td>3</td>
</tr>
<tr>
<td>ACG2450C Computerized Accounting</td>
<td></td>
<td>Total Program Credits</td>
<td>60</td>
</tr>
</tbody>
</table>

Notes:
*Students who pass the Computer Competency Test and therefore do not need to take CGS1060C are required to take an approved elective in order to earn the 3 credits.
**Elective – Students must select from one of the following approved courses: FIN1100, GEB1011, ACG2450C, MNA2345, or MAT1033.
- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Bachelor of Applied Science in Supervision and Management  
Program Code T100

**Program Description:** The Bachelor of Applied Science Degree in Supervision and Management is designed to provide individuals who hold an Associate in Science (AS) or Associate in Applied Science (AAS) degree the opportunity to further their education. Students with the Associate in Arts (AA) degree are also welcome to apply. Students completing this program will have the skills and knowledge required to become successful managers and leaders within public, private, and non-profit organizations. The curriculum offers a learner-centered practical approach to understanding supervision and management.

**Career Pathway:** Business

**Program Entrance Requirements:** Minimum AA, AS or AAS degree or 60 completed semester credit hours (from a Regionally Accredited Institution) and 2.0 out of 4.0 GPA in all previous post-secondary work. Students with an Associate in Arts degree or 60 credit hours but not holding a degree may be admitted to the program if the AS General Education requirements have been satisfied and other criteria are met upon the recommendation of the Dean of Business and Management Programs.

**Additional Program Information:** N/A

**Related Industry Certifications:** N/A

**Foreign Language Requirement:** Students must successfully complete the foreign language requirement as prescribed in college policy and the college catalog.

**Location(s):** Courses are offered at all BC locations. Please consult the course schedule for specific semester locations.

**Contact information:** Program contact information can be found at [http://www.broward.edu/academics/programs/supervisionmanagement/Pages/default.aspx](http://www.broward.edu/academics/programs/supervisionmanagement/Pages/default.aspx)

---

<table>
<thead>
<tr>
<th>General Education Credit Hours</th>
<th>18</th>
<th>MAN3240</th>
<th>Applied Organizational Behavior 3</th>
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</thead>
<tbody>
<tr>
<td>Communication</td>
<td></td>
<td>MAN3310</td>
<td>Human Resource Management 3</td>
</tr>
<tr>
<td>Humanities</td>
<td></td>
<td>MAN393X</td>
<td>Seminar in Business and Management* 1</td>
</tr>
<tr>
<td>Biological/Physical Science</td>
<td></td>
<td>MAR3802</td>
<td>Marketing Management 3</td>
</tr>
<tr>
<td>Biological/Physical Science Lab</td>
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<td>MAN393X</td>
<td>Seminar in Business and Management* 1</td>
</tr>
<tr>
<td>Wellness</td>
<td></td>
<td>MAN393X</td>
<td>Leadership Challenges and Supervision 3</td>
</tr>
<tr>
<td>Mathematics</td>
<td></td>
<td>MAN4120</td>
<td>Managing Cultural Diversity 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MAN4102</td>
<td>Operations Management 3</td>
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<tr>
<td></td>
<td></td>
<td>MAN4504</td>
<td>Strategic Management and Policy** 3</td>
</tr>
<tr>
<td>Upper Division Credit Hours</td>
<td>38</td>
<td>MAN4720</td>
<td>Capstone Project** 3</td>
</tr>
<tr>
<td>BUL3130 Business Law and Ethics</td>
<td>3</td>
<td>MAN4900</td>
<td></td>
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<tr>
<td>FIN3400 Principles of Financial Management</td>
<td>3</td>
<td></td>
<td></td>
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<tr>
<td>GEB3213 Business Writing</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAN3303 Management and Leadership</td>
<td>3</td>
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</table>

Broward College

College Catalog 2015-2016
**Bachelor of Applied Science in Supervision and Management**  
**Program Code T100**

**Recommended Course Sequencing** (students admitted with an Associate of Science degree)

<table>
<thead>
<tr>
<th>Term I</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAN3240 Applied Organizational Behavior</td>
<td>3</td>
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<tr>
<td>GEB3213 Business Writing</td>
<td>3</td>
</tr>
<tr>
<td>GE Course Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>FIN3400 Principles of Financial Management</td>
<td>3</td>
</tr>
<tr>
<td>MAN393X Seminar in Business &amp; Management*</td>
<td>1</td>
</tr>
<tr>
<td>Total Term Credit Hours</td>
<td>13</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term II</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAR3802 Marketing Management</td>
<td>3</td>
</tr>
<tr>
<td>MAN3310 Human Resource Management</td>
<td>3</td>
</tr>
<tr>
<td>BUL3130 Business Law &amp; Ethics</td>
<td>3</td>
</tr>
<tr>
<td>GE Course Biological/Physical Science</td>
<td>3</td>
</tr>
<tr>
<td>GE Course Biological/Physical Science Lab</td>
<td>1</td>
</tr>
<tr>
<td>Total Term Credit Hours</td>
<td>13</td>
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</table>

<table>
<thead>
<tr>
<th>Term III</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>MAN393X Seminar in Business &amp; Management*</td>
<td>1</td>
</tr>
<tr>
<td>MAN4504 Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>GE Course General Education Wellness</td>
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<table>
<thead>
<tr>
<th>Term I</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>MAN4720 Strategic Management &amp; Policy**</td>
<td>3</td>
</tr>
<tr>
<td>MAN3303 Management &amp; Leadership</td>
<td>3</td>
</tr>
<tr>
<td>GE Course Communications</td>
<td>3</td>
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<tr>
<td>GE Course General Education Humanities</td>
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<tr>
<td>Total Term Credit Hours</td>
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</tr>
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</table>

<table>
<thead>
<tr>
<th>Term II</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAN4900 Capstone Project**</td>
<td>3</td>
</tr>
<tr>
<td>MAN4102 Managing Cultural Diversity</td>
<td>3</td>
</tr>
<tr>
<td>MAN4120 Leadership Challenges &amp; Supervision</td>
<td>3</td>
</tr>
<tr>
<td>GE Course Social/Behavioral Science</td>
<td>3</td>
</tr>
<tr>
<td>Total Term Credit Hours</td>
<td>12</td>
</tr>
</tbody>
</table>

**Total General Education Requirements** 18  
**Total Upper Division Credit Hours** 38

**Notes:** Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

*MAN393X: MAN3930, MAN3931 and MAN3932 are offered on a rotational basis, with only one course offered per term. Seminar topics change frequently. A total of two semester credits from these offerings is required.

**It is recommended that students complete MAN4720 and MAN4900 during their final two terms.**

*General Education and Lower Division Elective Courses will vary based on a student’s transcript.*

Students are strongly encouraged to meet with a BAS advisor to create an educational plan.
Marketing Operations Technical Certificate
Program Code 6240

Program Description: The Marketing Operations Technical Certificate, offered at all BC locations, emphasizes the development of management and leadership skills needed in marketing occupations such as advertising, selling, entrepreneurship, and international business. This program enables students to continue on for an Associate of Science degree in Marketing Management.

Career Pathway: Business

Program Entrance Requirements: HS Diploma or GED

Additional Program Information: N/A

Location(s): All courses are offered at all BC locations. Please consult the course schedule for specific semester locations.

Contact Information: Program contact information can be found at http://www.broward.edu/academics/programs/Pages/business.aspx

Related Programs at Broward College:
Marketing Management Associate of Science (2126)

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAR1011 Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>MKA1021 Salesmanship</td>
<td>3</td>
</tr>
<tr>
<td>MKA1930 Seminar I: Marketing in Perspective</td>
<td>3</td>
</tr>
<tr>
<td>MNA1821C Introduction to E-Commerce</td>
<td>3</td>
</tr>
<tr>
<td>GEB1011 Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>OST2335 Communications in the Workforce</td>
<td>3</td>
</tr>
<tr>
<td>MKA1511 Advertising</td>
<td>3</td>
</tr>
<tr>
<td>MAR2141 International Marketing</td>
<td>3</td>
</tr>
<tr>
<td>MNA1161 Introduction to Customer Service or</td>
<td>3</td>
</tr>
<tr>
<td>MKA2042 Retailing</td>
<td>3</td>
</tr>
<tr>
<td>GEB2112 Entrepreneurship</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Program Credit Hours: 30

Notes:
- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Office Support Technical Certificate
Program Code 6279

Program Description: This technical certificate is designed to provide the necessary entry-level skills for students who plan to seek employment in office positions such as, file clerk, typist, data entry, receptionist, general office assistant, clerical service specialist, records management specialist, medical posting clerk, medical receptionist, medical secretary, medical records, or to provide supplemental training for persons previously or currently employed in these occupations.

Career Pathway: Business

Program Entrance Requirements: HS Diploma or GED

Additional Program Information: N/A

Related Industry Certifications: Upon completing this program, graduates will be eligible to sit for the Microsoft Office Specialist certification in Word.

Location(s): The program specific courses are offered at the North Campus, the Judson A. Samuels South Campus, and BC Online. Please consult the course schedule for specific semester locations.

Contact information: Program contact information can be found at http://www.broward.edu/academics/programs/office/Pages/default.aspx

Related Programs at Broward College:
- Office Administration Associate of Science Medical Office Specialization (22112)
- Office Administration Associate of Science Office Management Specialization (22113)
- Medical Office Management Technical Certificate (6281)
- Office Specialist Technical Certificate (6280)

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credit</th>
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</thead>
<tbody>
<tr>
<td>CGS1060C</td>
<td>Computer and Internet Literacy</td>
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</tr>
<tr>
<td>OST1100C</td>
<td>Keyboarding and Document Processing I</td>
<td>3</td>
</tr>
<tr>
<td>OST2335</td>
<td>Communications in the Workforce</td>
<td>3</td>
</tr>
<tr>
<td>OST2764C</td>
<td>Advanced Word</td>
<td>3</td>
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</tbody>
</table>

Total Program Credit Hours 12

Notes:
- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Office Specialist Technical Certificate  
Program Code 6280

**Program Description:** This technical certificate is designed to provide the necessary entry-level skills for students who plan to seek employment in office positions such as, file clerk, typist, data entry, receptionist, general office assistant, clerical service specialist, records management specialist, medical posting clerk, medical receptionist, medical secretary, medical records, or to provide supplemental training for persons previously or currently employed in these occupations.

**Career Pathway:** Business

**Program Entrance Requirements:** HS Diploma or GED

**Additional Program Information:** N/A

**Related Industry Certifications:** Upon completing this program, graduates will be eligible to sit for the Microsoft Office Specialist certification in Word.

**Location(s):** The program specific courses are offered at the North Campus, the Judson A. Samuels South Campus, and BC Online. Please consult the course schedule for specific semester locations.

**Contact information:** Program contact information can be found at [http://www.broward.edu/academics/programs/office/Pages/default.aspx](http://www.broward.edu/academics/programs/office/Pages/default.aspx)

**Related Programs at Broward College:**
- Office Administration Associate of Science Medical Office Specialization (22112)
- Office Administration Associate of Science Office Management Specialization (22113)
- Medical Office Management Technical Certificate (6281)
- Office Support Technical Certificate (6279)

**Required Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGS1060C</td>
<td>Computer and Internet Literacy</td>
<td>3</td>
</tr>
<tr>
<td>OST1100C</td>
<td>Keyboarding and Document Processing I</td>
<td>3</td>
</tr>
<tr>
<td>OST2335</td>
<td>Communications in the Workforce</td>
<td>3</td>
</tr>
<tr>
<td>OST2764C</td>
<td>Advanced Word</td>
<td>3</td>
</tr>
<tr>
<td>OST1355</td>
<td>Records Management</td>
<td>3</td>
</tr>
<tr>
<td>ACG1003</td>
<td>Accounting Survey</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Program Credit Hours** 18

**Notes:**
- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

**Students are strongly encouraged to meet with an advisor to create an educational plan.**
Medical Office Management Technical Certificate  
Program Code 6281

**Program Description:** This technical certificate is designed to provide the necessary entry-level skills for students who plan to seek employment in office positions such as, file clerk, typist, data entry, receptionist, general office assistant, clerical service specialist, records management specialist, medical posting clerk, medical receptionist, medical secretary, medical records, or to provide supplemental training for persons previously or currently employed in these occupations.

**Career Pathway:** Business

**Program Entrance Requirements:** HS Diploma or GED

**Additional Program Information:** N/A

**Related Industry Certifications:** Upon completing this program, graduates will be eligible to sit for the Microsoft Office Specialist certification in Word.

**Location(s):** The program specific courses are offered at the North Campus, the Judson A. Samuels South Campus, and BC Online. Please consult the course schedule for specific semester locations.

**Contact information:** Program contact information can be found at [http://www.broward.edu/academics/programs/office/Pages/default.aspx](http://www.broward.edu/academics/programs/office/Pages/default.aspx)

**Related Programs at Broward College:**
- Office Administration Associate of Science Medical Office Specialization (22112)
- Office Administration Associate of Science Office Management Specialization (22113)
- Office Specialist Technical Certificate (6280)
- Office Support Technical Certificate (6279)

### Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGS1060C</td>
<td>Computer and Internet Literacy</td>
<td>3</td>
</tr>
<tr>
<td>OST1100C</td>
<td>Keyboarding and Document Processing I</td>
<td>3</td>
</tr>
<tr>
<td>OST2335</td>
<td>Communications in the Workforce</td>
<td>3</td>
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<tr>
<td>OST2764C</td>
<td>Advanced Word</td>
<td>3</td>
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<tr>
<td>OST1355</td>
<td>Records Management</td>
<td>3</td>
</tr>
<tr>
<td>ACG1003</td>
<td>Accounting Survey</td>
<td>3</td>
</tr>
<tr>
<td>QMB1001</td>
<td>Business Math</td>
<td>3</td>
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<tr>
<td>OST1257C</td>
<td>Medical Terminology for the Administrative Assistant</td>
<td>3</td>
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<tr>
<td>OST2053</td>
<td>Successful Job Search</td>
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<tr>
<td>OST2455C</td>
<td>Medical Billing and Coding I</td>
<td>3</td>
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<tr>
<td>OST2456C</td>
<td>Medical Billing and Coding II</td>
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<tr>
<td>OST2464C</td>
<td>Medical Computer Applications</td>
<td>3</td>
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</tbody>
</table>

**Total Program Credit Hours** 34

**Notes:**
- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Business Specialist Technical Certificate
Program Code 6288

Program Description: The Business Specialist Technical Certificate is designed to prepare students for entry-level positions in a variety of business environments, or to provide supplemental training for persons previously or currently employed in management and supervisory occupations. The content of instruction includes the areas of planning, organizing, directing, and controlling of a business, with the emphasis on selected theories of management and decision making and the knowledge and understanding necessary for managing people and functions. This certificate can be taken as a stand-alone program or in conjunction with the AS degree in Business Administration or another related technical certificate.

Career Pathway: Business

Program Entrance Requirements: HS Diploma or GED

Additional Program Information: Internship Information
http://broward.edu/studentresources/career/Pages/internships.aspx

Location(s): All courses are offered at all BC locations and online. Please consult the course schedule for specific semester locations.

Contact information: Program contact information can be found at http://www.broward.edu/academics/programs/business/Pages/default.aspx

Related Programs at Broward College:
Business Administration Associate in Science (2119)
Business Management Technical Certificate (62671)
Business Operations Technical Certificate (6320)

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Choose one course (3 credits) from one of the following areas:</th>
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</thead>
<tbody>
<tr>
<td>CGS1060C  Computer and Internet Literacy</td>
<td>Banking</td>
</tr>
<tr>
<td>ACG2001 Principles of Accounting I</td>
<td>ECO2013 Principles of Macroeconomics</td>
</tr>
<tr>
<td>ACG2011 Principles of Accounting II</td>
<td>ECO2023 Principles of Microeconomics</td>
</tr>
<tr>
<td>ACG2071 Managerial Accounting</td>
<td>ECO2220 Money and Banking</td>
</tr>
<tr>
<td>FIN1100 Personal Finance</td>
<td>FIN1100 Personal Finance</td>
</tr>
<tr>
<td></td>
<td>Customer Service</td>
</tr>
<tr>
<td></td>
<td>MKA1021 Salesmanship</td>
</tr>
<tr>
<td></td>
<td>MKA1511 Advertising</td>
</tr>
<tr>
<td>Urban Business</td>
<td>MNA1161 Introduction to Customer Service</td>
</tr>
<tr>
<td></td>
<td>Management</td>
</tr>
<tr>
<td></td>
<td>MAN2021 Introduction to Management</td>
</tr>
<tr>
<td>Management</td>
<td>MAN2604 International Business Environment</td>
</tr>
<tr>
<td></td>
<td>MNA2345 Principles of Supervision</td>
</tr>
<tr>
<td>Total Program Credit Hours 12</td>
<td></td>
</tr>
</tbody>
</table>

Notes: Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements. Students are strongly encouraged to meet with an advisor to create an educational plan.
Guest Services Specialist Technical Certificate
Program Code 6300

Program Description: The Guest Services Specialist Certificate is designed to qualify successful completers for upwardly mobile positions in the lodging industry.

Career Pathway: Business

Program Entrance Requirements: HS Diploma or GED

Additional Program Information: Internship Information
http://broward.edu/studentresources/career/Pages/internships.aspx

Location(s): Hospitality (HFT) Classes are only offered at the A. Hugh Adams Central Campus. Please consult the course schedule for specific semester locations.

Contact information: Program contact information can be found at http://www.broward.edu/academics/programs/hospitality/Pages/default.aspx.

Related Programs at Broward College:
Hospitality and Tourism Management Associate of Science (2121)
Food & Beverages Management Certificate (6301)
Rooms Division Management Certificate (6302)
Event Management Technical Certificate (6312)

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>HFT1210 Supervisory Development</td>
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</tr>
<tr>
<td>QMB1001 Business Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>HFT2250 Hotel Management</td>
<td>3</td>
</tr>
<tr>
<td>HFT2410 Front Office Systems/Procedures</td>
<td>3</td>
</tr>
<tr>
<td>HFT2220 Organization and Personnel Management</td>
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</tbody>
</table>

Total Program Credit Hours 15

Notes:
- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Food & Beverages Management Technical Certificate
Program Code 6301

Program Description: The Food & Beverages Management Certificate is designed to qualify successful completers for upwardly mobile positions in the food & beverages industry.

Career Pathway: Business

Program Entrance Requirements: HS Diploma or GED

Additional Program Information: Internship Information can be found at http://broward.edu/studentresources/career/Pages/internships.aspx.

Location(s): All Hospitality (HFT) prefixed course are only offered at the A. Hugh Adams Central Campus. Please consult the course schedule for specific semester locations.

Contact Information: Program contact information can be found at http://www.broward.edu/academics/programs/hospitality/Pages/default.aspx.

Related Programs at Broward College:
Guest Services Specialist Technical Certificate (6300)
Rooms Division Management Technical Certificate (6302)
Hospitality and Tourism Management Associate in Science (2121)
Event Management Technical Certificate (6312)

Required Courses
HFT1210 Supervisory Development 3
HFT2600 Hospitality Law 3
QMB1001 Business Mathematics 3
HFT2250 Hotel Management 3
HFT2410 Front Office Systems/Procedures 3
MNA1161 Introduction to Customer Service 3
OST2335 Communications in the Workforce 3
HFT2220 Organization and Personnel Management 3
FSS2500 Food Service Costing & Controls 3
CGS1060C Computer and Internet Literacy 3

Total Program Credit Hours 30

Notes:
- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Rooms Division Management Technical Certificate  
Program Code 6302

Program Description: The Rooms Division Management Certificate is designed to qualify successful completers for upwardly mobile positions in the lodging industry.

Career Pathway: Business

Program Entrance Requirements: HS Diploma or GED

Additional Program Information: Internship Information can be found at http://broward.edu/studentresources/career/Pages/internships.aspx

Location(s): All Hospitality (HFT) prefixed course are only offered at the A. Hugh Adams Central Campus. Please consult the course schedule for specific semester locations.

Contact information: Program contact information can be found at http://www.broward.edu/academics/programs/hospitality/Pages/default.aspx.

Related Programs at Broward College:
Hospitality and Tourism Management Associate of Science Degree (2121)
Food & Beverages Management Technical Certificate (6301)
Guest Services Specialist Technical Certificate (6300)
Event Management Technical Certificate (6312)

Required Courses
CGS1060C  Computer and Internet Literacy  3
HFT2250  Hotel Management  3
HFT2410  Front Office Systems/Procedures  3
HFT1050  Intro to Tourism Industry  3
Business Group*  3
Marketing Group**  6
Law Group***  3
Management Group****  3
Finance Accounting Group*****  3

Total Program Credits Hours  30

Notes:
**Marketing Group: select from - MKA1511, MAR2141, MKA1930, MKA2042, MKA2931, MKA2932, MAR1011, HFT2500, HFT2511, MKA1021
***Law Group: select from - BUL2241, BUL2242, HFT2600
****Management Group: select from - HFT1210, MAN2021, MNA2345, HFT2220
*****Finance Accounting Group: select from - ACG2011, ACG2071, ACG2001, HFT2460
- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Entrepreneurship Technical Certificate
Program Code 6311

Program Description: The purpose of this program is to teach students the fundamentals of starting and operating a business venture while presenting entrepreneurship as a viable career option. Coursework covers marketing, opportunity recognition, business planning, cash flow and financial management, market research, e-commerce, and how to understand and work with an accounting system.

Career Pathway: Business

Program Entrance Requirements: HS Diploma or GED

Additional Program Information: Students are required to complete a co-op Internship.

Locations: Courses for this Certificate may be taken at any college location—except for GEB2949 that will be held at North Campus and The Innovation HUB. Please consult the course schedule for specific semester locations.

Contact Information: Program contact information can be found at http://www.broward.edu/academics/programs/business/Pages/default.aspx.

Related Programs at Broward College:
Business Administration Associate of Science (2119)
Business Management Technical Certificate (62671)
Business Specialist Technical Certificate (6288)
Business Operations Technical Certificate (6320)

Required Courses
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACG2001</td>
<td>Principles of Accounting</td>
<td>3</td>
</tr>
<tr>
<td>GEB2112</td>
<td>Entrepreneurship</td>
<td>3</td>
</tr>
<tr>
<td>MAR1011</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>GEB2949</td>
<td>Co-op Work Experience</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Program Credit Hours 12

Notes:
- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Event Management Technical Certificate  
Program Code 6312  

Program Description: The Event Planning Management Certificate is designed to qualify successful completers for upwardly mobile positions in the lodging industry.

Career Pathway: Business

Program Entrance Requirements: HS Diploma or GED

Additional Program Information: Internship Information can be found at http://broward.edu/studentresources/career/Pages/internships.aspx

Location(s): All Hospitality (HFT) prefixed course are only offered at the A. Hugh Adams Central Campus. Please consult the course schedule for specific semester locations.

Contact information: Program contact information can be found at http://www.broward.edu/academics/programs/hospitality/Pages/default.aspx.

Related Programs at Broward College:  
Hospital and Tourism Management Associate of Science (2121)  
Guest Services Specialist Technical Certificate (6300)  
Food and Beverage Management Technical Certificate (6301)  
Rooms Division Management Technical Certificate (6302)

Required Courses  
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGS1060C</td>
<td>Computer and Internet Literacy</td>
<td>3</td>
</tr>
<tr>
<td>HFT1050</td>
<td>Introduction to Tourism Industries Administration</td>
<td>3</td>
</tr>
<tr>
<td>HFT2250</td>
<td>Hotel Management</td>
<td>3</td>
</tr>
<tr>
<td>HFT2410</td>
<td>Front Office Systems and Procedures</td>
<td>3</td>
</tr>
<tr>
<td>*Business Group</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>**Finance Accounting Group</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>***Marketing Group</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Total Program Credit Credits</td>
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</tbody>
</table>

Notes:  
*Business Group: BUL2241, BUL2242, ECO2013, ECO2023, ECO2220, FIN1100, FIN2051, GEB1011, GEB2112, GEB2430, MAN2021, MAN2604, MNA1161, MNA1821C, or MNA2345

**Finance Accounting Group: ACG2001, ACG2011, ACG2071, or HFT2460

***Marketing Group: HFT2500, HFT2511, MAR1011, MAR2141, MKA1021, MKA1511, MKA1930, MKA2042

- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Business Operations Technical Certificate  
Program Code 6320

Program Description: The Business Operations Technical Certificate is a program designed to prepare students to work within existing businesses and contribute at a high level. Upon successful completion of this program, the student can also proceed toward completion of an AS Degree in either Business Administration or Marketing Management.

Career Pathway: Business

Program Entrance Requirements: HS Diploma/GED

Additional Program Information: Internship Information can be found at http://broward.edu/studentresources/career/Pages/internships.aspx

Location(s): The courses can be completed at any BC location. Please consult the course schedule for specific semester locations.

Contact information: Program contact information can be found at http://www.broward.edu/academics/programs/business/Pages/default.aspx.

Related Programs at Broward College:  
Business Administration Associate of Science (2119)  
Business Management Technical Certificate (62671)  
Business Specialist Technical Certificate (6288)

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Banking Group</th>
<th>OR</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGS1060C Comp and Internet Literacy</td>
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<td>3</td>
</tr>
<tr>
<td>*Communications Group</td>
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<td></td>
</tr>
<tr>
<td>**Accounting/Finance/Eco Group</td>
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</table>

Customer Service Group 6

Management Specialization 6

Total Program Credit Hours 18

Notes:
**Accounting/Finance/Eco Group: ACG2001, ACG2011, ACG2071, or FIN1100
*Communications Group: OST2335, SPC1024, or SPC1608
Banking Group: ECO2013, ECO2023, ECO2220, or FIN1100
Customer Service Group: MKA1021, MKA1511, or MNA1161
Management Group: MAN2021, MAN2604, or MNA2345

- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Accounting Technology Operations Technical Certificate
Program Code 6323

Program Description: The Accounting Technology Operations Technical Certificate is part of the existing Associate of Science Degree in Accounting Technology. The purpose of this program is to prepare students for positions such as accounts receivable/payable coordinators, bookkeepers, and related paraprofessional accounting positions or to provide supplementary training for persons previously or currently employed in these occupations. This certificate can be taken as a stand-alone program or in conjunction with the AS degree in Accounting Technology.

Career Pathway: Business

Program Entrance Requirements: HS Diploma or GED.

Additional Program Information: N/A

Related Industry Certifications: Upon completing this program, graduates will be eligible to sit for the following industry certifications/licenses:
- QuickBooks Certified User

Location(s): All courses are offered at all BC locations. Please consult the course schedule for specific semester locations.

Contact information: Program contact information can be found at http://www.broward.edu/academics/programs/accounting/Pages/default.aspx.

Related Programs at Broward College:
Accounting Technology Associate of Science (2100)
Accounting Technology Management Technical Certificate (62140)
Accounting Technology Specialist Technical Certificate (6324)

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGS1060C Computer and Internet Literacy</td>
<td>3</td>
</tr>
<tr>
<td>SPC1608 Public Speaking or</td>
<td></td>
</tr>
<tr>
<td>SPC1024 Introduction to Speech Communications</td>
<td>3</td>
</tr>
<tr>
<td>ACG2001 Principles of Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>ACG2011 Principles of Accounting II</td>
<td>3</td>
</tr>
<tr>
<td>ACG2071 Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACG2450C Computerized Accounting Applications</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Program Credit Hours 18

Notes:
- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Accounting Technology Specialist Technical Certificate
Program Code 6324

Program Description: The Accounting Technology Specialist Technical Certificate is part of the existing Associate of Science Degree in Accounting Technology. The purpose of this program is to prepare students for entry-level positions such as accounting clerks, bookkeepers, and related paraprofessional accounting positions or to provide supplementary training for persons previously or currently employed in these occupations. This certificate can be taken as a stand-alone program or in conjunction with the AS degree in Accounting Technology.

Career Pathway: Business

Program Entrance Requirements: HS Diploma or GED.

Additional Program Information: N/A

Related Industry Certifications: N/A

Location(s): All courses can be taken at any campus. Please consult the course schedule for specific semester locations.

Contact information: Program contact information can be found at http://www.broward.edu/academics/programs/accounting/Pages/default.aspx.

Related Programs at Broward College:
Associate of Science in Accounting Technology (2100)
Accounting Technology Management Technical Certificate (62140)
Accounting Technology Operations Technical Certificate (6323)

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>CGS1060C</td>
<td>Comp and Internet Literacy</td>
<td>3</td>
</tr>
<tr>
<td>SPC1608</td>
<td>Public Speaking or</td>
<td></td>
</tr>
<tr>
<td>SPC1024</td>
<td>Introduction to Speech Communication</td>
<td>3</td>
</tr>
<tr>
<td>ACG2001</td>
<td>Principles of Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>ACG2011</td>
<td>Principles of Accounting II</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Program Credit Hours 12

Notes:
- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Accounting Technology Management Technical Certificate
Program Code 62140

Program Description: The Accounting Technology Management Technical Certificate is part of the existing Associate of Science Degree in Accounting Technology. The program focuses on providing students with technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills. This certificate can be taken as a stand-alone program or in conjunction with the AS degree in Accounting Technology.

Career Pathway: Business

Program Entrance Requirements: HS Diploma or GED

Additional Program Information: N/A

Related Industry Certifications: Upon completing this program, graduates will be eligible to sit for the following industry certifications/licenses:
- QuickBooks Certified User

Location(s): All courses can be taken at any BC campus. Please consult the course schedule for specific semester locations.

Contact information: Program contact information can be found at http://www.broward.edu/academics/programs/accounting/Pages/default.aspx.

Related Programs at Broward College:
Associate of Science in Accounting Technology (2100)
Accounting Technology Operations Technical Certificate (6323)
Accounting Technology Specialist Technical Certificate (6324)

<table>
<thead>
<tr>
<th>Required Courses</th>
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</tr>
</thead>
<tbody>
<tr>
<td>ACG2001 Principles of Accounting I</td>
<td></td>
</tr>
<tr>
<td>ACG2011 Principles of Accounting II</td>
<td>3</td>
</tr>
<tr>
<td>ACG2071 Managerial Accounting</td>
<td>3</td>
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<tr>
<td>ACG2450C Computerized Accounting Applications</td>
<td>3</td>
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<tr>
<td>CGS1060C Computer and Internet Literacy</td>
<td>3</td>
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<tr>
<td>GEB1011 Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>TAX2000 Income Tax I</td>
<td>3</td>
</tr>
<tr>
<td>SPC1608 Public Speaking or</td>
<td></td>
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<tr>
<td>SPC1024 Introduction to Speech Communications</td>
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<tr>
<td>Elective* Business Elective</td>
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</tr>
</tbody>
</table>

Total Program Credit Hours 27

Notes:
*Business Elective – student must select from the following approved courses: ECO2023, FIN1100, GEB2112, MAN2021, MAN2604, MAR1011, MNA1161, or REE1040.
- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Business Management Technical Certificate  
Program Code 62671

Program Description: The Business Management Technical Certificate is part of the existing Associate of Science Degree in Business Administration. This certificate is designed to prepare students to become small business owners and managers, or to provide supplemental training for persons previously or currently employed in these positions. This certificate can be taken as a stand-alone program or in conjunction with the AS degree in Business Administration or another related technical certificate or degree.

Career Pathway: Business

Program Entrance Requirements: HS Diploma/GED

Additional Program Information: Internship Information can be found at http://broward.edu/studentresources/career/Pages/internships.aspx

Location(s): The courses can be completed at any BC location. Please consult the course schedule for specific semester locations.

Contact information: Program contact information can be found at http://www.broward.edu/academics/programs/business/Pages/default.aspx.

Related Programs at Broward College:
Business Administration Associate in Science (2119)  
Business Specialist Technical Certificate (6288)  
Business Operations Technical Certificate (6320)

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Banking Group</th>
<th>Total Program Credit Hours</th>
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<tbody>
<tr>
<td>CGS1060C Comp and Internet Literacy</td>
<td>3</td>
<td>24</td>
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<tr>
<td>*Communications Group</td>
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</tr>
<tr>
<td>**Accounting/Finance/Eco Group</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>OR</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Customer Service Group</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>OR</td>
<td>9</td>
<td></td>
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<tr>
<td>Management Specialization</td>
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Notes:
**Accounting/Finance/Eco Group: ACG2001, ACG2011, ACG2071, or FIN1100
*Communications Group: OST2335, SPC1024, or SPC1608
Banking Group: ECO2013, ECO2023, ECO2220, or FIN1100
Customer Service Group: MKA1021, MKA1511, or MNA1161
Management Group: MAN2021, MAN2604, or MNA2345
- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

Students are strongly encouraged to meet with an advisor to create an educational plan.
## Florida Education and Training Placement Information Program (FETPIP) Data

### Business

<table>
<thead>
<tr>
<th>Program Title</th>
<th>Award Type</th>
<th>Program Code</th>
<th>CIP Code</th>
<th>2009-10 FETPIP Current Placement Rate</th>
<th>2010-11 FETPIP Current Placement Rate</th>
<th>2011-12 FETPIP Current Placement Rate</th>
<th>2012-13 FETPIP Current Placement Rate</th>
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<tbody>
<tr>
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<td>Industrial Management Technology</td>
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<td>Food &amp; Beverage Management</td>
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<td>0252090503</td>
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<tr>
<td>Entrepreneurship</td>
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## Florida Education and Training Placement Information Program (FETPIP) Data

### Business

<table>
<thead>
<tr>
<th>Program Title</th>
<th>Award Type</th>
<th>Program Code</th>
<th>CIP Code</th>
<th>2009-10 FETPIP Current Placement Rate</th>
<th>2010-11 FETPIP Current Placement Rate</th>
<th>2011-12 FETPIP Current Placement Rate</th>
<th>2012-13 FETPIP Current Placement Rate</th>
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<td>0552020104</td>
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<td>Accounting Technology Operations</td>
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<td>Accounting Applications</td>
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</tbody>
</table>
Education

Do you like to influence and improve the learning opportunities of others; are you passionate about making a difference for the next generation? If so, learn more about what a degree in education can do for you. Education is one of the greatest equalizers of poverty. A great teacher in the classroom starts with the right training.

Articulation Agreements
Broward College has numerous articulation agreements with our local high schools and Technical Colleges. Students may be able to earn college credit for select programs completed at the secondary and postsecondary level. The programs listed below with an asterisk (*) have a current articulation agreement. For more information about articulation agreements, please contact the Career and Technical Education office at 954-201-7830. You can also find information online at www.broward.edu/careerpath

<table>
<thead>
<tr>
<th>Program Code</th>
<th>Program Title</th>
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<tbody>
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<td><strong>Associate of Arts degree</strong></td>
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<td>1010</td>
<td>Associate of Arts</td>
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<tr>
<td><strong>Associate of Science degrees</strong></td>
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<tr>
<td>2166</td>
<td>Early Childhood Education*</td>
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<tr>
<td><strong>Bachelor of Science degrees</strong></td>
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<tr>
<td>S100</td>
<td>Exceptional Student Education</td>
</tr>
<tr>
<td>S200</td>
<td>Middle Grades General Science</td>
</tr>
<tr>
<td>S300</td>
<td>Secondary Biology</td>
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<td>S400</td>
<td>Middle Grades Mathematics</td>
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<td>S500</td>
<td>Secondary Mathematics</td>
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<td><strong>Post Baccalaureate Teacher Certification Program</strong></td>
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<td>F100</td>
<td>Educator Preparation Institute</td>
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<td><strong>Technical Certificates</strong></td>
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<tr>
<td>6316</td>
<td>Child Care Center Management</td>
</tr>
<tr>
<td>6317</td>
<td>Infant &amp; Toddler Specialization</td>
</tr>
<tr>
<td>6318</td>
<td>Preschool Specialization</td>
</tr>
<tr>
<td>6319</td>
<td>Child Development</td>
</tr>
</tbody>
</table>
**Associate of Arts**  
**Program Code 1010**

**Program Description:** The Associate of Arts (AA) degree is the traditional transfer degree. Students who earn the AA are able to remain at Broward College, transfer to another state college, or a state university in order to continue their education and pursue a baccalaureate degree.

**Career Pathway:** Education

**Program Entrance Requirements:** HS Diploma or GED

**Additional Program Information:** The Associate of Arts degree includes 36 credit hours of General Education and an additional 24 credit hours of electives. The elective credit hours should be selected based on the student’s transfer major. Students are encouraged to review the state’s Common Course Prerequisite Manual ([www.flvc.org/partner-portal/common-prerequisite-manual](http://www.flvc.org/partner-portal/common-prerequisite-manual)) for additional guidance.

**Location(s):** Courses are offered at all college locations, including online. Please consult the course schedule for specific semester locations.

**Bachelor Degree Majors Include:**

<table>
<thead>
<tr>
<th>at Broward College</th>
<th>at a Transfer Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exceptional Student Education</td>
<td>Art Teacher Education</td>
</tr>
<tr>
<td>Middle Grades General Science Education</td>
<td>Chemistry Teacher Education</td>
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<tr>
<td>Secondary Biology Education</td>
<td>Early Childhood Education</td>
</tr>
<tr>
<td>Middle Grades Mathematics Education</td>
<td>English Teacher Education</td>
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<tr>
<td>Secondary Mathematics Education</td>
<td>Foreign Language Teacher Education</td>
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<tr>
<td>Environmental Science - Biosecurity</td>
<td>Health Teacher Education</td>
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<td>Environmental Science - Physical Science</td>
<td>Music Teacher Education</td>
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<tr>
<td>Supervision &amp; Management</td>
<td>Social Science Teacher Education</td>
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<tr>
<td>Technology Management</td>
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<td>Information Technology</td>
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<td>Supply Chain Management</td>
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</table>

**Recommended First Semester Courses**

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<tr>
<th>Exempt Students</th>
<th>Non-Exempt Students</th>
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<tbody>
<tr>
<td>ENC1101 Composition I</td>
<td>ENC XXXX*</td>
</tr>
<tr>
<td>3</td>
<td>3 XXXXXX*</td>
</tr>
<tr>
<td>MAT/STA/MAC XXXX*</td>
<td>MAT/STA/MAC XXXX*</td>
</tr>
<tr>
<td>3</td>
<td>3 XXXX*</td>
</tr>
<tr>
<td>SPC1608 Introduction to Public Speaking or SPC1024 Introduction to Speech Communications</td>
<td>SPC1608 Introduction to Public Speaking or SPC1024 Introduction to Speech Communications</td>
</tr>
<tr>
<td>3</td>
<td>3 Communications</td>
</tr>
<tr>
<td>PSY2012 General Psychology or PSY2012 General Psychology</td>
<td>PSY2012 General Psychology or PSY2012 General Psychology</td>
</tr>
<tr>
<td>3</td>
<td>3 PSY2012</td>
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<td>SYG2000 Principles of Sociology or SYG2000 Principles of Sociology</td>
<td>SYG2000 Principles of Sociology or SYG2000 Principles of Sociology</td>
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<td>3 SYG2000**</td>
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<td>EDF1005 Introduction to Education or EDF1005 Introduction to Education</td>
<td>EDF1005 Introduction to Education or EDF1005 Introduction to Education</td>
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<td>3</td>
<td>3 EDF1005**</td>
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</table>

*The specific English and Math course will depend on the student’s test score.
**Registration depends on the student’s test score.
- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

*If the student attends part-time (less than 12 credits), it is highly recommended that the student complete English and Math in the first term.

Students are strongly encouraged to meet with an advisor to create an educational plan.
**Associate of Science in Early Childhood Education**  
**Program Code 2166**

**Program Description:** Opportunities for a rewarding career in the early childhood field abound for the well trained professional interested in being a teacher of young children, supervisor of children’s programs, or owner of a child care facility. The Associate of Science degree combines classroom and field experiences to give the student the necessary background for success in the job market. Course work provides graduates with the ability to design an effective educational curriculum, manage children in a classroom setting, supervise early childhood personnel, and efficiently administer business operations.

**Career Pathway:** Education

**Program Entrance Requirements:** HS Diploma or GED

**Additional Program Information:** N/A

**Location(s):** The General Education courses can be completed at any BC location. However, the core Early Childhood Education courses are only offered at the North Campus and the Judson A. Samuels South Campus. Please consult the course schedule for specific semester locations.

**Contact information:** Program contact information can be found at [http://www.broward.edu/academics/programs/childcare/Pages/default.aspx](http://www.broward.edu/academics/programs/childcare/Pages/default.aspx).

**Related Programs at Broward College:**  
Child Care Center Management Specialization Technical Certificate (6316)  
Infant/Toddler Specialization Technical Certificate (6317)  
Preschool Specialization Technical Certificate (6318)  
Child Development Specialization Technical Certificate (6319)

<table>
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<tr>
<th>General Education Credit Hours</th>
<th>19</th>
<th>Specialized Course Credit Hours</th>
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<th>Total Program Credit Hours</th>
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<tr>
<td>ENC1101 English Composition I</td>
<td>3</td>
<td>CHD1331 Creativity for Young Children</td>
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<td>SPC1024 Introduction to Speech Communications</td>
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<td>CHD1338 Math and Science for the Young Child</td>
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<td>PSY2012 General Psychology</td>
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<td>CHD1334 Children’s Literature Language Arts</td>
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<td>Humanities</td>
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<td>CHD1940 Practicum I: Observation and Evaluation</td>
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<td>Biological/Physical Science</td>
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<td>CHD1320 Curriculum Planning for Early Childhood</td>
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<td>Biological/Physical Science Lab</td>
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<td>Mathematics</td>
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<tr>
<td><strong>General Education Credit Hours</strong></td>
<td><strong>19</strong></td>
<td><strong>Specialized Course Credit Hours</strong></td>
<td><strong>44</strong></td>
<td><strong>Total Program Credit Hours</strong></td>
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<tr>
<td>ENC1102 English Composition II or Technical Report Writing</td>
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<td>CHD2441 Practicum II</td>
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<td>ENC2210 Technical Report Writing</td>
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<td>CHD2800 Admin and Management in Early Childhood Education</td>
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<td>DEP2002 Child Psychology</td>
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<td>HLP1081 Total Wellness</td>
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<td>CGS1060C Computer and Internet Literacy</td>
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<td></td>
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<tr>
<td>EEC1603 Child Guidance</td>
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<td><strong>Total Program Credit Hours</strong></td>
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<td></td>
</tr>
</tbody>
</table>

**Note:**  
*Elective – student may need to take MAT1033/STA1001 based on placement score. If the student does not need MAT1033/STA1001, then the student can take any Humanities or Social/Behavioral Science Course.  
- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements. Students are strongly encouraged to meet with an advisor to create an educational plan.
Bachelor of Science in Education
Exceptional Student Education Program
Program Code S100

Program Description: The Bachelor of Science in Education for Exceptional Student Education is designed to qualify its graduates to teach ESE placements in grades K-12. Admission to Broward College does not constitute admission to the Teacher Education Program; a supplemental application is also required. Students must meet all Teacher Education Program admission requirements before acceptance into the program. In addition to the required coursework, students must pass the Florida Teacher Certification Exams.

The Bachelor of Science in Education uses a 2+2 model requiring the completion of an Associate of Arts Degree, or at least 60 semester credit hours of postsecondary education from a regionally accredited college or university for entry into the program; these must include 36 hours of General Education Core Requirements.

Career Pathway: Education

Program Entrance Requirements: Admission to Broward College does not constitute admission to the Teacher Education Program (TEP); a supplemental application is also required. Students must meet all Teacher Education Program admission requirements before acceptance into the program. Requirements for admission to the Teacher Education Program include the following:

- Submission of a supplemental application.
- Applications for the TEP will be accepted in the fall and winter. The supplemental application and application deadlines are posted online at www.broward.edu/education.
- Completion of an Associate in Arts degree from a regionally-accredited institution or at least 60 semester credit hours of post-secondary education from a regionally-accredited college or university with 36 credit hours of general education course work.
- A cumulative grade point average of 2.5 on a 4.0 scale for the general education component of undergraduate studies.
- A passing score on any one of the four (English, Essay, Mathematics, Reading) subtests of the General Knowledge Exam.
- Students admitted to the program will be required to take and pass the remaining three sections of the General Knowledge Exam by the completion of their 15th credit. To register for the General Knowledge Exam visit: www.fl.nesinc.com.
- Applicants must be in good academic standing at the last institution they attended.
- Broward College must have on file an official, complete transcript from each postsecondary institution attended, cumulatively indicating completion of 60 or more transferable credits by the applicant’s entry term. If the applicant has received credits through examinations, such as, but not exclusively, the College Level Examination Program, he or she must provide official examination results. Transfer students who have more than 30 upper-division credits completed, or those who have senior status, will not be eligible for admission. Prior Broward College students do not need to submit Broward College transcripts, only transcripts from any other institutions attended.
- Completion of all general education requirements and lower division state mandated common prerequisites, including the following three common education prerequisites, in which students must have earned a grade of “C” or better:
  - EDF 1005 Introduction to the Teaching Profession
Bachelor of Science in Education
Exceptional Student Education Program
Program Code S100

- EDF2085 Introduction to Diversity and Exceptionalities for Educators
- EME2040 Introduction to Educational Technology

- All transfer applicants must have completed 8 credit hours of sequential foreign language or its equivalent in quarter hours (high school or post-secondary) prior to enrollment.
- Submission of a letter of recommendation from one person who knows the applicant personally, educationally, and/or professionally.
- Approval from the Teacher Education Program Admission Committee.

Related Industry Certifications: Florida Teaching Certification Examinations – In order to complete the program, students are required to submit a passing score of Subject Area and Professional Education exams of the Florida Teacher Certification Examinations (FTCE).

Foreign Language Requirement: Students must successfully complete the foreign language requirement as prescribed in college policy and the college catalog.

Location(s): General Education courses can be taken at specific college locations. Please consult the course schedule for specific semester locations.

Contact information: For more information about the Teacher Education Program, visit www.broward.edu/education

<table>
<thead>
<tr>
<th>LOWER DIVISION COURSEWORK in semester credit hours</th>
<th>60</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associate Degree Program of Study Program Electives (to include EDF1005, EDF2085, EME2040)</td>
<td>24</td>
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<tr>
<td>General Education Core Requirements Credits: Communication (9), Math (6) Humanities (6) Social Behavioral Science (6) Science (6) Science Lab (1), Wellness (2)</td>
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<td>Foreign Language Requirement: Students must successfully complete the foreign language requirement as prescribed in college policy and the college catalog.</td>
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<tr>
<td>UPPER DIVISION COURSEWORK in semester credit hours</td>
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Upper Division Credit Hours

<table>
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<th>Course Title</th>
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<tr>
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<td>Educational Psychology</td>
</tr>
<tr>
<td>RED3342</td>
<td>Foundations of Reading</td>
</tr>
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<td></td>
<td>(10 hours field experience)</td>
</tr>
<tr>
<td>TSL3080</td>
<td>ESOL Issues &amp; Strategies I</td>
</tr>
<tr>
<td></td>
<td>(10 hours field experience)</td>
</tr>
<tr>
<td>EEX3011</td>
<td>Introduction to ESE</td>
</tr>
<tr>
<td></td>
<td>(10 hours field experience)</td>
</tr>
<tr>
<td>EDF3280</td>
<td>Instructional Strategies</td>
</tr>
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<td></td>
<td>(10 hours field experience)</td>
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<tr>
<td>EDF4930</td>
<td>Special Topics</td>
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<tr>
<td>RED4519</td>
<td>Literacy Assessment and Differentiated Instruction in Reading Education</td>
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Bachelor of Science in Education  
Exceptional Student Education Program  
Program Code S100

<table>
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<td>Classroom Management</td>
<td>3</td>
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<tr>
<td>EEX3601</td>
<td>Positive Behavioral Support</td>
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<tr>
<td>MAE4310</td>
<td>Methods of Teaching Math in Elementary Schools</td>
<td>3</td>
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<tr>
<td></td>
<td>(15 hours field experience)</td>
<td></td>
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<tr>
<td>EDF4430</td>
<td>Educational Tests and Measurements</td>
<td>3</td>
</tr>
<tr>
<td>EEX3103</td>
<td>Language and Communication Disorders</td>
<td>3</td>
</tr>
<tr>
<td>EEX3280</td>
<td>Transition Planning</td>
<td>2</td>
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<tr>
<td>EEX4293</td>
<td>Assessment and Instructional Strategies in ESE</td>
<td>3</td>
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<tr>
<td>EEX4472</td>
<td>Instructional Practices for Students with Moderate/Severe Disabilities</td>
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<td></td>
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<td>TSL4081</td>
<td>ESOL Issues &amp; Strategies II</td>
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<tr>
<td>RED4844</td>
<td>Reading Practicum</td>
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<tr>
<td></td>
<td>(30 hours field experience)</td>
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<tr>
<td>EEX4843</td>
<td>Methods of Teaching Exceptional Learners Practicum</td>
<td>3</td>
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<td></td>
<td>(60 hours field experience, one day/week for eight weeks)</td>
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<tr>
<td>EEX4945</td>
<td>Student Teaching Internship in ESE</td>
<td>9</td>
</tr>
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<td>(37.5 hours weekly for 15 weeks)</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:** Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

**Students are strongly encouraged to meet with an advisor to create an educational plan.**
Bachelor of Science in Education

Middle Grades General Science Program

Program Code S200

Program Description: The Bachelor of Science in Education for Middle Grades Science Education is designed to qualify its graduates to teach general science in grades 5-9. Admission to Broward College does not constitute admission to the Teacher Education Program; a supplemental application is also required. Students must meet all Teacher Education Program admission requirements before acceptance into the program. In addition to the required coursework, students must pass the Florida Teacher Certification Exams.

The Bachelor of Science in Education uses a 2+2 model requiring the completion of an Associate of Arts Degree, or at least 60 semester credit hours of postsecondary education from a regionally accredited college or university for entry into the program; these must include 36 hours of General Education Core Requirements.

Career Pathway: Education

Program Entrance Requirements: Admission to Broward College does not constitute admission to the Teacher Education Program (TEP); a supplemental application is also required. Students must meet all Teacher Education Program admission requirements before acceptance into the program. Requirements for admission to the Teacher Education Program include the following:

- Submission of a supplemental application.
- Applications for the TEP will be accepted in the fall and winter. The supplemental application and application deadlines are posted online at www.broward.edu/education
- Completion of an Associate in Arts degree from a regionally-accredited institution or at least 60 semester credit hours of post-secondary education from a regionally- accredited college or university with 36 credit hours of general education course work.
- A cumulative grade point average of 2.5 on a 4.0 scale for the general education component of undergraduate studies.
- A passing score on any one of the four (English, Essay, Mathematics, Reading) subtests of the General Knowledge Exam.
- Students admitted to the program will be required to take and pass the remaining three sections of the General Knowledge Exam by the completion of their 15th credit. To register for the General Knowledge Exam visit: www.fl.nesinc.com.
- Applicants must be in good academic standing at the last institution they attended.
- Broward College must have on file an official, complete transcript from each postsecondary institution attended, cumulatively indicating completion of 60 or more transferable credits by the applicant’s entry term. If the applicant has received credits through examinations, such as, but not exclusively, the College Level Examination Program, he or she must provide official examination results. Transfer students who have more than 30 upper-division credits completed, or those who have senior status, will not be eligible for admission. Prior Broward College students do not need to submit Broward College transcripts, only transcripts from any other institutions attended.
- Completion of all general education requirements and lower division state mandated common prerequisites, including the following three common education prerequisites, in which students must have earned a grade of “C” or better:
  - EDF 1005 Introduction to the Teaching Profession
Bachelor of Science in Education
Middle Grades General Science Program
Program Code S200

- EDF2085 Introduction to Diversity and Exceptionalities for Educators
- EME2040 Introduction to Educational Technology

- All transfer applicants must have completed 8 credit hours of sequential foreign language or its equivalent in quarter hours (high school or post-secondary) prior to enrollment.
- Submission of a letter of recommendation from one person who knows the applicant personally, educationally, and/or professionally.
- Approval from the Teacher Education Program Admission Committee.

Related Industry Certifications: Florida Teaching Certification Examinations – In order to complete the program, students are required to submit a passing score of Subject Area and Professional Education exams of the Florida Teacher Certification Examinations (FTCE).

Foreign Language Requirement: Students must successfully complete the foreign language requirement as prescribed in college policy and the college catalog.

Location(s): General Education courses can be taken at specific college locations. Please consult the course schedule for specific semester locations.

Contact information: For more information about the Teacher Education Program, visit www.broward.edu/education

| LOWER DIVISION COURSEWORK in semester credit hours | 60 |
| General Education Core Requirements Credits: Communication (9), Math (6) Humanities (6) Social Behavioral Science (6) Science (6) Science Lab (1), Wellness (2) | 36 |
| Required Content Courses: Students in the Middle Grades Science Program must include the following science courses within their lower division educational plan: OCE1001, CHM1045, BSC2010, BSC2010L, BSC2011, BSC2011L, GLY1010, and GLY1010L. | |
| Foreign Language Requirement: Students must successfully complete the foreign language requirement as prescribed in college policy and the college catalog. | |
| UPPER DIVISION COURSEWORK in semester credit hours | 62 |
| TOTAL | 122 |

Upper Division Credit Hours

- EDP4004 Educational Psychology 3
- RED3342 Foundations of Reading 3 (10 hours field experience)
- TSL3080 ESOL Issues & Strategies I 3 (10 hours field experience)
- EEX3011 Introduction to ESE 3 (10 hours field experience)
- EDF3280 Instructional Strategies 3 (10 hours field experience)
- EDF4930 Special Topics 1
# Bachelor of Science in Education
## Middle Grades General Science Program
### Program Code S200

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>EDG4410</td>
<td>Classroom Management</td>
<td>3</td>
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<tr>
<td></td>
<td>(10 hours field experience)</td>
<td></td>
</tr>
<tr>
<td>EDF4430</td>
<td>Educational Tests and Measurements</td>
<td>3</td>
</tr>
<tr>
<td>RED3352</td>
<td>Reading in the Content Area</td>
<td>3</td>
</tr>
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<td></td>
<td>(10 hours field experience)</td>
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<tr>
<td>PHY1001</td>
<td>Applied Physics</td>
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<tr>
<td>PHY1001L</td>
<td>Applied Physics Lab</td>
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<td>ESC4074</td>
<td>Weather and Climate</td>
<td>3</td>
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<tr>
<td>PCB4043</td>
<td>Ecology</td>
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<tr>
<td>AST1003</td>
<td>Astronomy</td>
<td>3</td>
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<tr>
<td>SCE3420</td>
<td>Methods of Teaching Physical Science in the Middle School</td>
<td>4</td>
</tr>
<tr>
<td>SCE3320</td>
<td>Integrative Teaching Methods in Middle Grades Science</td>
<td>3</td>
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<tr>
<td></td>
<td>(15 hours field experience)</td>
<td></td>
</tr>
<tr>
<td>SCE3941</td>
<td>Science Practicum</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>(60 hours field experience, one day/week for eight weeks)</td>
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<tr>
<td>SCE3943</td>
<td>Interactive Projects that Promote Learning</td>
<td>3</td>
</tr>
<tr>
<td>SCE4945</td>
<td>Student Teaching in Science</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>(37.5 hours weekly for 15 weeks)</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:** Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

**Students are strongly encouraged to meet with an advisor to create an educational plan.**
**Bachelor of Science in Education**  
**Secondary Biology Program**  
**Program Code S300**

**Program Description:** The Bachelor of Science in Education for Secondary Biology Education is designed to qualify its graduates to teach biology in grades 6-12. Admission to Broward College does not constitute admission to the Teacher Education programs; a supplemental application is also required. Students must meet all Teacher Education Program admission requirements before acceptance into the program. In addition to the required coursework, students must pass the Florida Teacher Certification Exams.

The Bachelor of Science in Education uses a 2+2 model requiring the completion of an Associate of Arts Degree, or at least 60 semester credit hours of postsecondary education from a regionally accredited college or university for entry into the program; these must include 36 hours of General Education Core Requirements.

**Career Pathway:** Education

**Program Entrance Requirements:** Admission to Broward College does not constitute admission to the Teacher Education Program (TEP); a supplemental application is also required. Students must meet all Teacher Education Program admission requirements before acceptance into the program. Requirements for admission to the Teacher Education Program include the following:

- Submission of a **supplemental application**.
- Applications for the TEP will be accepted in the fall and winter. The supplemental application and application deadlines are posted online at [www.broward.edu/education](http://www.broward.edu/education).
- Completion of an Associate in Arts degree from a regionally-accredited institution or at least 60 semester credit hours of post-secondary education from a regionally-accredited college or university with 36 credit hours of general education course work.
- A cumulative grade point average of 2.5 on a 4.0 scale for the general education component of undergraduate studies.
- A passing score on any one of the four (English, Essay, Mathematics, Reading) subtests of the General Knowledge Exam.
- Students admitted to the program will be required to take and pass the remaining three sections of the General Knowledge Exam by the completion of their 15th credit. To register for the General Knowledge Exam visit: [www.fl.nesinc.com](http://www.fl.nesinc.com).
- Applicants must be in good academic standing at the last institution they attended.
- Broward College must have on file an official, complete transcript from each postsecondary institution attended, cumulatively indicating completion of 60 or more transferable credits by the applicant’s entry term. If the applicant has received credits through examinations, such as, but not exclusively, the College Level Examination Program, he or she must provide official examination results. Transfer students who have more than 30 upper-division credits completed, or those who have senior status, will not be eligible for admission. Prior Broward College students do not need to submit Broward College transcripts, only transcripts from any other institutions attended.
- Completion of all general education requirements and lower division state mandated common prerequisites, including the following three common education prerequisites, in which students must have earned a grade of “C” or better:
  - **EDF 1005 Introduction to the Teaching Profession**
Bachelor of Science in Education
Secondary Biology Program
Program Code S300

- EDF2085 Introduction to Diversity and Exceptionalities for Educators
- EME2040 Introduction to Educational Technology

- All transfer applicants must have completed 8 credit hours of sequential foreign language or its equivalent in quarter hours (high school or post-secondary) prior to enrollment.
- Submission of a letter of recommendation from one person who knows the applicant personally, educationally, and/or professionally.
- Approval from the Teacher Education Program Admission Committee.

Related Industry Certifications: Florida Teaching Certification Examinations – In order to complete the program, students are required to submit a passing score of Subject Area and Professional Education exams of the Florida Teacher Certification Examinations (FTCE).

Foreign Language Requirement: Students must successfully complete the foreign language requirement as prescribed in college policy and the college catalog.

Location(s): General Education courses can be taken at specific college locations. Please consult the course schedule for specific semester locations.

Contact information: For more information about the Teacher Education Program, visit www.broward.edu/education

### LOWER DIVISION COURSEWORK in semester credit hours

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credits</th>
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<tbody>
<tr>
<td>Associate Degree Program of Study Program Electives (to include EDF1005, EDF2085, EME2040)</td>
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</tr>
<tr>
<td>General Education Core Requirements Credits: Communication (9), Math (6) Humanities (6) Social Behavioral Science (6) Science (6) Science Lab (1), Wellness (2)</td>
<td>36</td>
</tr>
</tbody>
</table>

Students in the Secondary Biology Program must include the following science courses within their lower division educational plan: OCE1001, CHM1045, CHM1045L, CHM1046, CHM1046L, BSC2010, BSC2010L, BSC2011, and BSC2011L.

Foreign Language Requirement: Students must successfully complete the foreign language requirement as prescribed in college policy and the college catalog.

### UPPER DIVISION COURSEWORK in semester credit hours

<table>
<thead>
<tr>
<th>Course Description</th>
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<tbody>
<tr>
<td>EDP4004 Educational Psychology</td>
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<td>RED3342 Foundations of Reading</td>
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<tr>
<td>TSL3080 ESOL Issues &amp; Strategies I</td>
<td>3</td>
</tr>
<tr>
<td>(10 hours field experience)</td>
<td></td>
</tr>
<tr>
<td>EEX3011 Introduction to ESE</td>
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<tr>
<td>(10 hours field experience)</td>
<td></td>
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<tr>
<td>EDF3280 Instructional Strategies</td>
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<tr>
<td>(10 hours field experience)</td>
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<tr>
<td>EDF4930 Special Topics</td>
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<tr>
<td>EDG4410 Classroom Management</td>
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<td>(10 hours field experience)</td>
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### TOTAL

|   | 62 | 122 |
Bachelor of Science in Education  
Secondary Biology Program  
Program Code S300

<table>
<thead>
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<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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<td>EDF4430</td>
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<td>RED3352</td>
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<td>CHM3203</td>
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<td>ZOO4713</td>
<td>Comparative Vertebrate Morphology and Physiology</td>
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<td>Comparative Vertebrate Morphology and Physiology Lab</td>
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<tr>
<td>MCB3020</td>
<td>General Microbiology</td>
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<td>MCB3020L</td>
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<tr>
<td>SCE4330</td>
<td>Methods and Strategies of Teaching Biological Science</td>
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<tr>
<td></td>
<td>(15 hours field experience)</td>
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</tr>
<tr>
<td>SCE3941</td>
<td>Science Practicum</td>
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<tr>
<td>SCE4945</td>
<td>Student Teaching in Science</td>
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<tr>
<td></td>
<td>(37.5 hours weekly for 15 weeks)</td>
<td></td>
</tr>
</tbody>
</table>

Notes: Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Bachelor of Science in Education  
Middle Grades Mathematics Program  
Program Code S400

Program Description: The Bachelor of Science in Education for Middle Grades Mathematics Education is designed to qualify its graduates to teach math in grades 5-9. Admission to Broward College does not constitute admission to the Teacher Education Program; a supplemental application is also required. Students must meet all Teacher Education Program admission requirements before acceptance into the program. In addition to the required coursework, students must pass the Florida Teacher Certification Exams.

The Bachelor of Science in Education uses a 2+2 model requiring the completion of an Associate of Arts Degree, or at least 60 semester credit hours of postsecondary education from a regionally accredited college or university for entry into the program; these must include 36 hours of General Education Core Requirements.

Career Pathway: Education

Program Entrance Requirements: Admission to Broward College does not constitute admission to the Teacher Education Program (TEP); a supplemental application is also required. Students must meet all Teacher Education Program admission requirements before acceptance into the program. Requirements for admission to the Teacher Education Program include the following:

- Submission of a supplemental application.
- Applications for the TEP will be accepted in the fall and winter. The supplemental application and application deadlines are posted online at [www.broward.edu/education](http://www.broward.edu/education).
- Completion of an Associate in Arts degree from a regionally-accredited institution or at least 60 semester credit hours of post-secondary education from a regionally-accredited college or university with 36 credit hours of general education course work.
- A cumulative grade point average of 2.5 on a 4.0 scale for the general education component of undergraduate studies.
- A passing score on any one of the four (English, Essay, Mathematics, Reading) subtests of the General Knowledge Exam.
- Students admitted to the program will be required to take and pass the remaining three sections of the General Knowledge Exam by the completion of their 15th credit. To register for the General Knowledge Exam visit: [www.fl.nesinc.com](http://www.fl.nesinc.com).
- Applicants must be in good academic standing at the last institution they attended.
- Broward College must have on file an official, complete transcript from each postsecondary institution attended, cumulatively indicating completion of 60 or more transferable credits by the applicant’s entry term. If the applicant has received credits through examinations, such as, but not exclusively, the College Level Examination Program, he or she must provide official examination results. Transfer students who have more than 30 upper-division credits completed, or those who have senior status, will not be eligible for admission. Prior Broward College students do not need to submit Broward College transcripts, only transcripts from any other institutions attended.
- Completion of all general education requirements and lower division state mandated common prerequisites, including the following three common education prerequisites, in which students must have earned a grade of “C” or better:
  - EDF 1005 Introduction to the Teaching Profession
Bachelor of Science in Education
Middle Grades Mathematics Program
Program Code S400

- EDF2085 Introduction to Diversity and Exceptionalities for Educators
- EME2040 Introduction to Educational Technology

- All transfer applicants must have completed 8 credit hours of sequential foreign language or its equivalent in quarter hours (high school or post-secondary) prior to enrollment.
- Submission of a letter of recommendation from one person who knows the applicant personally, educationally, and/or professionally.
- Approval from the Teacher Education Program Admission Committee.

Related Industry Certifications: Florida Teaching Certification Examinations – In order to complete the program, students are required to submit a passing score of Subject Area and Professional Education exams of the Florida Teacher Certification Examinations (FTCE).

Foreign Language Requirement: Students must successfully complete the foreign language requirement as prescribed in college policy and the college catalog.

Location(s): General Education courses can be taken at specific college locations. Please consult the course schedule for specific semester locations.

Contact information: For more information about the Teacher Education Program, visit www.broward.edu/education

<table>
<thead>
<tr>
<th>LOWER DIVISION COURSEWORK in semester credit hours</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Associate Degree Program of Study Program Electives (to include EDF1005, EDF2085, EME2040)</td>
<td>24</td>
</tr>
<tr>
<td>General Education Core Requirements Credits: Communication (9), Math (6) Humanities (6) Social Behavioral Science (6) Science (6) Science Lab (1), Wellness (2)</td>
<td>36</td>
</tr>
<tr>
<td>Students in the Middle Grades Math Program must include the following math courses within their lower division educational plan: MAC1105, MAC1140, MAC1114, STA2023, and MAC2311.</td>
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</tr>
<tr>
<td>Foreign Language Requirement: Students must successfully complete the foreign language requirement as prescribed in college policy and the college catalog.</td>
<td></td>
</tr>
<tr>
<td>UPPER DIVISION COURSEWORK in semester credit hours</td>
<td>60</td>
</tr>
<tr>
<td>TOTAL</td>
<td>120</td>
</tr>
</tbody>
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**Upper Division Credit Hours**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDP4004</td>
<td>Educational Psychology</td>
<td>3</td>
</tr>
<tr>
<td>RED3342</td>
<td>Foundations of Reading (10 hours field experience)</td>
<td>3</td>
</tr>
<tr>
<td>TSL3080</td>
<td>ESOL Issues &amp; Strategies I (10 hours field experience)</td>
<td>3</td>
</tr>
<tr>
<td>EEX3011</td>
<td>Introduction to ESE (10 hours field experience)</td>
<td>3</td>
</tr>
<tr>
<td>EDF3280</td>
<td>Instructional Strategies (10 hours field experience)</td>
<td>3</td>
</tr>
<tr>
<td>EDF4930</td>
<td>Special Topics</td>
<td>1</td>
</tr>
<tr>
<td>EDG4410</td>
<td>Classroom Management (10 hours field experience)</td>
<td>3</td>
</tr>
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</table>
Bachelor of Science in Education  
Middle Grades Mathematics Program  
Program Code S400

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>EDF4430</td>
<td>Educational Tests and Measurements</td>
<td>3</td>
</tr>
<tr>
<td>RED3352</td>
<td>Reading in the Content Area</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>(10 hours field experience)</td>
<td></td>
</tr>
<tr>
<td>MAD2104</td>
<td>Discrete Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>MAS2103</td>
<td>Linear Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MAS4300</td>
<td>Abstract Algebra with Introductory Number Theory</td>
<td>3</td>
</tr>
<tr>
<td>MTG3212</td>
<td>Geometry</td>
<td>3</td>
</tr>
<tr>
<td>MHF4404</td>
<td>History of Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>MAE4320</td>
<td>Methods of Teaching Math in the Middle School</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>(15 hours field experience)</td>
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<tr>
<td>MAE3143</td>
<td>Interactive Middle and Secondary School Projects</td>
<td>3</td>
</tr>
<tr>
<td>MAE3941</td>
<td>Teaching Middle School and Secondary School Practicum</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>(60 hours field experience, one day/week for eight weeks)</td>
<td></td>
</tr>
<tr>
<td>MAE4945</td>
<td>Student Teaching in Mathematics</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>(37.5 hours weekly for 15 weeks)</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:** Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

**Students are strongly encouraged to meet with an advisor to create an educational plan.**
Bachelor of Science in Education
Secondary Mathematics Program
Program Code S500

Program Description: The Bachelor of Science in Education for Secondary Mathematics Education is designed to qualify its graduates to teach math in grades 6-12. Admission to Broward College does not constitute admission to the Teacher Education programs; a supplemental application is also required. Students must meet all Teacher Education Program admission requirements before acceptance into the program. In addition to the required coursework, students must pass the Florida Teacher Certification Exams.

The Bachelor of Science in Education uses a 2+2 model requiring the completion of an Associate of Arts Degree, or at least 60 semester credit hours of postsecondary education from a regionally accredited college or university for entry into the program; these must include 36 hours of General Education Core Requirements.

Career Pathway: Education

Program Entrance Requirements: Admission to Broward College does not constitute admission to the Teacher Education Program (TEP); a supplemental application is also required. Students must meet all Teacher Education Program admission requirements before acceptance into the program. Requirements for admission to the Teacher Education Program include the following:

- Submission of a supplemental application.
- Applications for the TEP will be accepted in the fall and winter. The supplemental application and application deadlines are posted online at www.broward.edu/education
- Completion of an Associate in Arts degree from a regionally-accredited institution or at least 60 semester credit hours of post-secondary education from a regionally-accredited college or university with 36 credit hours of general education course work.
- A cumulative grade point average of 2.5 on a 4.0 scale for the general education component of undergraduate studies.
- A passing score on any one of the four (English, Essay, Mathematics, Reading) subtests of the General Knowledge Exam.
- Students admitted to the program will be required to take and pass the remaining three sections of the General Knowledge Exam by the completion of their 15th credit. To register for the General Knowledge Exam visit: www.fl.nesinc.com.
- Applicants must be in good academic standing at the last institution they attended.
- Broward College must have on file an official, complete transcript from each postsecondary institution attended, cumulatively indicating completion of 60 or more transferable credits by the applicant’s entry term. If the applicant has received credits through examinations, such as, but not exclusively, the College Level Examination Program, he or she must provide official examination results. Transfer students who have more than 30 upper-division credits completed, or those who have senior status, will not be eligible for admission. Prior Broward College students do not need to submit Broward College transcripts, only transcripts from any other institutions attended.
- Completion of all general education requirements and lower division state mandated common prerequisites, including the following three common education prerequisites, in which students must have earned a grade of “C” or better:
  - EDF 1005 Introduction to the Teaching Profession
Bachelor of Science in Education  
Secondary Mathematics Program  
Program Code S500

- EDF2085 Introduction to Diversity and Exceptionalities for Educators  
- EME2040 Introduction to Educational Technology

- All transfer applicants must have completed 8 credit hours of sequential foreign language or its equivalent in quarter hours (high school or post-secondary) prior to enrollment.  
- Submission of a letter of recommendation from one person who knows the applicant personally, educationally, and/or professionally.  
- Approval from the Teacher Education Program Admission Committee.

**Related Industry Certifications:** Florida Teaching Certification Examinations – In order to complete the program, students are required to submit a passing score of Subject Area and Professional Education exams of the Florida Teacher Certification Examinations (FTCE).

**Foreign Language Requirement:** Students must successfully complete the foreign language requirement as prescribed in college policy and the college catalog.

**Location(s):** General Education courses can be taken at specific college locations. Please consult the course schedule for specific semester locations.

**Contact information:** For more information about the Teacher Education Program, visit [www.broward.edu/education](http://www.broward.edu/education)

<table>
<thead>
<tr>
<th>LOWER DIVISION COURSEWORK in semester credit hours</th>
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<tbody>
<tr>
<td>Associate Degree Program of Study Program Electives (to include EDF1005, EDF2085, EME2040)</td>
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<tr>
<td>General Education Core Requirements Credits: Communication (9), Math (6) Humanities (6) Social Behavioral Science (6) Science (6) Science Lab (1), Wellness (2)</td>
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<td>Students in the Secondary Math Program must include the following math courses within their lower division educational plan: MAC1105, MAC1140, MAC1114, STA2023, MAC2311 and MAC2312.</td>
<td></td>
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<tr>
<td>Foreign Language Requirement: Students must successfully complete the foreign language requirement as prescribed in college policy and the college catalog.</td>
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<tr>
<td>UPPER DIVISION COURSEWORK in semester credit hours</td>
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<tr>
<td>TOTAL</td>
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**Upper Division Credit Hours**

<table>
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<tbody>
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<td>EDP4004</td>
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<td>RED3342</td>
<td>Foundations of Reading</td>
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</tr>
<tr>
<td>TSL3080</td>
<td>ESOL Issues &amp; Strategies I</td>
<td>3</td>
</tr>
<tr>
<td>EEX3011</td>
<td>Introduction to ESE</td>
<td>3</td>
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<tr>
<td>EDF3280</td>
<td>Instructional Strategies</td>
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<tr>
<td>EDF4930</td>
<td>Special Topics</td>
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<tr>
<td>EDG4410</td>
<td>Classroom Management</td>
<td>3</td>
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</table>
## Bachelor of Science in Education
### Secondary Mathematics Program
#### Program Code S500

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDF4430</td>
<td>Educational Tests and Measurements</td>
<td>3</td>
</tr>
<tr>
<td>RED3352</td>
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<td>MAD2104</td>
<td>Discrete Mathematics</td>
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<tr>
<td>MAS2103</td>
<td>Linear Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MAS4300</td>
<td>Abstract Algebra with Introductory Number Theory</td>
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<td>MTG3212</td>
<td>Geometry</td>
<td>3</td>
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<tr>
<td>MHF4404</td>
<td>History of Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>MAE4330</td>
<td>Methods of Teaching Math in the Secondary School</td>
<td>3</td>
</tr>
<tr>
<td>MAE3143</td>
<td>Interactive Middle and Secondary School Projects</td>
<td>3</td>
</tr>
<tr>
<td>MAE3941</td>
<td>Teaching Middle School and Secondary School Practicum</td>
<td>3</td>
</tr>
<tr>
<td>MAE4945</td>
<td>Student Teaching in Mathematics</td>
<td>11</td>
</tr>
</tbody>
</table>

(10 hours field experience)

Notes: Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Program Description: The Educator Preparation Institute (EPI) is a state-approved alternative teacher certification program. The EPI program is designed for individuals who hold a bachelor's degree in any field other than education. The program prepares students to enter the classroom. The program does not cover any one specific subject area. It is the responsibility of the student to take and pass their specific subject area exam in order to be eligible to teach that subject. More information regarding the required Florida Teacher Certification Examinations (FTCE) can be found at the Florida Department of Education (FTCE) website. Students are required to obtain an office Statement of Eligibility (SOE) from the Florida Department of Education. The SOE will list what the individual student needs to do in order to obtain both the temporary certificate (three year non-renewable) and the professional certificate (five year renewable). If deemed not-eligible, the individual can choose to either take the applicable subject area exam (SAE) OR complete additional coursework in that subject. If the individual takes and passes the SAE, the SOE will automatically be updated to "eligible" status and a new SOE will be issued. Students can obtain the SOE online at the Florida Department of Education’s website. All students must maintain a valid and current Statement of Eligibility in order to complete the EPI program.

Career Pathway: Education

Program Entrance Requirements: Minimum of a Bachelor’s degree in a field other than Education

Additional Program Information: The EPI requires students to complete two field experiences in a K12 setting. The field experiences include a minimum of 30 required hours.

Contact information: Program contact information can be found at http://www.broward.edu/academics/programs/tep/Pages/tepepi.aspx

Location(s): Courses are only offered online. Please consult the course schedule for specific semester locations.

Related Programs at Broward College: N/A

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPI0001</td>
<td>Classroom Management</td>
<td>3</td>
</tr>
<tr>
<td>EPI0002</td>
<td>Instructional Strategies</td>
<td>3</td>
</tr>
<tr>
<td>EPI0003</td>
<td>Technology</td>
<td>3</td>
</tr>
<tr>
<td>EPI0004</td>
<td>The Teaching and Learning Process</td>
<td>3</td>
</tr>
<tr>
<td>EPI0010</td>
<td>Foundations of Research-Based Practices in Reading</td>
<td>3</td>
</tr>
<tr>
<td>EPI0020</td>
<td>The Teaching Profession</td>
<td>2</td>
</tr>
<tr>
<td>EPI0940</td>
<td>Field Experience</td>
<td>1</td>
</tr>
<tr>
<td>EPI0030</td>
<td>Diversity</td>
<td>2</td>
</tr>
<tr>
<td>EPI0945</td>
<td>Field Experience</td>
<td>1</td>
</tr>
</tbody>
</table>

Total Program Credit Hours 21

Note: Students are strongly encouraged to meet with an advisor to create an educational plan.
**Child Care Center Management Technical Certificate**  
**Program Code 6316**

**Program Description:** The Child Care Center Management Specialization Technical Certificate is part of the existing Associate of Science Degree in Early Childhood Education. The purpose of this program is to prepare students as child care administrators with the knowledge and skills to effectively manage a quality child care program or to provide supplementary training for persons previously or currently employed in these occupations. This certificate can be completed as a stand-alone program or in conjunction with the AS Degree in Early Childhood Education.

**Career Pathway:** Education

**Program Entrance Requirements:** HS Diploma or GED

**Location:** The core Early Childhood Education courses are only offered at the North Campus and the Judson A. Samuels South Campus. Please consult the course schedule for specific semester locations.

**Contact information:** Program contact information can be found at [http://www.broward.edu/academics/programs/childcare/Pages/default.aspx](http://www.broward.edu/academics/programs/childcare/Pages/default.aspx).

**Related Programs at Broward College:**
- Early Childhood Education Associate in Science (2166)
- Infant/Toddler Specialization Technical Certificate (6317)
- Preschool Specialization Technical Center (6318)
- Child Development Specialization Technical Certificate (6319)

---

### Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
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<tbody>
<tr>
<td>CHD1320</td>
<td>Curriculum Planning for Early Childhood</td>
<td>3</td>
</tr>
<tr>
<td>CHD2800</td>
<td>Administration and Management in Early Childhood Education</td>
<td>3</td>
</tr>
<tr>
<td>EEC1200</td>
<td>Early Childhood Education</td>
<td>3</td>
</tr>
<tr>
<td>EEC1603</td>
<td>Child Guidance</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Program Credit Hours**  
12

**Notes:**
- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

**Students are strongly encouraged to meet with an advisor to create an educational plan.**
Infant/Toddler Specialization Technical Certificate  
Program Code 6317  

Program Description: The Infant/Toddler Specialization Technical Certificate is part of the existing Associate of Science Degree in Early Childhood Education. The purpose of this program is to prepare students as early childhood education caregivers with an infant/toddler specialization or to provide supplementary training for persons previously or currently employed in these occupations. This certificate can be completed as a stand-alone program or in conjunction with the AS Degree in Early Childhood Education.

Career Pathway: Education  

Program Entrance Requirements: HS Diploma or GED.  

Location: The core Early Childhood Education courses are only offered at the North Campus and the Judson A. Samuels South Campus. Please consult the course schedule for specific semester locations.  

Contact information: Program contact information can be found at http://www.broward.edu/academics/programs/childcare/Pages/default.aspx.  

Related Programs at Broward College:  
Early Childhood Education Associate of Science (2166)  
Child Care Center Management Technical Certificate (6316)  
Preschool Specialization Technical Certificate (6318)  
Child Development Specialization Technical Certificate (6319)  

Required Courses  
CHD1320 Curriculum Planning for Early Childhood 3  
CHD2800 Administration and Management in Early Childhood Education 3  
EEC1200 Early Childhood Education 3  
DEP2002 Child Psychology 3  

Total Program Credit Hours 12

Notes:  
- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.  

Students are strongly encouraged to meet with an advisor to create an educational plan.
Preschool Specialization Technical Certificate  
Program Code 6318

**Program Description:** The Preschool Specialization Technical Certificate is part of the existing Associate of Science Degree in Early Childhood Education. The purpose of this program is to prepare students as early childhood education caregivers with a preschool specialization or to provide supplementary training for persons previously or currently employed in these occupations. This certificate can be completed as a stand-alone program or in conjunction with the AS Degree in Early Childhood Education.

**Career Pathway:** Education

**Program Entrance Requirements:** HS Diploma or GED

**Location:** The core Early Childhood Education courses are only offered at the North Campus and the Judson A. Samuels South Campus. Please consult the course schedule for specific semester locations.

**Contact information:** Program contact information can be found at [http://www.broward.edu/academics/programs/childcare/Pages/default.aspx](http://www.broward.edu/academics/programs/childcare/Pages/default.aspx).

**Related Programs at Broward College:**
- Early Childhood Education Associate in Science (2166)
- Child Care Center Management Technical Certificate (6316)
- Infant/Toddler Specialization Technical Certificate (6317)
- Child Development Specialization Technical Certificate (6319)

**Required Courses**

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHD1320</td>
<td>Curriculum Planning for Early Childhood</td>
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</tr>
<tr>
<td>CHD2800</td>
<td>Administration and Management in Early Childhood Education</td>
<td>3</td>
</tr>
<tr>
<td>DEP2002</td>
<td>Child Psychology</td>
<td>3</td>
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<tr>
<td>EEC1603</td>
<td>Child Guidance</td>
<td>3</td>
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</tbody>
</table>

**Total Program Credit Hours** 12

**Notes:**
- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

**Students are strongly encouraged to meet with an advisor to create an educational plan.**
Child Development Technical Certificate  
Program Code 6319

Program Description: The Child Development Specialization Technical Certificate is part of the existing Associate of Science Degree in Early Childhood Education. The purpose of this program is to prepare individuals to assume administrative, educational, and care-giving responsibilities within child care facilities or to provide supplementary training for persons previously or currently employed in these occupations. This certificate can be completed as a stand-alone program or in conjunction with the AS Degree in Early Childhood Education.

Career Pathway: Education

Program Entrance Requirements: HS Diploma or GED

Location: The General Education courses can be completed at any BC location. However, the core Early Childhood Education courses are only offered at the North Campus and the Judson A. Samuels South Campus. Some courses are only offered at the North Campus. Please consult the course schedule for specific semester locations.

Contact Information: Program contact information can be found at http://www.broward.edu/academics/programs/childcare/Pages/default.aspx.

Related Programs at Broward College:
Early Childhood Education Associate in Science (2166)
Child Care Center Management Specialization Technical Certificate (6316)
Infant/Toddler Specialization Technical Certificate (6317)
Preschool Specialization Technical Certificate (6318)

Required Courses
<table>
<thead>
<tr>
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<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
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<tr>
<td>CHD1320</td>
<td>Curriculum Planning for Early Childhood</td>
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</tr>
<tr>
<td>CHD1334</td>
<td>Children’s Language and Literature Arts</td>
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<tr>
<td>CHD1331</td>
<td>Creativity for Young Children</td>
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<td>CHD1940</td>
<td>Practicum I: Observation and Evaluation</td>
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<td>CHD2800</td>
<td>Administration and Management Early Childhood Education</td>
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<td>CHD2441</td>
<td>Practicum II</td>
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<td>EEC1200</td>
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<td>Child Guidance</td>
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<td>DEP2002</td>
<td>Child Psychology</td>
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<td>PSY2012</td>
<td>General Psychology</td>
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<tr>
<td>SPC1024</td>
<td>Introduction to Speech Communications</td>
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</table>

Total Program Credit Hours 36

Notes:
- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

Students are strongly encouraged to meet with an advisor to create an educational plan.
## Florida Education and Training Placement Information Program (FETPIP) Data

### Education

<table>
<thead>
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<th>BC Program Title</th>
<th>Award Type</th>
<th>Program Code</th>
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<th>2010-11 FETPIP Current Placement Rate</th>
<th>2011-12 FETPIP Current Placement Rate</th>
<th>2012-13 FETPIP Current Placement Rate</th>
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<td>Early Childhood Education</td>
<td>AS</td>
<td>2166</td>
<td>1413121003</td>
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<td>Child Care Center Management</td>
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<td>Infant and Toddler Specialization</td>
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<td>0419070907</td>
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<td>Preschool Specialization</td>
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<td>Child Development</td>
<td>TC</td>
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<td>**</td>
<td>**</td>
<td>**</td>
<td>**</td>
</tr>
</tbody>
</table>
Health Sciences

Do you like to help people? As our population ages, the need increases for more healthcare professionals trained in the latest technologies. Get hands-on training and participate in clinical internships in a variety of health care career paths that will help you gain direct patient care, imaging and diagnostics, or health informatics experience.

Articulation Agreements
Broward College has numerous articulation agreements with our local high schools and Technical Colleges. Students may be able to earn college credit for select programs completed at the secondary and postsecondary level. The programs listed below with an asterisk (*) have a current articulation agreement. For more information about articulation agreements, please contact the Career and Technical Education office at 954-201-7830. You can also find information online at www.broward.edu/careerpath

<table>
<thead>
<tr>
<th>Program Code</th>
<th>Program Title</th>
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</thead>
<tbody>
<tr>
<td>Associate of Arts degree</td>
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</tr>
<tr>
<td>1010</td>
<td>Associate of Arts</td>
</tr>
<tr>
<td>Associate of Science degrees</td>
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</tr>
<tr>
<td>2102</td>
<td>Nuclear Medicine Technology*</td>
</tr>
<tr>
<td>2127</td>
<td>Nursing*</td>
</tr>
<tr>
<td>2131</td>
<td>Radiography*</td>
</tr>
<tr>
<td>2132</td>
<td>Respiratory Care*</td>
</tr>
<tr>
<td>2145</td>
<td>Dental Hygiene*</td>
</tr>
<tr>
<td>2153</td>
<td>Physical Therapist Assistant*</td>
</tr>
<tr>
<td>2159</td>
<td>Radiation Therapy*</td>
</tr>
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<td>2160</td>
<td>Emergency Medical Services*</td>
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<td>2176</td>
<td>Diagnostic Medical Sonography</td>
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<td>2179</td>
<td>Health Information Technology*</td>
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<td>2215</td>
<td>Dental Assisting</td>
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<td>21021</td>
<td>Hospital-Based Nuclear Medicine Technology</td>
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<td>21271</td>
<td>LPN/RN Transition*</td>
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<td>Hospital-Based Radiography</td>
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<td>21591</td>
<td>Hospital-Based Radiography Therapy</td>
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<tr>
<td>21891</td>
<td>Vision Care Tech/Opticianry*</td>
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<tr>
<td>2505</td>
<td>Medical Laboratory Technology</td>
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<tr>
<td></td>
<td><strong>Applied Technology Diplomas</strong></td>
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<td>Dental Assisting*</td>
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<td><strong>Bachelor of Science in Nursing</strong></td>
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<td>5302</td>
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</table>
**Associate of Arts**  
**Program Code 1010**

**Program Description:** The Associate of Arts (AA) degree is the traditional transfer degree. Students who earn the AA are able to remain at Broward College, transfer to another state college, or a state university in order to continue their education and pursue a baccalaureate degree.

**Career Pathway:** Health Sciences

**Program Entrance Requirements:** HS Diploma or GED

**Additional Program Information:** The Associate of Arts degree includes 36 credit hours of General Education and an additional 24 credit hours of electives. The elective credit hours should be selected based on the student’s transfer major. Students are encouraged to review the state’s Common Course Prerequisite Manual (www.flvc.org/partner-portal/common-prerequisite-manual) for additional guidance.

**Location(s):** Courses are offered at all college locations, including online. Please consult the course schedule for specific semester locations.

**Bachelor Degree Majors Include:**

**at Broward College**  
Exceptional Student Education  
Middle Grades General Science Education  
Secondary Biology Education  
Middle Grades Mathematics Education  
Secondary Mathematics Education  
Environmental Science - Biosecurity  
Environmental Science - Physical Science  
Supervision & Management  
Technology Management  
Information Technology  
Supply Chain Management  

**at a Transfer Institution**  
Dietetics  
Food Science Nutrition  
Health Service Administration  
Medical Technology  
Nutritional Science  
Pharmacy  
Pre-Medical/Dental  
Pre-Occupational Therapy  
Pre-Veterinary Medicine  
Radiologic (Medical) Technology  
Therapeutic Recreation

**Recommended First Semester Courses**

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<td>SPC1608 Introduction to Public Speaking or SPC1024 Introduction to Speech</td>
</tr>
<tr>
<td>SPC1024 Introduction to Speech Communications 3</td>
<td>PSY2012 General Psychology 3</td>
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<tr>
<td>BSC2085L Anatomy and Physiology Lab 1</td>
<td>BSC2085L** Anatomy and Physiology Lab 1</td>
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*The specific English and Math course will depend on the student’s test score.  
**Registration depends on the student’s test score.  
- Many courses have specific pre-requisite and co-requisite requirements that must be followed.  Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.  
*If the student attends part-time (less than 12 credits), it is highly recommended that the student complete English and Math in the first term.*
Associate of Science in Nuclear Medicine Technology  
Program Code 2102

Program Description: The Associate of Science in Nuclear Medicine Technology program is a limited access program. It prepares students to become Nuclear Medicine Technologists. Nuclear Medicine Technologists prepare and administer radiopharmaceuticals to patients and perform diagnostic procedures on virtually every organ system in the human body by using highly sophisticated computerized detection systems to produce and process images.

Career Pathway: Health Sciences

Program Entrance Requirements: The Associate of Science in Nuclear Medicine Technology is a limited access program. Admission to the college does not guarantee admission into the program. Students are required to complete a supplemental application and meet specific criteria. There are a limited number of students admitted to the program each year. Please refer to the Health Science Admissions information included in Appendix C of the catalog for specific admissions requirements. Students can also access admissions requirements online at www.broward.edu/healthsciences

Additional Program Information: Clinical Education is performed in medical facilities such as outpatient centers and hospitals and is offered concurrently with the didactic courses.

Program applicants who have criminal convictions or concerns must clear the ARRT ethics requirements through a pre-application review of eligibility process. The Pre-application Review of Eligibility process with the American Registry of Radiologic Technologists is done to avoid potential delays when applying to take the certification exam. Applicants should contact the ARRT directly at 651-687-0048 for further information.

Related Industry Certificate: American Registry of Radiologic Technologists (ARRT) certification exam & subsequently apply to the state of Florida for licensure, and Nuclear Medicine Technologist Certification Board

Location(s): General Education courses are offered at all college locations, including online. Program specific courses are only available at the North Campus. Please consult the course schedule for specific semester locations.

Contact information: Program contact information can be found at www.broward.edu/nuclearmedicine

Related Programs at Broward College:
Hospital-Based Nuclear Medicine Technology Associate of Science (21021)
Nuclear Medicine Specialist (6224)

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<td>STA2023 Statistics</td>
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<td>MGF1106 Foundations of Mathematical Reasoning</td>
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### Associate of Science in Nuclear Medicine Technology
#### Program Code 2102

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**Core Requirements**

**Credit Hours:** 14

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<td>Anatomy &amp; Physiology II</td>
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**Programmatic Specific**

**Credit Hours:** 42

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<td>NMT1430</td>
<td>Radiation Safety and Radiobiology</td>
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<td>Nuclear Medicine Physics and Math App</td>
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<td>Nuclear Medicine Pathology</td>
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<td>Nuclear Medicine Clinical Education I</td>
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<tr>
<td>NMT1814</td>
<td>Nuclear Medicine Clinical Education II</td>
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<td>Nuclear Medicine Methodology I</td>
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<td>NMT2824</td>
<td>Nuclear Medicine Clinical Education III</td>
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<td>NMT2779</td>
<td>Intro to Multiple Modalities</td>
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<td>NMT2960</td>
<td>Nuclear Medicine Advance Applications</td>
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<td>Nuclear Medicine Instrumentation</td>
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<td>Nuclear Medicine Seminar</td>
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<td>NMT2844</td>
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**Course Sequencing**

**First Year Term I (Fall)**

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<td>SPC1024</td>
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</table>

**Total Term Credit Hours:** 16
## Associate of Science in Nuclear Medicine Technology

### Program Code 2102

#### First Year Term II (Spring)
- NMT1630 Nuclear Medicine Physics & Math App 3
- NMT1714 Nuclear Medicine Pathology 2
- NMT1804 Nuclear Medicine Clinical Education I 2
- BSC2085 Anatomy and Physiology I 3
- BSC2085L Anatomy and Physiology I Lab 1
- GE Course Humanities 3

**Total Term Credit Hours** 14

#### First Year Term III (Summer)
- NMT1814 Nuclear Medicine Clinical Education II 2
- CHM1032 Chemistry for Health Sciences 3
- CHM1032L Chemistry for Health Sciences Lab 1
- GE Course Mathematics 3
- GE Course Social/Behavioral Science 3

**Total Term Credit Hours** 12

#### Second Year Term I (Fall)
- BSC2086 Anatomy and Physiology II 3
- BSC2086L Anatomy and Physiology II Lab 1
- NMT2713 Nuclear Medicine Methodology I 2
- NMT2713L Nuclear Medicine Methodology I Lab 1
- NMT2130 Nuclear Medicine Radiopharmacy 2
- NMT2779 Introduction to Multiple Modalities 2
- NMT2824 Nuclear Medicine Clinical Education III 3

**Total Term Credit Hours** 14

#### Second Year Term II (Spring)
- NMT2723 Nuclear Medicine Methodology II 2
- NMT2723L Nuclear Medicine Methodology II Lab 1
- NMT2534 Nuclear Medicine Instrumentation 2
- NMT2102 Nuclear Medicine Administration 1
- NMT2960 Nuclear Medicine Advanced Applications 2
- NMT2834 Nuclear Medicine Clinical Education IV 3
- PHY1001 Applied Physics 3

**Total Term Credit Hours** 14

#### Second Year Term III (Summer)
- NMT2061 Nuclear Medicine Seminar 3
- NMT2844 Nuclear Medicine Clinical V or
- NMT2905 Nuclear Medicine Independent Study* 2

**Total Term Credit Hours** 5

**Total Program Credit Hours** 75

---

**Notes:** Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements. Progression to the second year of the program is contingent upon successful completion of all first year courses with a 2.0 GPA or higher.

Computer literacy requirement: Cannot test out of CGS1060C

* Requires approval of Associate Dean.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Associate of Science in Nursing
Program Code 2127 (Generic-RN)

Program Description: The Associate of Science Degree in Nursing is designed to prepare the student for a career as a registered nurse. The mission of the Broward College Nursing Program is to prepare competent, compassionate, and culturally sensitive entry-level nursing graduates whose professional practice encompasses legal and ethical decision making. The Department of Nursing is committed to providing a nursing program that is accessible to a diverse community of learners. Delivered by a dedicated Faculty, the program provides a collaborative teaching-learning environment to promote critical thinking, lifelong learning, and positive role in a changing and global society across the lifespan. The program is committed to accomplishing this mission through the use of effective and diverse instructional methods that encompass both traditional as well as technology-based strategies.

The Nursing Program is approved by the Florida Board of Nursing, accredited by the Accreditation Commission for Education in Nursing (ACEN), and holds membership in both the Associate Degree Council of the National League for Nursing and the National Organization for Associate Degree Nursing (N-OADN). The Florida Board of Nursing mailing address is 4052 Bald Cypress Way, Tallahassee, Florida 32399-3257. www.doh.state.fl.us. ACEN is located at 3343 Peachtree Road, NE, Suite 500, Atlanta, Georgia, 30326. www.acen.org.

The student who has met all educational and institutional requirements for an Associate of Science Degree in Nursing from Broward College is eligible to have his/her name submitted to the Florida Board of Nursing to be considered as a candidate for the National Council Licensure Examination for the Registered Nurse (NCLEX-RN). The Florida Board of Nursing is the state agency authorized to determine if the applicant qualifies to take the National Council Licensure Examination (NCLEX-RN) for licensure as a Registered Nurse in Florida. For licensure requirements, refer to sections 464.008 and 464.009, Florida Statutes (F. S.), Rules 64B9-3.002 and 3.008, Florida Administrative Code (F.A.C.)

Career Pathway: Health Sciences

Program Entrance Requirements: Admission to the college does not guarantee admission into the program. Students are required to complete a supplemental application and meet specific criteria. There are a limited number of students admitted to the program each year. Please refer to the Health Science Admissions information included in Appendix C of the catalog for specific admissions requirements. Students can also access admissions requirements online at www.broward.edu/healthsciences.

Admission into the Generic-RN option begins every August, January and May. Sessions are 8 weeks in length except the Summer Term, which is 6 weeks. The Generic-RN Nursing Program length is 18 months.

After acceptance into the Nursing Program, students are required to complete a Medical History and Physical Examination. Acceptance is provisional based upon the approved health evaluation documents. Students are also required to provide a satisfactory criminal background check and HHS/OIG clearance and drug screening.

Ability to meet the Performance Standards for the Nursing Program to insure the safety of both the student and the patient(s) under their care. Students must be able to meet Performance Standards to enter and remain in the program.
Associate of Science in Nursing  
Program Code 2127 (RN)

**Additional Program Information:** The Nursing Program offers two program options for the Associate in Science Degree in Nursing: The Generic Option and the LPN-RN Transition Option. Both program options are offered in the traditional classroom setting and the generic program is also offered online.

The Generic Option is for applicants who have no previous nursing education. The LPN-RN Transition Option is for students who already hold a current Florida Practical Nursing License without restrictions. The LPN-RN Transition program recognizes the Florida Licensed Practical Nurses’ knowledge and skill level, and provides experiential learning credits for Nursing Process I/II (Fundamentals of Nursing) and the specialty lab nursing courses.

The Generic Online Option offers the nursing program theory as a hybrid method of delivery for courses and requires on campus meetings for orientations, labs, instruction, and proctored exams. Students enrolled in the online nursing courses must be able to attend clinical experiences in Broward County and come to campus for exams and lab activities.

The nursing program combines studies in general education and nursing education at the college with selected clinical experiences in hospitals and other community facilities. The program consists of 72 credits. There are 56 hours of clinical practicum for each credit and 16 hours of theory for each credit. Generic students attend 1008 hours of clinical. LPN-RN Transition students attend 728 hours of clinical.

Clinical hours are a combination of nursing experiences in acute care settings and high fidelity patient simulation experiences. Students are also provided the opportunity to develop their nursing knowledge and skills in the nursing skills lab to prepare them for nursing practice. All clinical hours are mandatory and it is expected that students will have made arrangements to meet the total required hours. All nursing students must have internet access and the capability to perform basic computer skills.

After admission, students are required to complete certificate courses; CAE0216 (HIV/AIDS), CAE0660 (TB/OSHA/Hepatitis), CAE0062 (CPR Basic Life Support American Heart Association approved), CAE0441 (Domestic Violence), CAE0528 (Prevention of Medical Errors), and CAE0644 (Florida Laws & Rules for Nursing and Respiratory Care). All Certificates are to have Florida Board of Nursing (FBN) approval shown by FBN number. The due dates for the forms/certificates are given in the mandatory, general orientation meeting that is discussed in the acceptance letter provided to students.

**Related Industry Certifications:** Upon completing this program, graduates will be eligible to have their name submitted to the Florida Board of Nursing to be considered as a candidate for the National Council Licensure Examination for the Registered Nurse (NCLEX-RN).

**Location(s):** General Education courses can be taken at any college location. The Nursing Program is offered on the A. Hugh Adams Central Campus, the Judson A. Samuels South Campus and the North Campus. On initial registration for the first nursing courses, the student may select the campus site they want to attend for the duration of the program. Once a campus is selected, all courses are taken on selected campus. Any requests for transfer of campus must be approved by the associate dean.

**Contact Information:** Program contact information can be found at [www.broward.edu/academics/programs/nursing/Pages/default.aspx](http://www.broward.edu/academics/programs/nursing/Pages/default.aspx)
# Associate of Science in Nursing
## Program Code 2127 (RN)

### General Education Credit Hours

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<td>Mathematics*</td>
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<tr>
<td>Humanities</td>
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<tr>
<td>Social/Behavioral Science</td>
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### Core Requirements Credit Hours

<table>
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<th>Course</th>
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### Program Specific Credit Hours

**Session 1**
- NUR1020 Nursing Process I 3
- NUR1020L Nursing Process Clinical Lab 2

**Session 2**
- NUR1210 Nursing Process II 3
- NUR1210L Nursing Process II Clinical Lab 2

**Session 3**
- NUR1220 Health Alterations I 3
- NUR1220L Health Alterations I Clinical Lab 2

**Session 4**
- NUR1421 Health Care of Women 3
- NUR1421L Health Care of Women Clinical Lab 2

**Session 5**
- NUR1520 Nursing Care of the Psychiatric Patient 3
- NUR1520L Nursing Care of the Psychiatric Patient Clinical Lab 2

**Session 6**
- NUR1310 Pediatric Nursing 3
- NUR1310L Pediatric Nursing Clinical Lab 2

**Session 7**
- NUR2221 Health Alterations II 3
- NUR2221L Health Alterations II Clinical Lab 2

**Session 8**
- NUR2222 Health Alterations III 3
- NUR2222L Health Alterations III Clinical Lab 2

**Session 9**
- NUR2811 Trends, Practices and Roles 3
- NUR2811L Trends, Practices and Roles Clinical Lab 2

### Total Program Credit Hours

**72**

*Note: Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

*The General Education Mathematics course may have a required prerequisite of MAT1033/STA1001. MCB2010 also has a required prerequisite of CHM1032. The Math prerequisite of MAT1033/STA1001 and the CHM1032 are not included in the overall program credit hours and therefore students may not be eligible for Federal Financial Aid for this specific pre-requisite courses.*
**Associate of Science in Radiography**  
**Program Code 2131**

**Program Description:** The Associate of Science in Radiography program is a limited access program. This degree program prepares students to practice as radiographers. Radiographers manipulate x-ray equipment and provide patient care to produce images of the tissues, organs, bones, and vessels of the body. Radiographers work closely with radiologists, who are the physicians responsible for interpreting medical images.

**Career Pathway:** Health Sciences

**Program Entrance Requirements:** The Associate of Science Radiography is a limited access program. Admission to the college does not guarantee admission into the program. Students are required to complete a supplemental application and meet specific criteria. There are a limited number of students admitted to the program each year. Please refer to the Health Science Admissions information included in Appendix C of the catalog for specific admissions requirements. Students can also access admissions requirements online at www.broward.edu/healthsciences

**Additional Program Information:** Clinical assignments are scheduled in local hospitals. The clinical component includes some evening rotations during the second year of the program.

Program applicants who have prior criminal proceedings, disciplinary actions taken by a state or federal regulatory authority or certification board, and/or honor code (academic) violations should initiate an Ethics Review Pre-Application process with the ARRT prior to starting the program. This review process is done to avoid potential denial of eligibility to take the exam or delays when applying to take the certification exam. Applicants should visit the ARRT Website at www.arrt.org for further information.

In order to successfully progress through the Radiography Program, students must achieve all cognitive, affective, and psychomotor objectives. This requires a grade of "C" or above to be earned in all didactic courses and an "S" (satisfactory) grade in all clinical/laboratory courses. This is in addition to maintaining an overall degree GPA of at least 2.0.

**Related Industry Certificate:** American Registry of Radiologic Technologists (ARRT) certification exam & subsequently apply to the state of Florida for licensure.

**Location(s):** General Education courses are offered at all college locations, including online. Program specific courses are only available at the A. Hugh Adams Central Campus. Please consult the course schedule for specific semester locations.

**Program Contact Information:** Program contact information can be found at www.broward.edu/radiography

**Related Programs at Broward College:**  
Hospital-Based Radiography Associate of Science (21311)
## Associate of Science in Radiography
### Program Code 2131

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| Social/Behavioral Science       | 3  |
| Humanities                     | 3  |

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## Associate of Science in Radiography  
Program Code 2131

### Course Sequencing

#### First Year Term I (Summer)

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**Total Term Credit Hours**: 14

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**Total Term Credit Hours**: 15

#### Second Year Term I (Summer)

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<td>Radiographic Procedures IV</td>
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<td>SPC1024</td>
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<tr>
<td>SPC1608</td>
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**Total Term Credit Hours**: 13
## Associate of Science in Radiography  
**Program Code 2131**

### Second Year Term III (Spring)

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<td>Radiographic Pathology</td>
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**Total Term Credit Hours** **12**

### Second Year Term IV (Summer)

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**Total Term Credit Hours** **2**

**Total Program Credit Hours** **77**

---

**Note:** Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Associate in Science in Respiratory Care
Program Code 2132

Program Description: Respiratory Care is a specialty dealing with the diagnosis, treatment and rehabilitation of patients with cardiorespiratory diseases. The program is accredited by the Commission on Accreditation for Respiratory Care (CoARC). The degree satisfies the requirements established by the National Board for Respiratory Care and qualifies the graduate as a candidate for the national registry examination.

Pathway: Health Sciences

Program Entrance Requirements: The Associate of Science in Respiratory Care is a limited access program. Admission to the college does not guarantee admission into the program. Students are required to complete a supplemental application and meet specific criteria. There are a limited number of students admitted to the program each year. Please refer to the Health Science Admissions information included in Appendix C of the catalog for specific admissions requirements. Students can also access admissions requirements online at www.broward.edu/healthsciences Applicants must meet the following requirements:

- HS Diploma or GED
- Enrolled in Broward College
- Possess a minimum transfer and Broward College GPA of 2.5
- Complete ALL prerequisites prior to program application
- Complete a limited Access Health Science Application
- Completion of a day of shadowing is required before admission, which is arranged by the Program Manager.

Additional Program Information: One cohort of 30 students is admitted each August. Auditing Passed Courses is required. The program has an obligation to assure that any student who progresses in the program and is eventually assigned to a clinical rotation has demonstrated sufficient academic knowledge as well as competency in the skills that will be required in the clinical arena. A student repeating a respiratory course will be required to audit all respiratory courses already passed in the same year as the failed course.

All students must be aware that if they are receiving Financial Aid, these audited courses will not be included in the financial aid package. The student must pay the full cost of the course including any fees that are part of the course. The audited course must be successfully repeated (grade of “C” or higher) in order to continue in the respiratory program.

A final grade of "C" or higher must be achieved in each Respiratory Care course for continuance in the Program. A student who withdraws or is withdrawn from a Respiratory Care course shall refer to College Policy 6Hx2-5.33 and Procedure A6Hx2-5.33 on Re-entry into a Health Sciences Program and/or program guidelines. Reentry to a Program will be based upon space availability. Only one reentry will be allowed. The student who reenters must maintain a “C” or higher in each Respiratory Care course to continue in a Program. The student receiving a grade of D OR F in any course after reentry will result in permanent dismissal from the BC Respiratory Care program.

After admission, students are required to complete the Basic Life Support (CAE0062) certificate course. The due dates for the course are given in the mandatory, general orientation meeting prior to the beginning of the program.
Associate in Science in Respiratory Care  
Program Code 2132

**Related Industry Certifications:** Upon completing this program, graduates will be eligible to sit for the following industry certifications/licenses:
- Florida Board of Respiratory Care
- CRT and RRT exams

**Location(s):** General Education courses can be taken at any college location. The program core courses are only taught on the North Campus. Please consult the course schedule for specific semester locations.

**Contact information:** Program contact information can be found at  
www.broward.edu/academics/programs/respiratory/Pages/default.aspx

**Related Programs at Broward College:** N/A

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**General Education Credit Hours**

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<td>Anatomy and Physiology I</td>
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<td>College Algebra</td>
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<td>SPC1608</td>
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**Core Requirements Credit Hours**

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**Programmatic Requirements Credit Hours**

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## Associate in Science in Respiratory Care

**Program Code 2132**

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### Mandatory Course Sequencing

**First Year Term I**

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**Total Term Credit Hours** 14

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**Second Year Term I**

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**Total Term Credit Hours** 8

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Broward College

College Catalog 2015-2016
### Associate in Science in Respiratory Care
**Program Code 2132**

#### Second Year Term II

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#### Second Year Term III

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<td>GE Course</td>
<td>Social/Behavioral Science</td>
<td>3</td>
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<tr>
<td>GE Course</td>
<td>Humanities</td>
<td>3</td>
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<tr>
<td>SPC1024</td>
<td>Introduction to Speech Communications or SPC1608</td>
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</tr>
<tr>
<td>SPC1608</td>
<td>Introduction to Public Speaking</td>
<td>3</td>
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</table>

**Total Term Semester Hours** 15

**Total Program Semester Hours** 76

**Notes:** Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

**Students are strongly encouraged to meet with an advisor to create an educational plan.**
Associate of Science in Dental Hygiene  
Program Code 2145

Program Description: The Associate in Science Degree Dental Hygiene Program is designed to prepare the student for a career as a Registered Dental Hygienist. The goal of the Broward College Dental Hygiene Program is to prepare knowledgeable, considerate, and culturally sensitive dental hygiene graduates whose professional practice encompasses legal and ethical decision making. The Dental Department is committed to providing a dental hygiene program that is accessible to a diverse community of learners. The dedicated faculty provides a collaborative teaching-learning environment to promote critical thinking and lifelong learning.

The Dental Hygiene program is a unique 1 + 1 program format and is designed to offer students employable skills as both a Certified Dental Assistant and a Registered Dental Hygienist.

Students must first complete the 12-month American Dental Association (ADA) accredited Dental Assisting Program. The Dental Assisting program must be listed in the Florida Department of Education database of post-secondary courses at public vocational-technical centers, community colleges, colleges, universities and participating non-public institutions. Graduates from the Dental Assisting Program are qualified to take the Dental Assisting National Board (DANB) Examination. Upon successful completion of this examination, the graduate becomes a Certified Dental Assistant (CDA).

With the completion of the Dental Assisting ATD Program and the appropriate course pre-requisites, the CDA student may apply to the 12-month Dental Hygiene Program. The student has up to three years from the date of graduation from the dental assisting program for first time application to this program. Students in the Dental Hygiene Program will be qualified to take the Dental Hygiene National Board and upon graduation the Commission on Dental Competency Assessments (CDCA) state practical licensing examination. Upon passing both examinations, the graduate is licensed as a Registered Dental Hygienist (RDH) in the State of Florida. Broward College awards an Associate in Science Degree in Dental Hygiene to each student who satisfactorily completes the required 12-month dental hygiene course of study.

The Dental Hygiene Program is accredited by the Commission on Dental Accreditation of the American Dental Association (CODA), a specialized accrediting body recognized by the Council on Postsecondary Accreditation and by the United States Department of Education.

Upon successful completion of the National Board Dental Hygiene and state licensure exam, the graduate will be awarded the Registered Dental Hygienist (R.D.H.) credential.

Career Pathway: Health Sciences

Program Requirements: The Associate of Science in Dental Hygiene is a limited access program. Admission to the college does not guarantee admission into the program. Students are required to complete a supplemental application and meet specific criteria. There are a limited number of students admitted to the program each year. Please refer to the Health Science Admissions information included in Appendix C of the catalog for specific admissions requirements. Students can also access admissions requirements online at www.broward.edu/healthsciences

- Enrolled in Broward College
- Possess a minimum transfer and Broward College GPA of 2.5
Associate of Science in Dental Hygiene  
Program Code 2145

- Complete a Florida ADA CODA accredited Dental Assisting program within the last three years, and earn the CDA certificate through successful completion of the Dental Assisting National Board Examination
- Complete a limited Access Health Science Application

Additional Program Information: One cohort of 16 students is admitted each August

A final grade of "C" or higher must be achieved in each Dental Hygiene course for continuance in the Program. A student who withdraws or is withdrawn from a Dental course shall refer to College Policy 6Hx2-5.33 and Procedure A6Hx2-5.33 on Re-entry into a Health Sciences Program and/or program guidelines. Reentry to a Program will be based upon space availability. Only one reentry will be allowed. The student who reenters must maintain a “C” or higher in each Dental Hygiene course to continue in a Program. The student receiving a grade of D OR F in any course after reentry will result in permanent dismissal from the BC Dental Programs.

The Dental Hygiene Program has affiliation agreements for externship experiences with Nova Southeastern University School of Dental Medicine, Broward Partnership for the Homeless, PACE Center for Girls, Broward House, Veteran’s Administration Dental Clinic, United Cerebral Palsy of Broward County, Achievement and Rehabilitation Centers, and Kids in Distress

After admission, students are required to complete the Basic Life Support (CAE0062) course. The due date for the course is given in the mandatory, general orientation meeting prior to the beginning of the program.

Related Industry Certifications: Upon completing this program, graduates will be eligible to sit for the following industry certifications/licenses: Florida State Dental Hygiene licensing examination

Location(s): General Education courses can be taken at any college location. The program specific courses are only taught on the A. Hugh Adams Central Campus. Please consult the course schedule for specific semester locations.

Contact information: Program contact information can be found at http://www.broward.edu/academics/programs/dental/Pages/default.aspx

Related Programs at Broward College:
Dental Assisting Applied Technology Diploma (B003)
Dental Assisting Associate of Science (2215)

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<thead>
<tr>
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<tr>
<td>ENC1101 Composition I</td>
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<tr>
<td>SPC1608 Introduction to Public Speaking</td>
<td>or</td>
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<tr>
<td>SPC1024 Introduction to Speech Communications</td>
<td>3</td>
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<td>PSY2012 General Psychology</td>
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<tr>
<td>SYG2000 Principles of Sociology</td>
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## Associate of Science in Dental Hygiene

**Program Code 2145**

<table>
<thead>
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<th>Course Title</th>
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<td>Anatomy and Physiology I</td>
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<td>Anatomy and Physiology I Lab</td>
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<td>General Education Mathematics</td>
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### Core Requirements Credit Hours  **14**

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<td>HUN1202</td>
<td>Essentials of Nutrition</td>
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<tr>
<td>BSC2086</td>
<td>Anatomy and Physiology II</td>
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<td>Anatomy and Physiology II Lab</td>
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<td>MCB2010</td>
<td>Microbiology</td>
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<tr>
<td>CHM1032</td>
<td>Chemistry for Health Sciences</td>
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### Programmatic Electives Credit Hours **11**

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### Programmatic Requirements Credit Hours **41**

<table>
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<td>Advanced Dental Technology Lab</td>
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<tr>
<td>DEH1002</td>
<td>Clinical Dental Hygiene Procedures</td>
<td>2</td>
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<td>DEH1002L</td>
<td>Clinical Dental Hygiene Procedures Lab</td>
<td>2</td>
</tr>
<tr>
<td>DEH2400</td>
<td>General and Oral Pathology</td>
<td>2</td>
</tr>
<tr>
<td>DEH1800</td>
<td>Dental Hygiene I</td>
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<tr>
<td>DEH1800L</td>
<td>Dental Hygiene I Clinic</td>
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</tr>
<tr>
<td>DEH2300</td>
<td>Dental Pharmacology</td>
<td>2</td>
</tr>
<tr>
<td>DEH1802</td>
<td>Dental Hygiene II</td>
<td>3</td>
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<tr>
<td>DEH1802L</td>
<td>Dental Hygiene II Clinic</td>
<td>4</td>
</tr>
<tr>
<td>DES1050</td>
<td>Pain Control and Dental Anesthesia</td>
<td>2</td>
</tr>
<tr>
<td>DEH1130</td>
<td>Oral Histology and Embryology</td>
<td>2</td>
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<td>DEH1602</td>
<td>Periodontology</td>
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<td>DEH1602L</td>
<td>Periodontology Laboratory</td>
<td>1</td>
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<tr>
<td>DEH2701</td>
<td>Community Dental Health</td>
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<tr>
<td>DEH2701L</td>
<td>Community Dental Health Lab</td>
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<td>DEH2804L</td>
<td>Dental Hygiene III Clinic</td>
<td>4</td>
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<td>DEH 2806</td>
<td>Dental Hygiene IV</td>
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<tr>
<td>DEH2806L</td>
<td>Dental Hygiene IV Clinic</td>
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**Mandatory Course Sequencing (for the programmatic courses – students will have to work with an academic advisor to determine the sequencing of the general education and core requirement courses)**

### Year I Term I (Fall)

**Session I (16 Weeks)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>DEH2840L</td>
<td>Advanced Dental Technology Lab</td>
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**Session II (8 Weeks)**

<table>
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<th>Course Title</th>
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<tbody>
<tr>
<td>DEH1002</td>
<td>Clinical Dental Hygiene Procedures</td>
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</tr>
<tr>
<td>DEH1002L</td>
<td>Clinical Dental Hygiene Procedures Lab</td>
<td>2</td>
</tr>
</tbody>
</table>
## Associate of Science in Dental Hygiene
### Program Code 2145

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>DEH2400</td>
<td>General and Oral Pathology</td>
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**Session IV (8 Weeks)**

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<td>DEH1800</td>
<td>Dental Hygiene I</td>
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<td>DEH1800L</td>
<td>Dental Hygiene I Clinic</td>
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<tr>
<td>DEH2300</td>
<td>Dental Pharmacology</td>
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**Total Term Semester Hours**: 13

### Year I Term II (Spring)

**Session I (16 Weeks)**

<table>
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<th>Course Title</th>
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<tbody>
<tr>
<td>DEH1802</td>
<td>Dental Hygiene II</td>
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<tr>
<td>DEH1802L</td>
<td>Dental Hygiene II Clinic</td>
<td>4</td>
</tr>
<tr>
<td>DES1050</td>
<td>Pain Control and Dental Anesthesia</td>
<td>2</td>
</tr>
<tr>
<td>DEH1130</td>
<td>Oral Histology and Embryology</td>
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</tr>
<tr>
<td>DEH1602</td>
<td>Periodontology</td>
<td>3</td>
</tr>
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<td>DEH1602L</td>
<td>Periodontology Laboratory</td>
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<tr>
<td>DEH2701</td>
<td>Community Dental Health</td>
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**Total Term Semester Hours**: 17

### Year I Term III (Summer)

**Session I (12 Weeks)**

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**Session II (6 Weeks)**

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**Session III (6 Weeks)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tr>
<td>DEH 2806</td>
<td>Dental Hygiene IV</td>
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<tr>
<td>DEH2806L</td>
<td>Dental Hygiene IV Clinic</td>
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</table>

**Total Term Semester Hours**: 11

### Notes:
Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

*Students must complete 11 credits of any combination of DES courses. Completion of an ADA accredited Dental Assistant Program that is listed in the database of the Florida Department of Education will provide the 11 credits necessary to satisfy this area (an experiential learning fee may be charged).

**Students are strongly encouraged to meet with an advisor to create an educational plan.**
Associate of Science in Physical Therapist Assistant
Program Code 2153

Program Description: The Physical Therapist Assistant Program is delivered to students at Broward College (BC) and Florida SouthWestern (FSW) State College via distance learning technology. Lectures are broadcast in real time so that all sites participate in lecture classes together. The individual sites manage lab sessions. The clinical education component of the program is managed by the Academic Coordinator of Clinical Education at the Broward site. The program provides the student with the opportunity to develop technical skills relative to physical therapy through planned clinical, classroom, and laboratory experiences. The graduate will be prepared to provide a variety of services under the direction and guidance of a supervising physical therapist.

Career Pathway: Health Sciences

Program Entrance Requirements: The Associate of Science in Physical Therapist Assistant is a limited access program. Admission to the college does not guarantee admission into the program. Students are required to complete a supplemental application and meet specific criteria. There are a limited number of students admitted to the program each year. Please refer to the Health Science Admissions information included in Appendix C of the catalog for specific admissions requirements. Students can also access admissions requirements online at www.broward.edu/healthsciences

Additional Program Information: The program is a full-time day program accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE) and the Physical Therapist Assistant shall be eligible for an appropriate membership category in the American Physical Therapy Association. In order to successfully progress through the Physical Therapist Assistant program, students must meet all affective, cognitive, and psychomotor objectives, achieve a grade of “C” or above in all program courses, a grade of “S” in all clinical practicums, and maintain a minimum GPA of 2.0 or higher.

Related Industry Certifications: A licensing examination is required upon completion of the two-year program.

Location(s): General Education courses are offered at all college locations, including online. Program specific courses are only offered on the North Campus at Broward College and on the Thomas Edison campus in Fort Myers, Florida. Please consult the course schedule for specific semester locations.

Contact information: Program contact information can be found at www.broward.edu/pta

Related Programs at Broward College: N/A

<table>
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<tr>
<th>General Education Credit Hours</th>
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<tr>
<td>BSC2085 Anatomy &amp; Physiology I</td>
<td>3</td>
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<tr>
<td>BSC2085L Anatomy &amp; Physiology Lab I</td>
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<td>PSY2012 General Psychology</td>
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<td>Humanities</td>
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<td>or</td>
</tr>
<tr>
<td>STA2023 Statistics</td>
<td>or</td>
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<tr>
<td>MGF1106 Foundations of Mathematical Reasoning</td>
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### Core Requirements Credit Hours

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<th>Credit Hours</th>
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<tbody>
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<td>Anatomy &amp; Physiology Lab II</td>
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</tr>
<tr>
<td>HSC1531</td>
<td>Medical Terminology</td>
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### Programmatic Specific Credit Hours

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<td>PHT103L</td>
<td>Anatomy for the PTA Lab</td>
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<td>PHT1200</td>
<td>Introduction to Physical Therapy</td>
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<tr>
<td>PHT1200L</td>
<td>Introduction to Physical Therapy Lab</td>
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</tr>
<tr>
<td>PHT1300</td>
<td>Survey of Pathological Deficits</td>
<td>3</td>
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<tr>
<td>PHT1310</td>
<td>Survey of Musculoskeletal Deficits</td>
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<td>PHT1010</td>
<td>Physical Principles for the PTA</td>
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<td>Therapeutic Communication for the PTA</td>
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<td>PHT2120</td>
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### Total Program Credit Hours

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### Mandatory Course Sequencing

#### First Year Term I (Summer)

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<td>or</td>
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<tr>
<td>MAC1105</td>
<td>College Algebra</td>
<td>or</td>
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<td>ENC1101</td>
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**Total Term Credit Hours** 13

#### First Year Term II (Fall)

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<td>PHT1103</td>
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## Associate of Science in Physical Therapist Assistant
### Program Code 2153

<table>
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<td>Introduction to Physical Therapy Lab*</td>
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<tr>
<td>PHT1300</td>
<td>Survey of Pathological Deficits</td>
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### First Year Term III (Spring)

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<td>PHT1010</td>
<td>Physical Principles for the PTA</td>
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<td>PHT1020</td>
<td>Therapeutic Communication for the PTA</td>
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<td>PHT1211</td>
<td>Disabilities and Therapeutic Procedures I</td>
<td>2</td>
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<td>PHT1211L</td>
<td>Disabilities and Therapeutic Procedures I Lab</td>
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<td>PHT1801L</td>
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<td>PHT2224</td>
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### Second Year Term I (Fall)

<table>
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<tr>
<td>PHT1350</td>
<td>Basic Pharmacology</td>
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<tr>
<td>PHT2120</td>
<td>Applied Kinesiology</td>
<td>3</td>
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<tr>
<td>PHT2120L</td>
<td>Applied Kinesiology Lab</td>
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<tr>
<td>PHT2162</td>
<td>Survey of Neurological Deficits</td>
<td>3</td>
</tr>
<tr>
<td>PHT2810L</td>
<td>Clinical Practicum II</td>
<td>5</td>
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<tr>
<td>PSY2012</td>
<td>General Psychology</td>
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### Second Year Term II (Spring)

<table>
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<tr>
<th>Course Code</th>
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<tr>
<td>PHT2704</td>
<td>Rehabilitative Procedures</td>
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<td>PHT2704L</td>
<td>Rehabilitative Procedures Lab</td>
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<tr>
<td>PHT2820L</td>
<td>Clinical Practicum III</td>
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<tr>
<td>PHT2931</td>
<td>Transition Seminar</td>
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<tr>
<td>GE Course</td>
<td>Humanities</td>
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### Note:
Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

*Upon successful completion of the PHT1200 and PHT1200L courses, students will have met the Health Careers Core objectives.

**Students are strongly encouraged to meet with an advisor to create an educational plan.**
**Associate of Science in Radiation Therapy**

**Program Code 2159**

**Program Description:** The Radiation Therapy Programs prepare individuals to successfully perform as a radiation therapist. Radiation therapists are vital members of a team of health professionals including a radiation oncologist (physician), physicist, dosimetrist, and oncology nurse. Some of the many functions of a radiation therapist include: assisting the radiation oncologist in localizing the tumor and simulating treatment parameters, treating patients with malignant diseases using ionizing radiation, monitoring patient’s physical condition and response to treatment and recognizing treatment complications.

**Career Pathway:** Health Sciences

**Program Entrance Requirements:** The Associate of Science in Radiation Therapy is a limited access program. Admission to the college does not guarantee admission into the program. Students are required to complete a supplemental application and meet specific criteria. There are a limited number of students admitted to the program each year. Please refer to the Health Science Admissions information included in Appendix C of the catalog for specific admissions requirements. Students can also access admissions requirements online at [www.broward.edu/healthsciences](http://www.broward.edu/healthsciences)

**Additional Program Information:** This Associate in Science degree program is a two-year program. Applicants must complete all of the AS General Education course requirements prior to the second year of the program.

Radiation Therapy AS Program applicants who have criminal convictions or concerns must clear the ARRT ethics requirements through a pre-application review of eligibility process. The Pre-application Review of Eligibility process with the American Registry of Radiologic Technologists is done to avoid potential delays when applying to take the certification exam. Applicants should contact the ARRT directly at 651-687-0048 for further information.

In order to successfully progress through the AS Radiation Therapy Program, students must achieve a grade of "C" or above in all didactic courses and clinical courses and an "S" (satisfactory) grade in all laboratory courses. This requirement is in addition to maintaining an overall degree GPA of at least 2.0.

Clinical education is performed in Broward and Palm Beach County hospitals/clinics and is offered concurrently with the didactic courses.

**Related Industry Certificate:** American Registry of Radiologic Technologists (ARRT) certification exam & subsequently apply to the state of Florida for licensure.

**Location(s):** General Education courses are offered at all college locations, including online. Program specific courses are only available at the North Campus. Please consult the course schedule for specific semester locations.

**Contact information:** Program contact information can be found at [www.broward.edu/radiation](http://www.broward.edu/radiation)

**Related Programs at Broward College:**
Hospital-Based Radiation Therapy Associate of Science (21591)
Radiation Therapy Specialist Technical Certificate (6228)
# Associate of Science in Radiation Therapy
## Program Code 2159

### General Education Credit Hours
- ENC1101 College Composition I 3
- BSC2085 Anatomy and Physiology I 3
- BSC2085L Anatomy and Physiology I Lab 1
- SPC1608 Public Speaking or SPC1024 Introduction to Speech Communications 3
- MGF 1106 Mathematics for Liberal Arts or STA 2023 Statistics 3
- Humanities 3
- Social/Behavioral Science 3

### Core Requirements Credit Hours
- CGS1060c Computer and Internet Literacy 3
- BSC2086 Anatomy and Physiology I 3
- BSC2086L Anatomy and Physiology I Lab 1

### Programmatic Specific Credit Hours
- RAT1001 Introduction to Radiation Therapy 1
- RAT1002 Introduction to Radiation Therapy Clinical 2
- RAT1002L Introduction to Radiation Therapy Clinical Lab 1
- RAT1210 Introduction to Radiation Therapy Anatomy 1
- RAT1112 Radiation Therapy Medical Imaging 1
- RAT1123 Patient Care and Ethics 2
- RAT1212 Radiation Therapy Imaging Anatomy 2
- RAT1515 Radiation Pharmacology 1
- RAT1614 Introduction to Radiation Physics 2
- RAT1804 Clinical Education I 1
- RAT2021 Principles of Radiation Therapy I 2
- RAT2022 Principles of Radiation Therapy II 2
- RAT2023 Oncology I 3
- RAT2024 Oncology II 3
- RAT2040 Radiation Oncology Law 1
- RAT2041 Radiation Oncology Ethics 1
- RAT2241 Radiobiology 2
- RAT2243 Radiation Oncology Sectional Anatomy 4
- RAT2617 Advanced Radiation Physics I 3
- RAT2618 Advanced Radiation Physics II 2
- RAT2619 Dosimetry & Computer Treatment Planning 3
- RAT2657 Quality Assurance/Quality Management 2
- RAT2814 Clinical Education II 3
- RAT2824 Clinical Education III 3
- RAT2834 Clinical Education IV or
- RAT2905 Independent Study* 3
Associate of Science in Radiation Therapy  
Program Code 2159

Course Sequencing

First Year Term I (Summer)
ENC1101 College Composition I 3  
BSC2085 Anatomy and Physiology I 3  
BSC2085L Anatomy and Physiology I Lab 1  
GE Course Mathematics 3  
CGS1060c Computer and Internet Literacy 3  
Total Term Credit Hours 13

First Year Term II (Fall)
RAT1614 Introduction to Radiation Physics 2  
RAT1210 Introduction to Radiation Therapy Anatomy 1  
GE Course Humanities 3  
BSC2086 Anatomy and Physiology I 3  
BSC2086L Anatomy and Physiology I Lab 1  
Total Term Credit Hours 10

First Year Term III (Spring)
RAT1112 Radiation Therapy Medical Imaging 1  
RAT1123 Patient Care and Ethics 2  
RAT1212 Radiation Therapy Imaging Anatomy 2  
SPC1608 Public Speaking or  
SPC1024 Introduction to Speech Communications 3  
GE Course Social/Behavioral Science 3  
Total Term Credit Hours 11

Second Year Term I (Summer)
RAT1001 Introduction to Radiation Therapy 1  
RAT1002 Introduction to Radiation Therapy Clinical 2  
RAT1002L Introduction to Radiation Therapy Clinical Lab 1  
RAT1515 Radiation Pharmacology 1  
RAT1804 Clinical Education I 1  
Total Term Credit Hours 6

Second Year Term II (Fall)
RAT2021 Principles of Radiation Therapy I 2  
RAT2617 Advanced Radiation Physics I 3  
RAT2023 Oncology I 3  
RAT2243 Radiation Oncology Sectional Anatomy 4  
RAT2040 Radiation Oncology Law 1  
RAT2814 Clinical Education II 3  
Total Term Credit Hours 16

Second Year Term III (Spring)
RAT2022 Principles of Radiation Therapy II 2  
RAT2024 Oncology II 3  
RAT2041 Radiation Oncology Ethics 1
Associate of Science in Radiation Therapy
Program Code 2159

RAT2618  Advanced Radiation Physics II    2
RAT2657  Quality Assurance/Quality Management    2
RAT2241  Radiobiology    2
RAT2824  Clinical Education III    3
Total Term Credit Hours    15

Second Year Term IV (Summer)
RAT2619  Dosimetry & Computer Treatment Planning    3
RAT2834  Clinical Education IV or
RAT2905  Independent Study*    3
Total Term Credit Hours    6

Total Program Credit Hours    77

Notes: Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

*Course requires approval of Associate Dean

Students are strongly encouraged to meet with an advisor to create an educational plan.
Associate of Science in Emergency Medical Services
Program Code 2160

Program Description: The Emergency Medical Services program contains three milestones to meet the needs of the community. The Applied Technology Diploma for the EMT (milestone 1) and the Technical Certificate for the Paramedic (milestone 2) are included in the Associate in Science Degree in Emergency Medical Services (milestone 3). Satisfactory completion of the EMT Applied Technology Diploma program (milestone 1) will enable the student to take the Florida State EMT Examination and the National Registry of Emergency Medical Technicians EMT Examination. Satisfactory completion of the advanced courses in the Paramedic Technical Certificate Program will enable students to take the Florida State Paramedic and National Registry of Emergency Medical Technicians Paramedic Examination.

Career Pathway: Health Sciences

Program Entrance Requirements: The Associate of Science in Emergency Medical Services is a limited access program. Admission to the college does not guarantee admission into the program. Students are required to complete a supplemental application and meet specific criteria. There are a limited number of students admitted to the program each year. Please refer to the Health Science Admissions information included in Appendix C of the catalog for specific admissions requirements. Students can also access admissions requirements online at www.broward.edu/healthsciences

Additional Program Information: Students spend time in the classroom, the EMS lab, in local area hospitals, and on fire-rescue or on Advanced Life Support ambulances to gain the range of didactic, psychomotor, and affective knowledge, skills, and abilities necessary to function as entry-level paramedics. All classes in a semester must be successfully-completed with a “C” or better to move to the next semester in the sequence. All paramedic-level EMS-prefix classes must be taken at Broward College.

The Emergency Medical Services Paramedic Program is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP).

Location(s): General Education courses are offered at all college locations, including online. Program specific courses are offered at the A. Hugh Adams Central Campus and the North Campus. Please consult the course schedule for specific semester locations.

Contact information: Program contact information can be found at hwww.broward.edu/academics/programs/emt/Pages/default.aspx

Related Programs at Broward College:
Emergency Medical Technician Applied Technology Diploma (B003)
Paramedic Technical Certificate (6208)

Required Courses

<table>
<thead>
<tr>
<th>General Education Credit Hours</th>
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<tbody>
<tr>
<td>ENC1101 Composition I</td>
<td>3</td>
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<tr>
<td>SPC1024 Introduction to Speech Communications</td>
<td>or</td>
</tr>
<tr>
<td>SPC1608 Introduction to Public Speaking</td>
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</tr>
<tr>
<td>PSY2012 General Psychology</td>
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</table>
# Associate of Science in Emergency Medical Services

**Program Code 2160**

<table>
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<tr>
<th>Humanities</th>
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<tbody>
<tr>
<td>Science</td>
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<td>Mathematics</td>
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## Core Requirements Credit Hours 55

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<td>EMS1119L</td>
<td>EMS Skills Lab</td>
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<tr>
<td>EMS1411</td>
<td>Hospital Clinical</td>
<td>2</td>
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<td>EMS1421</td>
<td>Field Clinical</td>
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<tr>
<td>EMS2010</td>
<td>Body Systems for the Paramedic</td>
<td>3</td>
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<td>EMS2631</td>
<td>Paramedic Science I-Lecture</td>
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<td>Paramedic Science I- Skills Lab</td>
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<td>Paramedic Science I, Field Clinical</td>
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<td>EMS2632</td>
<td>Paramedic Science II-Lecture*</td>
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<td>Paramedic Science II, Skills Lab</td>
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<td>EMS2633</td>
<td>Paramedic Science II, Cardio-Respiratory Lecture</td>
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<td>EMS2641</td>
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<td>Paramedic Science II, Field Clinical</td>
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<td>Paramedic Science III, Trauma Lecture</td>
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<td>Paramedic Science III, Medical Emergencies Lecture</td>
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<td>Paramedic Science Internship</td>
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<tr>
<td>EMS2311</td>
<td>Leadership Practicum**</td>
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</table>

## Total Program Credit Hours 73

### Notes:
- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

- *To continue in the second and successive semesters of the Paramedic program, students must possess a valid State of Florida EMT license and maintain it for the duration of the program.

- **This course may not be offered every semester, check with the EMS department for availability

- ***Students who complete the Associate of Science in EMS are considered to have met the college’s computer competency requirement.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Associate of Science in Diagnostic Medical Sonography  
Program Code 2176

Program Description: The Diagnostic Medical Sonography program prepares individuals meeting certain qualifications to work with medical practitioners in the management, control and care of patients referred for ultrasound studies.

Career Path: Health Sciences

Program Entrance Requirements: The Associate of Science in Diagnostic Medical Sonography is a limited access program. Admission to the college does not guarantee admission into the program. Students are required to complete a supplemental application and meet specific criteria. There are a limited number of students admitted to the program each year. Please refer to the Health Science Admissions information included in Appendix C of the catalog for specific admissions requirements. Students can also access admissions requirements online at www.broward.edu/healthsciences

Additional Program Information: Students must complete all required coursework with a grade of “C” or higher and earn a minimum degree grade point average of 2.0. The Diagnostic Medical Sonography program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP), 1361 Park Street, Clearwater, FL, 33756, Phone (727) 210-2350, upon recommendation of the Joint Review Committee on Education in Diagnostic Medical Sonography. Clinical education is performed in local clinics/hospitals and is offered concurrently with the didactic courses. Clinical affiliation sites are located throughout Broward and Palm Beach counties.

Related Industry Certifications: Upon completing this program, graduates will be eligible to sit for the following industry certifications/licenses: American Registry for Diagnostic Medical Sonography (ARDMS) Abdomen, OB/GYN, and Adult Echocardiography.

Location(s): General Education courses are offered at all college locations, including online. Program specific courses are only available at the North Campus. Please consult the course schedule for specific semester locations.

Contact information: Program contact information can be found at www.broward.edu/ultrasound

Related Programs at Broward College: N/A

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<tr>
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<td>ENC1101 Composition I</td>
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<tr>
<td>MAC1105 College Algebra</td>
<td>3</td>
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<tr>
<td>BSC2085 Anatomy and Physiology I</td>
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<tr>
<td>SPC1608 Public Speaking</td>
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<td>SPC1024 Intro to Speech Communications</td>
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<td>Social/Behavioral Science</td>
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<td>Humanities</td>
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<table>
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<tr>
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<tr>
<td>PHY1001 Applied Physics or Radiographic Physics</td>
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<tr>
<td>BSC2086 Anatomy and Physiology II</td>
<td>3</td>
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<tr>
<td>BSC2086L Anatomy and Physiology II Lab</td>
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</table>
Associate of Science in Diagnostic Medical Sonography
Program Code 2176

Programmatic Specific Credit Hours 51
SON1170  Sonography of the Circulatory System 2
SON1100L Principles and Protocols of Sonographic Imaging 2
SON1211  Medical Sonographic Physics I 3
SON1111  Abdominal Sonography I 2
SON1121  OB/GYN Sonography I 2
SON1003L Fundamentals of Sonography Lab 1
SON1804  Clinical Education 3
SON1212  Medical Sonographic Physics II 3
SON1122  OB/GYN Sonography II 3
SON1112  Abdomen Sonography II 2
SON1214  Practical Aspects of Sonography I 2
SON2013L Fundamentals of Sonography Lab II 1
SON1814  Clinical Education 3
SON1141  Small Parts Sonography 2
SON1824  Clinical Education 3
SON2400  Introduction to Echocardiography 3
SON2400L Intro to Echocardiography Lab 1
SON1215  Practical Aspects of Sonography II 2
SON2834  Clinical Education 3
SON2401  Echocardiography II 3
SON2401L Echocardiography II Lab 1
SON2061  Seminar in Sonography 1
SON2844  Clinical Education 3

Total Program Credit Hours 77

Mandatory Course Sequencing
First Year Term I (Spring)
PHY1001  Applied Physics or Radiographic Physics 3
MAC1105  College Algebra 3
ENC1101  Composition I 3
SPC1608  Public Speaking or
SPC1024  Intro to Speech Communications 3
BSC1085  Anatomy and Physiology I 3
BSC1085L Anatomy and Physiology I Lab 1
Total Term Semester Hours 16

First Year Term II (Summer)
BSC2086  Anatomy and Physiology II 3
BSC2086L Anatomy and Physiology II Lab 1
SON1170  Sonography of the Circulatory System 2
SON1100L Principles and Protocols of Sonographic Imaging 2
Term Semester Hours 8

First Year Term III (Fall)
SON1211  Medical Sonographic Physics I 3
### Associate of Science in Diagnostic Medical Sonography

**Program Code 2176**

<table>
<thead>
<tr>
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<td>SON1111</td>
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<td>SON1121</td>
<td>OBGYN Sonography I</td>
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<td>Fundamentals of Sonography Lab I</td>
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<td>SON1804</td>
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**Second Year Term I (Spring)**

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<tr>
<td>SON1212</td>
<td>Medical Sonographic Physics II</td>
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<tr>
<td>SON1122</td>
<td>OB/GYN Sonography II</td>
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<td>SON1112</td>
<td>Abdomen Sonography II</td>
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<td>SON1214</td>
<td>Practical Aspects of Sonography I</td>
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<td>SON1814</td>
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**Second Year Term II (Summer)**

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<tr>
<td>SON1141</td>
<td>Small Parts Sonography</td>
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<td>SON1824</td>
<td>Clinical Education</td>
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**Second Year Term III (Fall)**

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<tbody>
<tr>
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<td>Introduction to Echocardiography</td>
<td>3</td>
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<tr>
<td>SON2400L</td>
<td>Intro to Echocardiography Lab</td>
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<tr>
<td>SON1215</td>
<td>Practical Aspects of Sonography II</td>
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<tr>
<td>SON2834</td>
<td>Clinical Education</td>
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<tr>
<td>GE Course</td>
<td>Humanities</td>
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**Third Year Term I (Spring)**

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<tr>
<td>SON2061</td>
<td>Seminar in Sonography</td>
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<tr>
<td>GE Course</td>
<td>Social/Behavioral Science</td>
<td>3</td>
</tr>
<tr>
<td>SON2844</td>
<td>Clinical Education</td>
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<tr>
<td></td>
<td><strong>Total Term Semester Hours</strong></td>
<td><strong>11</strong></td>
</tr>
</tbody>
</table>

**Total Program Credit Hours**

77

**Notes:** Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Associate of Science in Health Information Technology
Program Code 2179

Program Description: The Associate of Science in Health Information Technology program prepares the student for employment as a health information technician (HIT) in a variety of settings and eligibility to write the national certifying examination to become a Registered Health Information Technician (RHIT). The program will also provide the student the eligibility to sit for the AAPC or AHIMA coding credentialing examinations. Responsibilities include coding of diagnoses and procedures; as well as processing, storage and retrieval of health information in either paper or electronic health records. Areas covered in the course work include, but not limited to, confidentiality of protected health information, health information and electronic health records systems, legal aspects, statistical reporting, reimbursement methodology, healthcare informatics, performance improvement, and supervision of daily department activities comprise other functions taught in the program.

Career Pathway: Health Science

Program Entrance Requirements: The Associate of Science in Health Information Technology is a limited access program. Admission to the college does not guarantee admission into the program. Students are required to complete a supplemental application and meet specific criteria. There are a limited number of students admitted to the program each year. Please refer to the Health Science Admissions information included in Appendix C of the catalog for specific admissions requirements. Students can also access admissions requirements online at www.broward.edu/healthsciences

Additional Program Information: Students must complete all required coursework with a grade of “C” or higher and earn a minimum degree grade point average of 2.0. Professional practice experiences are provided in local health care facilities, by simulation or in combination under the supervision of qualified professional personnel. The program is accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM).

BC has articulation agreements with limited educational organizations in the community which allow us to accept the certifications received from these programs to be counted (credits awarded) towards the degree at BC. The program currently has articulation agreements with Sheridan and Atlantic Tech Vocational Centers for students graduating from the Medical Transcription and the Medical Coder/Billing Certification Programs.

Related Industry Certifications: Upon completing this program, graduates will be eligible to sit for the following industry certifications and/or licenses:
- Registered Health Information Technician (RHIT)
- Certified Coding Associate (CCA)

Locations: General Education courses are offered at all college locations, including online. Program specific courses are only available at the North Campus. Please consult the course schedule for specific semester locations.

Contact information: Program contact information can be found at www.broward.edu/hit

Related Programs at Broward College: N/A
### Associate of Science in Health Information Technology

**Program Code 2179**

#### General Education Credit Hours

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC1101</td>
<td>Composition</td>
<td>3</td>
</tr>
<tr>
<td>BSC1005</td>
<td>General Biology</td>
<td>3</td>
</tr>
<tr>
<td>SPC1024</td>
<td>Introduction to Speech or</td>
<td>3</td>
</tr>
<tr>
<td>SPC1608</td>
<td>Introduction to Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>PSY2012</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>PHI2600</td>
<td>Introduction to Ethics</td>
<td>3</td>
</tr>
<tr>
<td>MAC1105</td>
<td>College Algebra</td>
<td>3</td>
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<td>STA2023</td>
<td>Statistics</td>
<td>3</td>
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<tr>
<td>MGF1106</td>
<td>Foundations of Mathematical Reasoning</td>
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#### Programmatic Specific Credit Hours

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<tbody>
<tr>
<td>HSC1531</td>
<td>Medical Terminology</td>
<td>3</td>
</tr>
<tr>
<td>HIM1000</td>
<td>Introduction to Health Information Management</td>
<td>3</td>
</tr>
<tr>
<td>HIM 1430</td>
<td>Survey of Human Structure &amp; Disease I</td>
<td>3</td>
</tr>
<tr>
<td>HIM 2512</td>
<td>Supervision and Organizational Life</td>
<td>2</td>
</tr>
<tr>
<td>HIM1435</td>
<td>Survey of Human Structure &amp; Disease II</td>
<td>3</td>
</tr>
<tr>
<td>HIM1110</td>
<td>Health Data Concepts</td>
<td>3</td>
</tr>
<tr>
<td>HIM1110L</td>
<td>Health Data Concepts Lab</td>
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</tr>
<tr>
<td>HIM1253</td>
<td>Coding: I</td>
<td>3</td>
</tr>
<tr>
<td>HIM2214L</td>
<td>Health Statistics</td>
<td>1</td>
</tr>
<tr>
<td>CGS1540C</td>
<td>Database Management</td>
<td>3</td>
</tr>
<tr>
<td>HIM1800</td>
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<tr>
<td>HIM1253L</td>
<td>Coding I Lab</td>
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</tr>
<tr>
<td>HIM2012</td>
<td>Health Records Law</td>
<td>3</td>
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<tr>
<td>HIM1260</td>
<td>Reimbursement Methodology</td>
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</tr>
<tr>
<td>HIM2232</td>
<td>Coding II</td>
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<td>HIM2232L</td>
<td>Coding II Lab</td>
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<tr>
<td>HIM2652</td>
<td>Health Information Systems</td>
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<tr>
<td>HIM2728</td>
<td>Coding III</td>
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<tr>
<td>HIM2728L</td>
<td>Coding III Lab</td>
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</tr>
<tr>
<td>HIM2112C</td>
<td>Electronic Health Record</td>
<td>3</td>
</tr>
<tr>
<td>HIM2500</td>
<td>Performance Improvement</td>
<td>2</td>
</tr>
<tr>
<td>HIM2234C</td>
<td>Advanced Coding Lab</td>
<td>2</td>
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<tr>
<td>HIM2810</td>
<td>Professional Practice II</td>
<td>2</td>
</tr>
<tr>
<td>HIM2930L</td>
<td>Transition Seminar</td>
<td>1</td>
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</table>

**Total Program Credit Hours**: 70

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### Mandatory Course Sequencing

#### First Year Term I

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>HIM1000</td>
<td>Introduction to Health Information Management</td>
<td>3</td>
</tr>
<tr>
<td>HIM1430</td>
<td>Survey of Human Structure &amp; Disease I</td>
<td>3</td>
</tr>
<tr>
<td>GE Course</td>
<td>Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>HIM 2512</td>
<td>Supervision and Organizational Life</td>
<td>2</td>
</tr>
<tr>
<td>ENC1101</td>
<td>Composition I</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Term Credit Hours**: 14
### Associate of Science in Health Information Technology

**Program Code 2179**

**First Year Term II**
- HIM1435  Survey of Human Structure & Disease II  3
- HIM1110  Health Data Concepts  3
- HIM1110L  Health Data Concepts Lab  1
- HIM1253  Coding: I  3
- HIM2214L  Health Statistics  1
- BSC1005  General Biology  3
- **Total Term Credit Hours**  14

**First Year Term III**
- CGS1540C  Database Management  3
- HIM1800  Professional Practice I  2
- HIM1253L  Coding I Lab  1
- PSY2012  General Psychology  3
- **Total Term Credit Hours**  9

**Second Year Term I**
- HIM2012  Health Records Law  3
- HIM1260  Reimbursement Methodology  2
- HIM2232  Coding II  2
- HIM2232L  Coding II Lab  1
- HIM2652  Health Information Systems  3
- **Total Term Credit Hours**  11

**Second Year Term II**
- HIM2728  Coding III  2
- HIM2728L  Coding III Lab  1
- HIM2112C  Electronic Health Record  3
- HIM2500  Performance Improvement  2
- PSY2012  General Psychology  3
- SPC1608  Introduction to Public Speaking  or
- SPC1024  Introduction to Speech Communications  3
- **Total Term Credit Hours**  14

**Second Year Term III**
- HIM2234C  Advanced Coding Lab  2
- HIM2810  Professional Practice II  2
- HIM2930L  Transition Seminar  1
- PHI2600  Introduction to Ethics  3
- **Total Term Credit Hours**  13

**Total Program Credit Hours**  70

---

**Note:** Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

**Students are strongly encouraged to meet with an advisor to create an educational plan.**
## Associate of Science in Dental Assisting

**Program Code 2215**

**Program Description:** The Dental Assisting program is a degree completion option for students who have completed the Dental Assisting Applied Technical Diploma (ATD).

**Career Pathway:** Health Sciences

**Additional Program Information:** Students must complete all required coursework with a grade of “C” or higher and earn a minimum degree grade point average of 2. The transfer of 44 dental assisting ATD credits is guaranteed for 3 years following the ATD award date, and there is no expiration for the 6 credits of general education coursework.

**Related Industry Certifications:** Students will be eligible to sit for the Dental Assisting National Board Examination (DANB) and must take the examination prior to program completion.

**Location(s):** General Education courses can be taken at any college location. The program specific courses are only taught on the A. Hugh Adams Central Campus. Please consult the course schedule for specific semester locations.

**Contact information:** Program contact information can be found at [http://www.broward.edu/academics/programs/dental/Pages/default.aspx](http://www.broward.edu/academics/programs/dental/Pages/default.aspx)

**Related Programs at Broward College:**
Dental Assisting Applied Technology Diploma (B007)
Dental Hygiene Associate of Science (2145)

### Core Requirements Credit Hours

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>PSY2012</td>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SYG2000</td>
<td>Principles of Sociology</td>
<td>3</td>
</tr>
<tr>
<td>HLP1081</td>
<td>Total Wellness</td>
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<tr>
<td>CHM1032</td>
<td>Chemistry for Health Sciences</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>General Education Mathematics</td>
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<td></td>
<td>General Education Humanities</td>
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<tr>
<td>CGS1060C</td>
<td>Computer and Internet Literacy</td>
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### ATD Dental Assisting Program Credit Hours

<table>
<thead>
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<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>ENC1101</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>SPC1024</td>
<td>Introduction to Speech Communication</td>
<td>3</td>
</tr>
<tr>
<td>SPC1608</td>
<td>Introduction to Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>DEA1003</td>
<td>Introduction to Dentistry</td>
<td>3</td>
</tr>
<tr>
<td>DES1020</td>
<td>Dental Anatomy and Physiology</td>
<td>3</td>
</tr>
<tr>
<td>DEA1030</td>
<td>Preclinical</td>
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<tr>
<td>DEA1030L</td>
<td>Preclinical Laboratory</td>
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<tr>
<td>DES1100</td>
<td>Dental Materials</td>
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<tr>
<td>DES1100L</td>
<td>Dental Materials Laboratory</td>
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<tr>
<td>DES1840</td>
<td>Preventive Dentistry</td>
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</table>
### Associate of Science in Dental Assisting
#### Program Code 2215

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
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<tr>
<td>DES1840L</td>
<td>Preventive Dentistry Lab</td>
<td>1</td>
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<tr>
<td>DES1200</td>
<td>Dental Radiography</td>
<td>3</td>
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<tr>
<td>DES1200L</td>
<td>Dental Radiography Laboratory</td>
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<tr>
<td>DES1832</td>
<td>Expanded Functions I</td>
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</tr>
<tr>
<td>DES1832L</td>
<td>Expanded Function I Laboratory</td>
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<tr>
<td>DES1833</td>
<td>Expanded Functions II</td>
<td>2</td>
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<tr>
<td>DES1833L</td>
<td>Expanded Functions II Lab</td>
<td>1</td>
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<tr>
<td>DES1805</td>
<td>Clinical Procedures I</td>
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<td>DES1805L</td>
<td>Clinical Procedures I Lab</td>
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<td>DEA1131</td>
<td>Allied Dental Theory</td>
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<tr>
<td>DES1502</td>
<td>Dental Office Management</td>
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<tr>
<td>DES1404</td>
<td>Basic Anatomy and Physiology</td>
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<tr>
<td>DEA1155</td>
<td>Dental Psychology</td>
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<tr>
<td>DES1807</td>
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<td>DES1807L</td>
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</table>

**Total Program Hours** 70

**Mandatory Course Sequencing (for the programmatic courses – students will have to work with an academic advisor to determine the sequencing of the general education and core requirement courses)**

**First Year Term I (Fall)**

*Session I (16 Weeks)*

<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Credits</th>
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<tbody>
<tr>
<td>DEH2840L</td>
<td>Advanced Dental Technology Lab</td>
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</table>

*Session II (8 Weeks)*

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<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>DEH1002</td>
<td>Clinical Dental Hygiene Procedures</td>
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</tr>
<tr>
<td>DEH1002L</td>
<td>Clinical Dental Hygiene Procedures Lab</td>
<td>2</td>
</tr>
<tr>
<td>DEH2400</td>
<td>General and Oral Pathology</td>
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</table>

*Session IV (8 Weeks)*

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>DEH1800</td>
<td>Dental Hygiene I</td>
<td>2</td>
</tr>
<tr>
<td>DEH1800L</td>
<td>Dental Hygiene I Clinic</td>
<td>2</td>
</tr>
<tr>
<td>DEH2300</td>
<td>Dental Pharmacology</td>
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**First Year Term II (Spring)**

*Session I (16 Weeks)*

<table>
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<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>DEH1802</td>
<td>Dental Hygiene II</td>
<td>3</td>
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<td>DEH1802L</td>
<td>Dental Hygiene II Clinic</td>
<td>4</td>
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<tr>
<td>DES1050</td>
<td>Pain Control and Dental Anesthesia</td>
<td>2</td>
</tr>
<tr>
<td>DEH1130</td>
<td>Oral Histology and Embryology</td>
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<td>DEH1602</td>
<td>Periodontology</td>
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<td>DEH1602L</td>
<td>Periodontology Laboratory</td>
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<tr>
<td>DEH2701</td>
<td>Community Dental Health</td>
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</table>
Associate of Science in Dental Assisting  
Program Code 2215

First Year Term III (Summer)  
_Session I (12 Weeks)_
DEH2701L Community Dental Health Lab 1

_Session II (6 Weeks)_
DEH2804L Dental Hygiene III Clinic 4

_Session III (6 Weeks)_
DEH 2806 Dental Hygiene IV 2  
DEH2806L Dental Hygiene IV Clinic 4

**Notes:** Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

* Students are eligible to be awarded the 44 programmatic specific credits if they completed the Dental Assisting ATD within the last three years. The additional 6 general education credits from the ATD are also awarded to students but there is no expiration for these credits, unlike the programmatic specific courses.

_Students are strongly encouraged to meet with an advisor to create an educational plan._
Associate of Science in (Hospital-Based) Nuclear Medicine Technology  
Program Code 21021

**Program Description:** The Associate of Science in (Hospital-Based) Nuclear Medicine Technology program is a limited access program. This program provides a means for graduates of an accredited hospital-based program to obtain an Associate in Science Degree in Nuclear Medicine. To qualify for this program, applicants must be currently nationally registered as a nuclear medicine technologist and currently hold a valid license in the field.

**Career Pathway:** Health Sciences

**Program Entrance Requirements:** The Associate of Science in (Hospital-Based) Nuclear Medicine Technology is a limited access program. Admission to the college does not guarantee admission into the program. Students are required to complete a supplemental application and meet specific criteria. There are a limited number of students admitted to the program each year. Please refer to the Health Science Admissions information included in Appendix C of the catalog for specific admissions requirements. Students can also access admissions requirements online at [www.broward.edu/healthsciences](http://www.broward.edu/healthsciences)

**Additional Program Information:** Students must complete a minimum of 19 credits of the general education and core courses at Broward College to satisfy the residency requirement. To apply for the experiential learning credit, students must provide a copy of ARRT/NMTCB Registry.

**Location(s):** General Education courses are offered at all college locations, including online. Program specific courses are only available at the North Campus. Please consult the course schedule for specific semester locations.

**Contact information:** Program contact information can be found at [www.broward.edu/nuclearmedicine](http://www.broward.edu/nuclearmedicine)

**Related Programs at Broward College:**
Nuclear Medicine Technology Associate of Science (2102)  
Nuclear Medicine Specialist (6224)

### General Education Credit Hours 19

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
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<td>ENC1101</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>MAC 1105</td>
<td>College Algebra</td>
<td>or</td>
</tr>
<tr>
<td>STA2023</td>
<td>Statistics</td>
<td>or</td>
</tr>
<tr>
<td>MGF1106</td>
<td>Foundations of Mathematical Reasoning</td>
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<tr>
<td>BSC2085</td>
<td>Anatomy &amp; Physiology I</td>
<td>3</td>
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<tr>
<td>BSC2085L</td>
<td>Anatomy &amp; Physiology Lab I</td>
<td>1</td>
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<tr>
<td>SPC1024</td>
<td>Introduction to Speech Communications</td>
<td>or</td>
</tr>
<tr>
<td>SPC1608</td>
<td>Introduction to Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>Social/Behavioral Science</td>
<td></td>
<td>3</td>
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<tr>
<td>Humanities/Fine Arts</td>
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</tr>
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### Core Requirements Credit Hours 14

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<th>Credits</th>
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<td>CHM1032</td>
<td>Chemistry for Health Sciences</td>
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<tr>
<td>CHM1032L</td>
<td>Chemistry for Health Sciences Lab</td>
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</tr>
<tr>
<td>BSC2086</td>
<td>Anatomy &amp; Physiology II</td>
<td>3</td>
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</table>
Associate of Science in (Hospital-Based) Nuclear Medicine Technology
Program Code 21021

<table>
<thead>
<tr>
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<th>Course Name</th>
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<td>Anatomy &amp; Physiology Lab II</td>
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<td>PHY1001</td>
<td>Applied Physics</td>
<td>3</td>
</tr>
<tr>
<td>CGS1060C</td>
<td>Computer and Internet Literacy</td>
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</table>

**Programmatic Specific Credit Hours**

<table>
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<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>NMT1002</td>
<td>Introduction to Nuclear Medicine</td>
<td>3</td>
</tr>
<tr>
<td>NMT1002L</td>
<td>Nuclear Medicine Lab</td>
<td>1</td>
</tr>
<tr>
<td>NMT1430</td>
<td>Radiation Safety and Radiobiology</td>
<td>3</td>
</tr>
<tr>
<td>NMT1630</td>
<td>Nuclear Medicine Physics and Math App</td>
<td>3</td>
</tr>
<tr>
<td>NMT1714</td>
<td>Nuclear Medicine Pathology</td>
<td>2</td>
</tr>
<tr>
<td>NMT1804</td>
<td>Nuclear Medicine Clinical Education I</td>
<td>2</td>
</tr>
<tr>
<td>NMT1814</td>
<td>Nuclear Medicine Clinical Education II</td>
<td>2</td>
</tr>
<tr>
<td>NMT2713</td>
<td>Nuclear Medicine Methodology I</td>
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</tr>
<tr>
<td>NMT2713L</td>
<td>Nuclear Medicine Methodology I Lab</td>
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**Total Program Credit Hours**

75

**Note:** Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

*Students may be eligible for experiential learning credit if they provide a copy of the ARRT/NMTCB Registry. After the documentation has been reviewed and approved, students will be awarded the 42 credits toward the program.

**Students are strongly encouraged to meet with an advisor to create an educational plan.**
Associate of Science in Nursing  
Program Code 21271 (LPN-RN Transition)

**Program Description:** The Associate of Science Degree in Nursing is designed to prepare the student for a career as a registered nurse. The mission of the Broward College Nursing Program is to prepare competent, compassionate, and culturally sensitive entry-level nursing graduates whose professional practice encompasses legal and ethical decision making. The Department of Nursing is committed to providing a nursing program that is accessible to a diverse community of learners. Delivered by a dedicated Faculty, the program provides a collaborative teaching-learning environment to promote critical thinking, lifelong learning, and positive role in a changing and global society across the lifespan. The program is committed to accomplishing this mission through the use of effective and diverse instructional methods that encompass both traditional as well as technology-based strategies.

The Nursing Program is approved by the Florida Board of Nursing, accredited by the Accreditation Commission for Education in Nursing (ACEN), and holds membership in both the Associate Degree Council of the National League for Nursing and the National Organization for Associate Degree Nursing (N-OADN). The Florida Board of Nursing mailing address is 4052 Bald Cypress Way, Tallahassee, Florida 32399-3257. [www.doh.state.fl.us](http://www.doh.state.fl.us). ACEN is located at 3343 Peachtree Road, NE, Suite 500, Atlanta, Georgia, 30326. [www.acen.org](http://www.acen.org).

The student who has met all educational and institutional requirements for an Associate of Science Degree in Nursing from Broward College is eligible to have his/her name submitted to the Florida Board of Nursing to be considered as a candidate for the National Council Licensure Examination for the Registered Nurse (NCLEX-RN). The Florida Board of Nursing is the state agency authorized to determine if the applicant qualifies to take the National Council Licensure Examination (NCLEX-RN) for licensure as a Registered Nurse in Florida. For licensure requirements, refer to sections 464.008 and 464.009, Florida Statutes (F. S.), Rules 64B9-3.002 and 3.008, Florida Administrative Code (F.A.C.)

**Career Pathway:** Health Sciences

**Program Entrance Requirements:** Admission to the college does not guarantee admission into the program. Students are required to complete a supplemental application and meet specific criteria. There are a limited number of students admitted to the program each year. Please refer to the Health Science Admissions information included in Appendix C of the catalog for specific admissions requirements. Students can also access admissions requirements online at [www.broward.edu/healthsciences](http://www.broward.edu/healthsciences)

The LPN-RN Transition option begins each May and the location is rotated on each campus. Students applying for the LPN-RN Transition Option must hold a current Florida LPN License without restrictions, complaints and/or obligations.

After acceptance into the Nursing Program, students are required to complete a Medical History and Physical Examination. Acceptance is provisional based upon the approved health evaluation documents. Students are also required to provide a satisfactory criminal background check and HHS/OIG clearance and drug screening.

Ability to meet the Performance Standards for the Nursing Program to insure the safety of both the student and the patient(s) under their care. Students must be able to meet Performance Standards to enter and remain in the program.
Additional Program Information: The Nursing Program offers two program options for the Associate in Science Degree in Nursing: The Generic Option and the LPN-RN Transition Option. Both program options are offered in the traditional classroom setting and the generic program is also offered online.

The Generic Option is for applicants who have no previous nursing education. The LPN-RN Transition Option is for students who already hold a current Florida Practical Nursing License without restrictions. The LPN-RN Transition program recognizes the Florida Licensed Practical Nurses’ knowledge and skill level, and provides experiential learning credits for Nursing Process I/II (Fundamentals of Nursing) and the specialty lab nursing courses.

The nursing program combines studies in general education and nursing education at the college with selected clinical experiences in hospitals and other community facilities. The program consists of 72 credits. There are 56 hours of clinical practicum for each credit and 16 hours of theory for each credit. Generic students attend 1008 hours of clinical. LPN-RN Transition students attend 728 hours of clinical.

Clinical hours are a combination of nursing experiences in acute care settings and high fidelity patient simulation experiences. Students are also provided the opportunity to develop their nursing knowledge and skills in the nursing skills lab to prepare them for nursing practice. All clinical hours are mandatory and it is expected that students will have made arrangements to meet the total required hours. All nursing students must have internet access and the capability to perform basic computer skills.

After admission, students are required to complete certificate courses; CAE0216 (HIV/AIDS), CAE0660 (TB/OSHA/Hepatitis), CAE0062 (CPR Basic Life Support American Heart Association approved), CAE0441 (Domestic Violence), CAE0528 (Prevention of Medical Errors), and CAE0644 (Florida Laws & Rules for Nursing and Respiratory Care). All Certificates are to have Florida Board of Nursing (FBN) approval shown by FBN number. The due dates for the forms/certificates are given in the mandatory, general orientation meeting that is discussed in the acceptance letter provided to students.

Related Industry Certifications: Upon completing this program, graduates will be eligible to have their name submitted to the Florida Board of Nursing to be considered as a candidate for the National Council Licensure Examination for the Registered Nurse (NCLEX-RN).

Location(s): General Education courses can be taken at any college location. The Nursing Program is offered on the A. Hugh Adams Central Campus, the Judson A. Samuels South Campus and the North Campus. On initial registration for the first nursing courses, the student may select the campus site they want to attend for the duration of the program. Once a campus is selected, all courses are taken on selected campus. Any requests for transfer of campus must be approved by the associate dean.

Contact Information: Program contact information can be found at www.broward.edu/academics/programs/nursing/Pages/default.aspx
Associate of Science in Nursing  
Program Code 21271 (LPN-RN Transition)

<table>
<thead>
<tr>
<th>General Education Credit Hours</th>
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<tr>
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<tr>
<td>BSC2085 Human Anatomy &amp; Physiology I</td>
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<tr>
<td>Mathematics*</td>
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<td>Humanities</td>
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<thead>
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<td>MCB2010 Microbiology*</td>
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<td>HSC1149 Pharmacology</td>
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<td><strong>Session 1</strong></td>
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<td>NUR2000 Transition Nursing I</td>
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<tr>
<td><strong>Session 2</strong></td>
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<tr>
<td>NUR1220 Health Alterations I</td>
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<td>NUR1220L Health Alterations I Clinical Lab</td>
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<tr>
<td><strong>Session 3</strong></td>
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</tr>
<tr>
<td>NUR1421 Health Care of Women</td>
<td>3</td>
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<tr>
<td>NUR1400L Transition Health Care of Women Clinical Lab</td>
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<td><strong>Session 4</strong></td>
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<td>NUR1520 Nursing Care of the Psychiatric Patient</td>
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<td>NUR1310 Pediatric Nursing</td>
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<td><strong>Session 6</strong></td>
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<td><strong>Session 7</strong></td>
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<td>Experiential Learning Credits**</td>
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**Total Program Credit Hours** | 72

*Note: Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

*The General Education Mathematics course may have a required prerequisite of MAT1033/STA1001. MCB2010 also has a required prerequisite of CHM1032. The Math prerequisite of MAT1033/STA1001 and the CHM1032 are not included in the overall program credit hours and therefore students may not be eligible for Federal Financial Aid for this specific pre-requisite course.

**LPN-RN Transition students will be eligible for up to 9 Nursing Course Credits for experiential learning. The experiential learning credits are awarded in the final nursing course. Students must contact the Nursing department for more information.
Program Description: The Associate of Science in Radiography program is a limited access program. This program provides a means for those currently enrolled in an accredited hospital-based program to obtain an Associate in Science Degree in Radiography. This program is also open to graduates of such programs, who hold a national certification by the ARRT (American Registry of Radiologic Technologist) and a valid state license. Radiographers manipulate x-ray equipment and provide patient care to produce images of the tissues, organs, bones, and vessels of the body. Radiographers work closely with radiologists, who are the physicians responsible for interpreting medical images.

Career Pathway: Health Sciences

Program Entrance Requirements: The Associate of Science Radiography is a limited access program. Admission to the college does not guarantee admission into the program. Students are required to complete a supplemental application and meet specific criteria. There are a limited number of students admitted to the program each year. Please refer to the Health Science Admissions information included in Appendix C of the catalog for specific admissions requirements. Students can also access admissions requirements online at www.broward.edu/healthsciences.

Additional Program Information: Students must complete a minimum of 20 general education and core credit hours at Broward College to satisfy residency requirements.

To apply for experiential learning credit, students must provide an official transcript indicating graduation/completion date from a hospital-based Radiography program, or valid ARRT certification.

In order to successfully progress through the Radiography Program, students must achieve all cognitive, affective, and psychomotor objectives. This requires a grade of "C" or above to be earned in all didactic courses and an "S" (satisfactory) grade in all clinical/laboratory courses. This is in addition to maintaining an overall degree GPA of at least 2.0.

Location(s): General Education courses are offered at all college locations, including online. Program specific courses are only available at the A. Hugh Adams Central Campus. Please consult the course schedule for specific semester locations.

Program Contact Information: Program contact information can be found at www.broward.edu/radiography

Related Programs at Broward College:
Hospital-Based Radiography Associate of Science (21311)

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<tr>
<th>General Education Credit Hours</th>
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<td>STA2023 Statistics</td>
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<tr>
<td>MGF1106 Foundations of Mathematical Reasoning</td>
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<td>BSC2085 Anatomy &amp; Physiology I</td>
<td>3</td>
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<td>BSC2085L Anatomy &amp; Physiology Lab I</td>
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<tr>
<td>SPC1024 Introduction to Speech Communications</td>
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<td>SPC1608 Introduction to Public Speaking</td>
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### Associate of Science in (Hospital-Based) Radiography
**Program Code 21311**

<table>
<thead>
<tr>
<th>Social/Behavioral Science</th>
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<td>Humanities</td>
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#### Core Requirements Credit Hours 10
- BSC2086  Anatomy & Physiology II  3
- BSC2086L Anatomy & Physiology Lab II  1
- HSC1531  Medical Terminology  3
- CGS1060C Computer and Internet Literacy  3

#### Programmatic Specific Credit Hours* 48
- RTE1503  Radiographic Procedures I  3
- RTE1503L Radiographic Procedures I Lab  1
- RTE1000  Introduction to Radiologic Technology  3
- RTE1111  Patient Care, Law, & Ethics  2
- RTE1804  Clinical Education I  2
- RTE1513  Radiographic Procedures II  3
- RTE1513L Radiographic Procedures II Lab  1
- RTE1418  Imaging I  2
- RTE1418L Imaging I Lab  1
- RTE1613  Radiographic Physics  2
- RTE1814  Clinical Education II  2
- RTE1523  Radiographic Procedures III  2
- RTE1523L Radiographic Procedures III Lab  1
- RTE1824  Clinical Education III  2
- RTE2457  Imaging II  2
- RTE2457L Imaging II Lab  1
- RTE2385  Radiation Biology & Protection  2
- RTE2834  Clinical Education IV  3
- RTE2623  Radiographic Equipment & Quality Assurance  3
- RTE2130  Pharmacology & Venipuncture for Radiography  1
- RTE2130L Pharmacology & Venipuncture for Radiography Lab  1
- RTE2782  Radiographic Pathology  1
- RTE2844  Clinical Education V  3
- RTE2061  Radiography Seminar  1
- RTE2854  Clinical Education VI  1

#### Total Program Credit Hours 77

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**Notes:** Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

*Students may be eligible for experiential learning credit if they provide a copy of their graduation/completion date from a hospital-based Radiography program, or valid ARRT certification. After the documentation has been reviewed and approved, students will be awarded the 48 credits toward the program.

**Students are strongly encouraged to meet with an advisor to create an educational plan.**
Associate of Science in (Hospital-Based) Radiation Therapy  
Program Code 21591

**Program Description:** This program provides a means for graduates of an accredited hospital-based program to obtain an Associate in Science Degree in Radiation Therapy. To qualify for this program, applicants must be currently nationally registered as a Radiation Therapist by the ARRT (American Registry of Radiologic Technologist) and currently hold a valid license in the field.

**Career Pathway:** Health Sciences

**Program Entrance Requirements:** The Associate of Science in (Hospital-Based) Radiation Therapy is a limited access program. Admission to the college does not guarantee admission into the program. Students are required to complete a supplemental application and meet specific criteria. There are a limited number of students admitted to the program each year. Please refer to the Health Science Admissions information included in Appendix C of the catalog for specific admissions requirements. Students can also access admissions requirements online at www.broward.edu/healthsciences

**Additional Program Information:** Students must complete a minimum of 20 general education and core credit hours at Broward College to satisfy residency requirements.

To apply for experiential learning credit, students must provide a copy of current ARRT Registry.

In order to successfully progress through the AS (Hospital-Based) Radiation Therapy Program, students must achieve a grade of "C" in all coursework. This requirement is in addition to maintaining an overall degree GPA of at least 2.0.

**Location(s):** General Education courses are offered at all college locations, including online. Program specific courses are only available at the North Campus. Please consult the course schedule for specific semester locations.

**Contact information:** Program contact information can be found at www.broward.edu/academics/programs/radiation/Pages/default.aspx

**Related Programs at Broward College:**
Radiation Therapy Associate of Science (2159)
Radiation Therapy Specialist Technical Certificate (6228)

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<td>MAC1105 College Algebra</td>
<td>or</td>
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<tr>
<td>STA2023 Statistics</td>
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<td>Social/Behavioral Science</td>
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</table>
### Associate of Science in (Hospital-Based) Radiation Therapy
### Program Code 21591

**Core Requirements Credit Hours**

<table>
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<td>BSC2086</td>
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**Programmatic Specific Credit Hours***

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<td>Introduction to Radiation Therapy Clinical Lab</td>
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<td>RAT1210</td>
<td>Introduction to Radiation Therapy Anatomy</td>
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<td>RAT1112</td>
<td>Radiation Therapy Medical Imaging</td>
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<td>RAT1123</td>
<td>Patient Care and Ethics</td>
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<td>RAT2619</td>
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</table>

**Total Program Credit Hours**

77

*Notes: Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

*Students may be eligible for experiential learning credit if they provide a copy of their current ARRT Registry. After the documentation has been reviewed and approved, students will be awarded the 51 credits toward the program.

**Students are strongly encouraged to meet with an advisor to create an educational plan.**
**Associate of Science in Vision Care Technology Opticianry**  
**Program Code 21891**

**Program Description:** The Associate Degree Programs in Vision Care Technology provides the student with the opportunity to develop competency in skills relative to patient eye care. An Optician plays a vital role in the fitting and adapting of corrective lenses and other optical devices to aid vision and correct ocular deficiencies. To accomplish this, the Optician must use scientific and clinical procedures and apply learned skills to correctly produce and fit quality eyewear and contact lenses. The curriculum has been designed to train the student in the laboratory techniques of measuring, grinding, fitting, and adapting to eyewear, and preliminary examination pre-testing evaluation.

**Career Pathway:** Health Sciences

**Program Entrance Requirements:** The Associate of Science in Vision Care Technology Opticianry is a limited access program. Admission to the college does not guarantee admission into the program. Students are required to complete a supplemental application and meet specific criteria. There are a limited number of students admitted to the program each year. Please refer to the Health Science Admissions information included in Appendix C of the catalog for specific admissions requirements. Students can also access admissions requirements online at [www.broward.edu/healthsciences](http://www.broward.edu/healthsciences)

**Additional Program Information:** One cohort of 25 students is admitted each August. A final grade of "C" or higher must be achieved in each Vision Care Technology course for continuance in the Program.

A student who withdraws or is withdrawn from Vision Care Technology course shall refer to College Policy 6Hx2-5.33 and Procedure A6Hx2-5.33 on Re-entry into a Health Sciences Program and/or program guidelines. Reentry to a Program will be based upon space availability. Only one reentry will be allowed. The student who reenters must maintain a “C” or higher in each Vision Care Technology course to continue in a Program. The student receiving a grade of “D” or “F” in any course after reentry will result in permanent dismissal from the BC Vision Care Technology Programs.

The Vision Care Technology has affiliation agreements for externship experiences with various optical establishments in Broward County.

**Related Industry Certifications:** Upon completing this program, graduates will be eligible to sit for the following industry certifications/licenses:
- ABO American Board of Optician
- NCLE National Contact Lens Examination
- Florida Licensed Dispensing Optician examination (LDO)

**Location(s):** General Education courses are offered at all college locations, including online. Program specific courses are only available at the A. Hugh Adams Campus. Please consult the course schedule for specific semester locations.

**Contact information:** Program contact information can be found at [www.broward.edu/academics/programs/vision/Pages/default.aspx](http://www.broward.edu/academics/programs/vision/Pages/default.aspx)

**Related Program at Broward College:** N/A
**Associate of Science in Vision Care Technology Opticianry**  
**Program Code 21891**

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>ENC1101 Composition I</td>
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<tr>
<td>MGF1106 Foundations of Mathematical Reasoning or</td>
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</tr>
<tr>
<td>MAC1105 College Algebra</td>
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<tr>
<td>BSC1005 General Biology</td>
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<tr>
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<tr>
<td>SPC1024 Introduction to Speech Communication</td>
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<td>Social/Behavioral Science</td>
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<tr>
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<tr>
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<tr>
<td>OPT2800L Vision Care Clinic I</td>
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<tr>
<td>OPT2420 Eyewear Fabrication I</td>
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<tr>
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**Mandatory Course Sequencing (for the programmatic courses – students will have to work with an academic advisor to determine the sequencing of the general education and core requirement courses)**

**First Year Term I**

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<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>OPT1210 A and P of the Eye</td>
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<td>OPT1110 Physical and Geometric Optics</td>
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# Associate of Science in Vision Care Technology Opticianry
## Program Code 21891

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tr>
<td>OPT1110L</td>
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<td>Orientation to Vision Care</td>
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<td>OPT2090</td>
<td>Orientation to Vision Care Clinic</td>
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<td>OPT2375</td>
<td>Refractometry</td>
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### First Year Term III

#### Session II and Session III

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<td>Contact Lens Theory Lab</td>
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### Second Year Term I

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<td>OPT2876</td>
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<tr>
<td>OPT2060</td>
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**Notes:** Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Associate of Science in Medical Laboratory Technology  
Program Code 2505

Program Description: The Medical Technology Associate of Science degree program was developed specifically to enable Medical Laboratory Technician Certificate/Advanced Technology Diploma (ATD) graduates to continue their education and qualify for higher level positions in the clinical laboratory field or higher degrees such as the Bachelor’s degree. AS program graduates will be able to work with less direct supervision and perform more difficult procedures than would be expected of an ATD graduate. They will be eligible to take state and national certifying exams that require education above the ATD level.

Career Pathway: Health Sciences

Program Entrance Requirements: Students must be graduates from Sheridan Technical College, Erwin Technical Center (College) or a similar Medical Laboratory Technology programs with an Advanced Technology Diploma (ATD).

Additional Program Information: Students with the appropriate ATD will awarded 42 credits toward the AS in Medical Laboratory Technology. The credits will be awarded for the following courses:

- MLT1022 Introduction to Medical Technology 2
- MLT1022L Introduction to Medical Technology 1
- MLT1040 Phlebotomy 1
- MLT1044L Phlebotomy Clinical 1
- MLT2362 Hematology and Body Fluid Analysis 4
- MLT2362L Hematology and Body Fluid Analysis Lab 2
- MLT2400 Medical Microbiology 4
- MLT2400L Medical Microbiology 3
- MLT2625 Clinical Chemistry 4
- MLT2625L Clinical Chemistry 1
- MLT2530 Immunology/Immunohematology 4
- MLT2530L Immunology/Immunohematology 2
- MLT2807L Immunohematology Clinical Practicum 3
- MLT2809L Hematology Clinical Practicum 3
- MLT2810L Clinical Chemistry Practicum 3
- MLS2811L Microbiology Clinical Practicum 3
- MLS2930 Seminar 1

Related Industry Certifications: N/A

Locations: The majority of the courses are offered at all BC locations, including online. However, some courses may only be offered at the A. Hugh Adams Central Campus. Please consult the course schedule for specific semester locations.

Contact Information: Program contact information can be found at http://www.broward.edu/academics/programs/Pages/health-sciences.aspx

Related Programs at Broward College: N/A
Associate of Science in Medical Laboratory Technology  
Program Code 2505

General Education Credit Hours 15
ENC1101 Composition I 3
PHI2600 Ethics 3
ECO2013 Principles of Macroeconomics 3
BSC2010 Introduction to Biology I 3
STA2023 Statistics 3

Core Requirements Credit Hours 13
BSC2010L Introduction to Biology I Laboratory 1
BSC2421 Introduction to Biotechnology 3
BSC2421L Introduction to Biotechnology Lab 1 or
MCB2010 General Microbiology 3
MCB2010L General Microbiology Lab 1
CHM1045 General Chemistry I 3
CHM1045L General Chemistry I Lab 1
CHM1046 General Chemistry II 3
CHM1046L General Chemistry II Lab 1

Elective Credit Hours 6
Program Electives*

Total ATD Credit Hours 42
(see above)

Total Program Credit Hours 76

Notes: Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

*Student may have to take MAT1033/STA1001 based on placement score. Student may also need to take CGS1060C if they are unable to successfully pass the computer competency test. If the student does not need to take MAT1033/STA1001 or CGS1060C, the student must take either 1000 or 2000 level BSC or CHM courses to meet the elective credit hour requirements.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Emergency Medical Technician Applied Technology Diploma  
Program Code B003

Program Description: The Emergency Medical Services program contains three milestones to meet the needs of the community. The Applied Technology Diploma for the EMT (milestone 1) and the Technical Certificate for the Paramedic (milestone 2) are included in the Associate in Science Degree in Emergency Medical Services (milestone 3). Satisfactory completion of the EMT Applied Technology Diploma program (milestone 1) will enable the student to take the Florida State EMT Examination and the National Registry of Emergency Medical Technicians EMT Examination. Satisfactory completion of the advanced courses in the Paramedic Technical Certificate Program will enable students to take the Florida State Paramedic and National Registry of Emergency Medical Technicians Paramedic Examination.

Career Pathway: Health Sciences

Program Entrance Requirements: The Emergency Medical Technical Applied Technology Diploma is a limited access program. Admission to the college does not guarantee admission into the program. Students are required to complete a supplemental application and meet specific criteria. There are a limited number of students admitted to the program each year. Please refer to the Health Science Admissions information included in Appendix C of the catalog for specific admissions requirements. Students can also access admissions requirements online at www.broward.edu/healthsciences

Additional Program Information: Students spend time in the classroom, the EMS lab, in local area hospitals, and on fire-rescue or on Advanced Life Support ambulances to gain the range of didactic, psychomotor, and affective knowledge, skills, and abilities necessary to function as entry-level paramedics. All classes in a semester must be successfully-completed with a “C” or better to move to the next semester in the sequence. All paramedic-level EMS-prefix classes must be taken at Broward College.

The Emergency Medical Services Paramedic Program is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP).

Location(s): Program specific courses are offered at the A. Hugh Adams Central Campus and the North Campus. Please consult the course schedule for specific semester locations.

Contact information: Program contact information can be found at www.broward.edu/academics/programs/emt/Pages/default.aspx

Related Programs at Broward College:
Emergency Medical Services Associate of Science (2160)  
Paramedic Technical Certificate (6208)

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<tr>
<td>EMS1119L EMS Skills Lab</td>
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<td>EMS1411 Hospital Clinical</td>
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<td>EMS1421 Field Clinical</td>
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Total Program Credit Hours 11

Note: Many courses have specific prerequisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements. Students are strongly encouraged to meet with an advisor to create an educational plan.
Applied Technology Diploma in Dental Assisting  
Program Code B007

**Program Description:** The Applied Technology Diploma (ATD) Dental Assisting Program is designed to prepare the student for a career as a certified dental assistant. The goal of the Broward College Dental Assisting program is to prepare knowledgeable, considerate, and culturally sensitive dental assisting graduates whose professional training encompasses legal and ethical decision making. The Dental Department is committed to providing a dental assisting program that is accessible to a diverse community of learners. The dedicated faculty provides a collaborative teaching-learning environment to promote critical thinking and lifelong learning.

The Dental Assisting program is a 12-month, full-time, daytime program. Successful completion of this program enables students to receive a dental assisting Applied Technology Diploma (ATD). Students completing the ATD program will be awarded 50 college credits. Students are required to take the Dental Assisting National Board (DANB) examination prior to completion of the program. Successful completion of the Dental Assisting program enables the students to receive the Expanded Duties and Dental Radiographer Certifications according to the Board of Dentistry of the State of Florida.

The Commission on Dental Accreditation (CODA) of the American Dental Association accredits the Dental Assisting program. CODA is a specialized accrediting body recognized by the Council on Postsecondary Accreditation and by the United States Department of Education.

Broward College’s Dental Assisting program is listed in the Florida Department of Education database of post-secondary courses at public vocational-technical centers, community colleges, universities and participating non-public institutions.

**Career Pathway:** Health Sciences

**ATD Program Entrance Requirements:** The Applied Technology Diploma in Dental Assisting is a limited access program. Admission to the college does not guarantee admission into the program. Students are required to complete a supplemental application and meet specific criteria. There are a limited number of students admitted to the program each year. Please refer to the Health Science Admissions information included in Appendix C of the catalog for specific admissions requirements. Students can also access admissions requirements online at www.broward.edu/healthsciences. Students must complete the following six credits before applying to the program:

- ENC1101  Composition I  3
- SPC1024  Intro to Speech Communication  or
- SPC1608  Intro to Public Speaking  3

Students must also take the A2 HESI test for dental assisting and achieve the following minimum scores:

- 75% Reading Comprehension
- 50% Math

After admission, students are required to complete the Basic Life Support (CAE0062) course. The due date for the course is given in the mandatory, general orientation meeting prior to the beginning of the program.
**Applied Technology Diploma in Dental Assisting**  
**Program Code B007**

**Additional Program Information:** One cohort of 36 students is admitted each June.

A final grade of "C" or higher must be achieved in each Dental Assisting course for continuance in the Program. A student who withdraws or is withdrawn from a Dental course shall refer to College Policy 6Hx2-5.33 and Procedure A6Hx2-5.33 on Re-entry into a Health Sciences Program and/or program guidelines.

Students are exempt from taking DES1404 if they received a grade of “C” or higher in all of the following courses:
- BSC2085 Anatomy and Physiology I
- BSC2085L Anatomy and Physiology I Lab
- BSC2086 Anatomy and Physiology II
- BSC2086L Anatomy and Physiology II Lab

****The exemption must be approved by the health science advisor

**Related Industry Certifications:** Students will be eligible to sit for the Dental Assisting National Board Examination (DANB) and must take the examination prior to program completion.

**Location(s):** General Education courses can be taken at any college location. The program specific courses are only taught on the A. Hugh Adams Central Campus. Please consult the course schedule for specific semester locations.

**Contact information:** Program contact information can be found at [http://www.broward.edu/academics/programs/dental/Pages/default.aspx](http://www.broward.edu/academics/programs/dental/Pages/default.aspx)

**Related Programs at Broward College:**
- Dental Hygiene Associate of Science (2145)
- Dental Assisting Associate of Science (2215)

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**General Education Credit Hours**  
ENC1101 Composition I 3
SPC1024 Introduction to Speech Communication or
SPC1608 Introduction to Public Speaking 3

**ATD Dental Assisting Core Requirements**  44
- DEA1003 Introduction to Dentistry 3
- DES1020 Dental Anatomy and Physiology 3
- DEA1030 Preclinical 4
- DEA1030L Preclinical Laboratory 2
- DES1100 Dental Materials 2
- DES1100L Dental Materials Laboratory 1
- DES1840 Preventive Dentistry 2
- DES1840L Preventive Dentistry Lab 1
- DES1200 Dental Radiography 3
- DES1200L Dental Radiography Laboratory 1
Applied Technology Diploma in Dental Assisting  
Program Code B007

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<td>Clinical Procedures I Lab</td>
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<td>DEA1131</td>
<td>Allied Dental Theory</td>
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<td>DES1502</td>
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<td>Basic Anatomy and Physiology</td>
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Total Program Credit Hours: 50

Mandatory Course Sequencing

First Year Term I (Summer – May)

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<td>SPC1608</td>
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Total Term Credit Hours: 6

First Year Term I (Summer – June)

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<td>DES1020</td>
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Total Term Credit Hours: 5

First Year Term II (Fall)

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<td>DES1840</td>
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Total Term Credit Hours: 18

First Year Term III (Spring)

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</table>

Broward College 312  College Catalog 2015-2016
Applied Technology Diploma in Dental Assisting
Program Code B007

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>DES1404</td>
<td>Basic Anatomy and Physiology#</td>
<td>2</td>
</tr>
<tr>
<td>DEA1155</td>
<td>Dental Psychology</td>
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</table>

Total Term Credit Hours 17

First Year Term IV (Summer – May)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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</tr>
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<tbody>
<tr>
<td>DES1807</td>
<td>Clinical Procedures II</td>
<td>1</td>
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<tr>
<td>DES1807L</td>
<td>Clinical Procedures II Lab</td>
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</tbody>
</table>

Total Term Credit Hours 4

Total Program Credit Hours 50

Notes: Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

This program has mandatory course sequencing.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Bachelor of Science in Nursing
Program Code N100

Program Description: The Registered Nurse to Bachelor of Science in Nursing (RN-BSN Program) is offered as a face-to-face or online post-licensure program intended to provide an increased educational opportunity for unrestricted and unencumbered licensed Registered Nurses (RNs). RNs applying to the program must have earned an Associate of Science (AS) Degree in nursing to matriculate into a baccalaureate degree program. RNs that have earned a Diploma in nursing from an accredited Diploma School of Nursing may enter the program by completing an Associate of Arts Degree, including the General Education Requirements, State of Florida Common Prerequisites, Required State of Florida courses and the RN-BSN Prerequisite courses. This one hundred twenty-three (123) credit hour program incorporates the Associate of Arts (AA) and AS lower division coursework as the foundation of the baccalaureate program.

Career Pathway: Health Sciences

Program Entrance Requirements: Applicants must possess an Associate of Science in Nursing or higher from an accredited institution recognized by Broward College. Applicants must also possess an unrestricted and unencumbered active license as a registered nurse in the State of Florida. Eligible applicants must:

- Apply to and be accepted by Broward College as a degree-seeking student (at www.broward.edu/future. The program’s objective code is: RN-BSN N100).
- International Students must go to: www.broward.edu/international to apply and complete an admission application.
- Submit a supplemental application to the RN-BSN Program by the published deadline. There are three entry periods per year: Summer, beginning May; Fall, beginning August and Winter, beginning January. To access the RN-BSN Supplemental Application, please go to the following link: www.broward.edu/academics/programs/bsn
- Possess an Associate of Science in Nursing or higher from an accredited institution.
- Successfully complete health forms.
- Successfully complete a (level 2) background investigation and drug screening (fee required).
- Successfully complete statistics (STA 2023) or equivalent course recognized by Broward College.
- Successfully complete a minimum of 24 General Education requirement credits.

Additional Program Information: All students are required to complete 96 face-to-face clinical hours in both Community Health Nursing Practicum (NUR4636L) and Nursing Capstone Practicum (NUR4945L). The End of Life course (NUR 4195C) is a combined lecture and lab course which includes 48 lab/clinical hours completed with simulation and clinical observation.

Academic Service-Learning is a requirement of the RN-BSN Program and is included in ten (10) lecture courses. Completion of a Professional Portfolio is a graduation requirement.

The RN-BSN Program is accredited by the Accreditation Commission for Education in Nursing (ACEN).

Related Industry Certifications: N/A

Foreign Language Requirement: Students must successfully complete the foreign language requirement as prescribed in college policy and the college catalog.
Bachelor of Science in Nursing  
Program Code N100

**Location:** General Education courses can be taken at any college location. The program is based and taught at the A. Hugh Adams Central Campus. Please consult the course schedule for specific semester locations.

**Contact information:** Program contact information can be found at [www.broward.edu/academics/programs/nursing/Pages/default.aspx](http://www.broward.edu/academics/programs/nursing/Pages/default.aspx)

**Related Programs at Broward College:**
Nursing (Generic-RN) Associate of Science (2127)
LPN-RN Transition Associate of Science (21271)

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**General Education Credit Hours**  
18

- Communications  
- Mathematics  
- Social/Behavioral Science  
- Humanities  
- Biological/Physical Science  
- Biological/Physical Science Lab  
- Wellness

**Core Requirement Credit Hours**  
39

- NUR4128 Patho-Pharmacology  
- NUR3805 Nursing Roles, Dimensions, & Perspectives  
- NUR3069 Advanced Health Assessment  
- NUR3069L Advanced Health Assessment Lab  
- NUR3119 Nursing Concepts & Theories  
- NUR3167 Nursing as Scholar  
- NUR4165 Nursing Research  
- NUR4667 Nursing Perspectives & Global Trends  
- NUR4636 Community Health Nursing  
- NUR4636L Community Health Nursing Practicum  
- NUR4827 Principles in Nursing Leadership & Management  
- NUR4945 Nursing Capstone  
- NUR4945L Nursing Capstone Practicum  
- Nursing Elective*  
- Nursing Elective*  

---

**Recommended Course Sequencing (for the programmatic courses – students will have to work with an advisor to determine the sequencing of the general education and core requirement courses)**

**First Year Term I**

- NUR4128 Patho-Pharmacology  
- NUR3805 Nursing Roles, Dimensions, & Perspectives  
- NUR3069 Advanced Health Assessment  
- NUR3069L Advanced Health Assessment Lab  
- Nursing Elective*  

**Total Term Credit Hours**  
12
Bachelor of Science in Nursing
Program Code N100

First Year Term II
NUR3119 Nursing Concepts & Theories 3
NUR3167 Nursing as Scholar 3
NUR4165 Nursing Research 3
NUR4667 Nursing Perspectives & Global Trends 3
NUR4636 Community Health Nursing 3
NUR4636L Community Health Nursing Practicum 2
Total Term Credit Hours 17

First Year Term III
NUR4827 Principles in Nursing Leadership & Management 3
Nursing Elective* 3
Total Term Credit Hours 6

Second Year Term I
NUR4945 Nursing Capstone 2
NUR4945 Nursing Capstone Practicum 2
Total Term Credit Hours 4

Notes: Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

*Electives – students must select from the following elective courses: NUR4826, NUR4870, NUR4195C, NUR3678, NUR4284.

The courses are offered in sequence and all courses must be completed with a grade of “C” or better to proceed to the next course.

General Education Courses will vary based on a student’s transcript.

Students are required to meet with an RN-BSN advisor three times during their program to create and update their individual educational plan (IEP).
Paramedic Technical Certificate
Program Code 6208

Program Description: The Emergency Medical Services program contains three milestones to meet the needs of the community. The Applied Technology Diploma for the EMT (milestone 1) and the Technical Certificate for the Paramedic (milestone 2) are included in the Associate in Science Degree in Emergency Medical Services (milestone 3). Satisfactory completion of the EMT Applied Technology Diploma program (milestone 1) will enable the student to take the Florida State EMT Examination and the National Registry of Emergency Medical Technicians EMT Examination. Satisfactory completion of the advanced courses in the Paramedic Technical Certificate Program will enable students to take the Florida State Paramedic and National Registry of Emergency Medical Technicians Paramedic Examination.

Career Pathway: Health Sciences

Program Entrance Requirements: The Paramedic Technical Certificate is a limited access program. Admission to the college does not guarantee admission into the program. Students are required to complete a supplemental application and meet specific criteria. There are a limited number of students admitted to the program each year. Please refer to the Health Science Admissions information included in Appendix C of the catalog for specific admissions requirements. Students can also access admissions requirements online at www.broward.edu/healthsciences

Additional Program Information: Students spend time in the classroom, the EMS lab, in local area hospitals, and on fire-rescue or on Advanced Life Support ambulances to gain the range of didactic, psychomotor, and affective knowledge, skills, and abilities necessary to function as entry-level paramedics. All classes in a semester must be successfully-completed with a “C” or better to move to the next semester in the sequence. All paramedic-level EMS-prefix classes must be taken at Broward College.

The Emergency Medical Services Paramedic Program is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP).

Location(s): General Education courses are offered at all college locations, including online. Program specific courses are offered at the A. Hugh Adams Central Campus and the North Campus. Please consult the course schedule for specific semester locations.

Contact information: Program contact information can be found at www.broward.edu/academics/programs/emt/Pages/default.aspx

Related Programs at Broward College:
Emergency Medical Technician Applied Technology Diploma (B003)
Emergency Medical Services Associate of Science (2160)

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
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<tr>
<td>EMS2010</td>
<td>Body Systems for the Paramedic</td>
<td>3</td>
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<tr>
<td>EMS2631</td>
<td>Paramedic Science I-Lecture</td>
<td>3</td>
</tr>
<tr>
<td>EMS2631L</td>
<td>Paramedic Science I - Skills Lab</td>
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<tr>
<td>EMS2650</td>
<td>Paramedic Science I, Field Clinical</td>
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<tr>
<td>EMS2632</td>
<td>Paramedic Science II-Lecture*</td>
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<td>EMS2632L</td>
<td>Paramedic Science II, Skills Lab</td>
<td>1</td>
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<tr>
<td>EMS2633</td>
<td>Paramedic Science II, Cardio-Respiratory Lecture</td>
<td>3</td>
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</tbody>
</table>
## Paramedic Technical Certificate
### Program Code 6208

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>EMS2641</td>
<td>Paramedic Science, Hospital Clinical I</td>
<td>2</td>
</tr>
<tr>
<td>EMS2651</td>
<td>Paramedic Science II, Field Clinical</td>
<td>3</td>
</tr>
<tr>
<td>EMS2634</td>
<td>Paramedic Science III, Trauma Lecture</td>
<td>3</td>
</tr>
<tr>
<td>EMS2634L</td>
<td>Paramedic Science III, Lab</td>
<td>1</td>
</tr>
<tr>
<td>EMS2635</td>
<td>Paramedic Science III, Medical Emergencies Lecture</td>
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</tr>
<tr>
<td>EMS2642</td>
<td>Paramedic Science II Hospital Clinical</td>
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<td>EMS2652</td>
<td>Paramedic Science III Field Clinical</td>
<td>3</td>
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<tr>
<td>EMS2636</td>
<td>Paramedic Science IV-Lecture</td>
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<tr>
<td>EMS2636L</td>
<td>Paramedic Science IV Lab*</td>
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<td>EMS2643</td>
<td>Paramedic Science III Hospital Clinical</td>
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<tr>
<td>EMS2653</td>
<td>Paramedic Science Internship</td>
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</table>

**Total Program Credit Hours**: 42

**Notes**: Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

*To continue in the second and successive semesters of the Paramedic program, students must possess a valid State of Florida EMT license and maintain it for the duration of the program.

**Students are strongly encouraged to meet with an advisor to create an educational plan.**
Nuclear Medicine Technology Specialist Technical Certificate  
Program Code 6224

**Program Description:** Applicants for the Nuclear Medicine Technology Technical Certificate Program must be a graduate of an accredited two-year Health Science Program which leads to registration and/or licensure. Upon completion of the twelve (12) months full-time day program, the student will be eligible for the Nuclear Medicine National Board Certification Exam offered by, and become certified by, the American Registry of Radiologic Technologists (ARRT) and/or the Nuclear Medicine Technology Certification Board (NMTCB).

**Career Pathway:** Health Sciences

**Program Entrance Requirements:** The Nuclear Medicine Technology Specialist Technical Certificate is a limited access program. Admission to the college does not guarantee admission into the program. Students are required to complete a supplemental application and meet specific criteria. There are a limited number of students admitted to the program each year. Please refer to the Health Science Admissions information included in Appendix C of the catalog for specific admissions requirements. Students can also access admissions requirements online at www.broward.edu/healthsciences

Program applicants who have criminal convictions or concerns must clear the ARRT ethics requirements through a pre-application review of eligibility process. The Pre-application Review of Eligibility process with the American Registry of Radiologic Technologists is done to avoid potential delays when applying to take the certification exam. Applicants should contact the ARRT directly at 651-687-0048 for further information.

**Location(s):** General Education courses are offered at all college locations, including online. Program specific courses are only available at the North Campus. Please consult the course schedule for specific semester locations.

**Related Industry Certificate:** American Registry of Radiologic Technologists (ARRT) certification exam & subsequently apply to the state of Florida for licensure, and Nuclear Medicine Technologist Certification Board

**Contact information:** Program contact information can be found at www.broward.edu/nuclearmedicine

**Related Programs at Broward College:**
Nuclear Medicine Technology Associate of Science (2102)
Hospital-Based Nuclear Medicine Technology Associate of Science (21021)

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**Required Courses**

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>CHM1032</td>
<td>Chemistry for Health Sciences</td>
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<tr>
<td>CHM1032L</td>
<td>Chemistry for Health Sciences Lab</td>
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<tr>
<td>BSC2085</td>
<td>Anatomy &amp; Physiology I</td>
<td>3</td>
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<tr>
<td>BSC2085L</td>
<td>Anatomy &amp; Physiology Lab I</td>
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<tr>
<td>PHY1001</td>
<td>Applied Physics</td>
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<tr>
<td>NMT1002</td>
<td>Introduction to Nuclear Medicine</td>
<td>3</td>
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<tr>
<td>NMT1430</td>
<td>Radiation Safety and Radiobiology</td>
<td>3</td>
</tr>
<tr>
<td>NMT1630</td>
<td>Nuclear Medicine Physics and Math App</td>
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</table>
## Nuclear Medicine Technology Specialist Technical Certificate
### Program Code 6224

<table>
<thead>
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<th>Course Code</th>
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<tr>
<td>NMT1714</td>
<td>Nuclear Medicine Pathology</td>
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<td>NMT2713</td>
<td>Nuclear Medicine Methodology I</td>
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<td>NMT2713L</td>
<td>Nuclear Medicine Methodology I Lab</td>
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</tr>
<tr>
<td>NMT2130</td>
<td>Nuclear Medicine Radiopharmacy</td>
<td>2</td>
</tr>
<tr>
<td>NMT2824</td>
<td>Nuclear Medicine Clinical Education III</td>
<td>3</td>
</tr>
<tr>
<td>NMT2779</td>
<td>Intro to Multiple Modalities</td>
<td>2</td>
</tr>
<tr>
<td>NMT2960</td>
<td>Nuclear Medicine Advance Applications</td>
<td>2</td>
</tr>
<tr>
<td>NMT2102</td>
<td>Nuclear Medicine Administration</td>
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<tr>
<td>NMT2534</td>
<td>Nuclear Medicine Instrumentation</td>
<td>2</td>
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<td>NMT2723</td>
<td>Nuclear Medicine Methodology II</td>
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<td>NMT2834</td>
<td>Nuclear Medicine Clinical Education IV</td>
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<td>NMT2061</td>
<td>Nuclear Medicine Seminar</td>
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<td>NMT2844</td>
<td>Nuclear Medicine Clinical Education V</td>
<td>or</td>
</tr>
<tr>
<td>NMT2905</td>
<td>Nuclear Medicine Independent Study*</td>
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**Total Program Credit Hours**: 48

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**Notes**: Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

* Requires approval of Associate Dean.

**Students are strongly encouraged to meet with an advisor to create an educational plan.**
Radiation Therapy Specialist Technical Certificate
Program Code 6228

Program Description: The Radiation Therapist Specialist Technical Certificate program prepares the Certified Radiologic Technologist (ARRT) for employment as a radiation therapist. Upon completion of this 15 month full-time day program the graduates are eligible to take the American Registry of Radiologic Technologists (ARRT) certification exam & subsequently apply to the state of Florida for licensure.

Career Pathway: Health Sciences

Program Entrance Requirements: The Radiation Therapist Specialist Technical Certificate is a limited access program. Admission to the college does not guarantee admission into the program. Students are required to complete a supplemental application and meet specific criteria. There are a limited number of students admitted to the program each year. Please refer to the Health Science Admissions information included in Appendix C of the catalog for specific admissions requirements. Students can also access admissions requirements online at www.broward.edu/healthsciences

Additional Program Information: In order to successfully progress through the Radiation Therapist Specialist Technical Certificate, students must achieve a grade of "C" or above in all didactic courses and clinical courses and an "S" (satisfactory) grade in all laboratory courses. This requirement is in addition to maintaining an overall degree GPA of at least 2.0.

Clinical education is performed in Broward and Palm Beach County hospitals/clinics and is offered concurrently with the didactic courses.

Related Industry Certificate: American Registry of Radiologic Technologists (ARRT) certification exam & subsequently apply to the state of Florida for licensure.

Location(s): Program specific courses are only available at the North Campus. Please consult the course schedule for specific semester locations.

Contact information: Program contact information can be found at www.broward.edu/academics/programs/radiation/Pages/default.aspx

Related Programs at Broward College:
Radiation Therapy Associate of Science (2159)
Hospital-Based Radiation Therapy Associate of Science (21591)

Required Courses
RAT1001 Introduction to Radiation Therapy 1
RAT1002 Introduction to Radiation Therapy Clinical 2
RAT1002L Introduction to Radiation Therapy Clinical Lab 1
RAT1515 Radiation Pharmacology 1
RAT1804 Clinical Education I 1
RAT2021 Principles of Radiation Therapy I 2
RAT2022 Principles of Radiation Therapy II 2
RAT2023 Oncology I 3
RAT2024 Oncology II 3
RAT2040 Radiation Oncology Law 1
RAT2041 Radiation Oncology Ethics 1
Radiation Therapy Specialist Technical Certificate  
Program Code 6228

<table>
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<tr>
<td>RAT2241</td>
<td>Radiobiology</td>
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<tr>
<td>RAT2243</td>
<td>Radiation Oncology Sectional Anatomy</td>
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<tr>
<td>RAT2617</td>
<td>Advanced Radiation Physics I</td>
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<tr>
<td>RAT2618</td>
<td>Advanced Radiation Physics II</td>
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<tr>
<td>RAT2619</td>
<td>Dosimetry &amp; Computer Treatment Planning</td>
<td>3</td>
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<tr>
<td>RAT2657</td>
<td>Quality Assurance/Quality Management</td>
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<tr>
<td>RAT2814</td>
<td>Clinical Education II</td>
<td>3</td>
</tr>
<tr>
<td>RAT2824</td>
<td>Clinical Education III</td>
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<td>RAT2905</td>
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</table>

**Total Program Credit Hours**  
43

**Notes:** Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

*Course requires approval of Associate Dean

Students are strongly encouraged to meet with an advisor to create an educational plan.
Post-Secondary Adult Vocational Certificate in Medical Assisting  
Program Code 5215

Program Description: The Medical Assisting Program is a 10-month vocational certificate program. The Broward College Medical Assisting Certificate Program is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of Medical Assisting Education Review Board (MAERB). The role of the Medical Assistant within the physician's office is varied, demanding, and complex. Duties and responsibilities may encompass those skills of administrator, clinician, or technician. In many instances, the Medical Assistant functions in all three areas while also serving as a public relations specialist.

Career Pathway: Health Sciences

Program Entrance Requirements: The PSAV Certificate in Medical Assisting is a limited access program. Admission to the college does not guarantee admission into the program. Students are required to complete a supplemental application and meet specific criteria. There are a limited number of students admitted to the program each year. Please refer to the Health Science Admissions information included in Appendix C of the catalog for specific admissions requirements. Students can also access admissions requirements online at www.broward.edu/healthsciences

Additional Program Information: One cohort of 20 students is admitted each August. A final grade of "C" or higher must be achieved in each Medical Assisting course for continuance in the Program. To successfully progress through the Medical Assisting Program, students must achieve a grade of "C" or above in all didactic courses, an "S" (satisfactory) grade in all clinical and laboratory courses, maintain an overall degree GPA of at least 2.0. Students must also obtain TABE Assessment scores at or above the state mandated grade level. Students must have at least the first attempt of the TABE test completed by the end of term one.

Students are placed into practicums in physicians' offices throughout Broward County which offer maximum flexibility. The practicum course has been especially designed to meet the individual needs of the student, thus allowing for the development of specific skills within a chosen interest or specialty area.

Upon completion of this ten (10) month program the student will be eligible to register for the national certification exam of the American Association of Medical Assistants to obtain the credential of Certified Medical Assistant (CMA-AAMA).

A student who withdraws or is withdrawn from a Medical Assisting course shall refer to College Policy 6Hx2-5.33 and Procedure A6Hx2-5.33 on Re-entry into a Health Sciences Program and/or program guidelines. Reentry to a Program will be based upon space availability. Only one reentry will be allowed. Students who receive a grade of “D” or “F” in any course after reentry will result in permanent dismissal from the BC Medical Assisting.

Related Industry Certifications: Upon completing this program, graduates will be eligible to sit for the following industry certifications/licenses:
- Medical Assistant - NCMA
- Certified Medical Assistant - CMA

Location(s): The program specific courses and the Health Science Certificate courses are only offered on the A. Hugh Adams Central Campus. Please consult the course schedule for specific semester locations. The Health Science Certificate courses should be completed prior to or by the end of Term I.
Post-Secondary Adult Vocational Certificate in Medical Assisting  
Program Code 5215

Contact information: Program contact information can be found at  
www.broward.edu/academics/programs/medicalassisting/Pages/default.aspx

Related Programs at Broward College: N/A

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<thead>
<tr>
<th>Health Science Certificate Courses</th>
<th>Clock Hours</th>
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<tbody>
<tr>
<td>HCP0001 Health Careers Core Curriculum</td>
<td>75</td>
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<tr>
<td>HSC0405 Basic Life Support</td>
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<tr>
<td>HSC0591 HIV/AIDS</td>
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<tr>
<td>HSC0691 Domestic Violence</td>
<td>2</td>
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<td>HSC0522 OSHA/TB</td>
<td>6</td>
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<tr>
<td>HSC0692 Prevention of Medical Errors</td>
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<tbody>
<tr>
<td>MEA0230 Medical Terminology</td>
<td>48</td>
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<tr>
<td>MEA0233 Anatomy and Physiology</td>
<td>48</td>
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<tr>
<td>MEA0334C Admin Office Procedures + Lab</td>
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<tr>
<td>MEA0335C Electronic Health Records +Lab</td>
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<tr>
<td>MEA0258 Radiology for Med Assist I</td>
<td>64</td>
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<tr>
<td>HSC0693 All Hazards Training</td>
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<tr>
<td>MEA0255 Basic Lab Procedures I</td>
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<td>MEA0255L Basic Lab Procedures I Lab</td>
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<tr>
<td>MEA0582 Medical Assisting Simulation Lab I</td>
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<td>MEA0256 Basic Lab Procedures II</td>
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<td>MEA0256L Basic Lab Procedures II Lab</td>
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<td>MEA0005 Intro to Medical Assisting</td>
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<td>MEA0800 Practicum in Medical Assisting</td>
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Course Sequencing

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**Total Clock Hour**: 93.5
# Post-Secondary Adult Vocational Certificate in Medical Assisting

**Program Code 5215**

## Year I Term I

### Session I

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**Total Session Clock Hours 276**

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**Total Session Clock Hours 120**

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**Total Session Clock Hours 128**

## Year I Term II

### Session I

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**Total Term Clock Hours 304**

### Session II

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**Total Semester Clock Hours 131**

## Year I Term III

### Session II

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**Total Session Clock Hours 247.5**

**Total Program Clock Hours 1300**

**Notes:**
- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.
- Verification of CPR is required before program completion. The HSC0405, Basic Life Support (CPR and First Aid) course is offered by the Continuing Education Health Science department.
- Students are strongly encouraged to meet with an advisor to create an educational plan.
Post-Secondary Adult Vocational Certificate in Massage Therapy
Program Code 5281

Program Description: The Massage Therapy Program provides the student the opportunity to develop competency in technical skills through planned experiences in the classroom, laboratory, off-site clinical facilities, and at various community sites. Our state-of-the-art curriculum is both challenging and enjoyable as it develops a student’s understanding of the therapeutic experience and encourages a high level of technical skill and sensitivity. The teaching format combines lectures, discussions, practical demonstrations, interactive exercises, videos, guest speakers, field trips, and supervised massage practice both on and off campus. Our curriculum is designed to meet a wide range of learning styles, as students are encouraged to identify and strengthen their strategies for success. The Massage Therapy Program is dedicated to developing therapists who are quality-minded and who will ultimately make unique contributions to the field of massage therapy.

Career Pathway: Health Sciences

Program Entrance Requirements: The PSAV Certificate in Massage Therapy is a limited access program. Admission to the college does not guarantee admission into the program. Students are required to complete a supplemental application and meet specific criteria. There are a limited number of students admitted to the program each year. Please refer to the Health Science Admissions information included in Appendix C of the catalog for specific admissions requirements. Students can also access admissions requirements online at www.broward.edu/healthsciences

Additional Program Information: Two cohorts of 20 students each are admitted. The cohort admitted in August attend classes during the day. The cohort admitted in January attend classes in the evening. Students must maintain a grade point average of 2.0 or higher and earn a grade of “C” or higher in all didactic courses, an “S” grade in all laboratory courses, and obtain TABE Assessment scores at or above the state mandated grade level-9th grade level for Math, 10th grade level for Reading and English.

A student who withdraws or is withdrawn from a Massage Therapy course shall refer to College Policy 6Hx2-5.33 and Procedure A6Hx2-5.33 on Re-entry into a Health Sciences Program and/or program guidelines. Reentry to a Program will be based upon space availability. Only one reentry will be allowed. The student receiving a grade of “D” or “F” in any course after reentry will result in permanent dismissal from the BC Massage Therapy program.

Related Industry Certifications: Upon completing this program, completers will be eligible to sit for the Florida Board of Massage required exam given by the Federation of State Massage Therapy Boards. www.FSMTB.org. Upon successful completion of the massage program and passing of the required exam, completers are eligible to apply to the Florida Board of Massage for a Massage Therapy License. www.floridasmassagetherapy.gov

Location(s): The program specific courses are only offered at the North Campus. The Health Science Certificate courses are only offered on the A. Hugh Adams Central Campus. Please consult the course schedule for specific semester locations. The Health Science Certificate courses should be completed prior to or by the end of Term I.
Post-Secondary Adult Vocational Certificate in Massage Therapy  
Program Code 5281

Program Contact: Program contact information can be found at 
www.broward.edu/academics/programs/massage/Pages/default.aspx

Related Programs at Broward College: N/A

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<tr>
<th>Health Science Certificate Courses</th>
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<tr>
<td>HCP0001 Health Careers Core Curriculum</td>
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<td>HSC0405 Basic Life Support</td>
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<table>
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<tr>
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<td>MSS0001 Medical Ethics &amp; Standards</td>
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<tr>
<td>MSS0150 Anatomy &amp; Physiology of Body Systems</td>
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Total Program Clock Hours 750

Notes: Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Post-Secondary Adult Vocational Certificate in Pharmacy Technician
Program Code 5302

Program Description: Pharmacy technicians (aka pharmaceutical technicians) are health care workers who perform pharmacy related functions, generally working under the direct supervision of a licensed pharmacist or other health professional. Pharmacy technicians work in a variety of locations, usually in community/retail and hospital pharmacies but also sometimes in long-term care facilities, pharmaceutical manufacturers, third-party insurance companies, computer software companies, or in government or teaching. Job duties include dispensing prescription drugs and other medical devices to patients and instructing on their use. They may also perform administrative duties in pharmaceutical practice, such as reviewing prescription requests with doctor's offices and insurance companies to ensure correct medications are provided and payment is received. In recent times, they also speak directly with the patients on the phone to aid in the awareness of taking medications on time.

Graduates of the Pharmacy Technician training program are eligible to take the Pharmacy Technician Certification Board (PTCB) certification exam.

Career Pathway: Health Sciences

Program Entrance Requirements: The PSAV Certificate in Pharmacy Technician is a limited access program. Admission to the college does not guarantee admission into the program. Students are required to complete a supplemental application and meet specific criteria. There are a limited number of students admitted to the program each year. Please refer to the Health Science Admissions information included in Appendix C of the catalog for specific admissions requirements. Students can also access admissions requirements online at www.broward.edu/healthsciences

Additional Program Information: One cohort of 20 students is admitted in August. To successfully progress through the Pharmacy Technician Program, students must achieve a grade of "C" or above in all didactic courses, an "S" (satisfactory) grade in all clinical and laboratory courses. Students must also maintain an overall degree GPA of at least 2.0.

A student who withdraws or is withdrawn from a Pharmacy Technician course shall refer to College Policy 6Hx2-5.33 and Procedure A6Hx2-5.33 on Re-entry into a Health Sciences Program and/or program guidelines. Reentry to a Program will be based upon space availability. Only one reentry will be allowed. The student who reenters must maintain a “C” or higher in each Pharmacy Technician course to continue in a Program. The student receiving a grade of “D” or “F” in any course after reentry will result in permanent dismissal from the BC Pharmacy Technician program.

Related Industry Certifications: Upon completing this program, graduates will be eligible to sit for the following industry certifications/licenses:

- Registered Pharmacy Technician

Location(s): The program specific and Health Science Certificate courses are only offered on the A. Hugh Adams Central Campus. Please consult the course schedule for specific semester locations.

Program Contact: Program contact information can be found at www.broward.edu/academics/programs/pharmtech/Pages/default.aspx

Related Programs at Broward College: N/A
Post-Secondary Adult Vocational Certificate in Pharmacy Technician  
Program Code 5302

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<th>Required Courses</th>
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Total Clock Hours for Program                                     1050

Note: Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

Students are strongly encouraged to meet with an advisor to create an educational plan.
## Florida Education and Training Placement Information Program (FETPIP) Data

**Health Science**

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Industry, Manufacturing, Construction, & Transportation

Transform your ideas to plans and your dreams into reality by taking your analytical skills to the next level. Your dream to fly an airplane or to help plan a beautiful building can be achieved when you enroll in one of Broward College’s exciting programs listed below. Get started today.

Articulation Agreements
Broward College has numerous articulation agreements with our local high schools and Technical Colleges. Students may be able to earn college credit for select programs completed at the secondary and postsecondary level. The programs listed below with an asterisk (*) have a current articulation agreement. For more information about articulation agreements, please contact the Career and Technical Education office at 954-201-7830. You can also find information online at www.broward.edu/careerpath

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<td>A004</td>
<td>Auto Tech Service*</td>
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<td>A037</td>
<td>Dealer Specific Auto Technology*</td>
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<td>A040</td>
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<td>6314</td>
<td>Engineering Technology Support</td>
</tr>
<tr>
<td>6315</td>
<td>Building Construction Special</td>
</tr>
<tr>
<td>6321</td>
<td>Commercial Flight Operations</td>
</tr>
<tr>
<td>6322</td>
<td>Electronics Aide</td>
</tr>
<tr>
<td>6325</td>
<td>Alternative Energy Systems</td>
</tr>
<tr>
<td>6326</td>
<td>General Auto Service Technician</td>
</tr>
<tr>
<td>6327</td>
<td>Marine Electrician</td>
</tr>
<tr>
<td>6328</td>
<td>Marine Propulsion Technician</td>
</tr>
<tr>
<td>6342</td>
<td>Marine Systems Technician</td>
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**Post-Secondary Adult Vocational Certificate**

<table>
<thead>
<tr>
<th>Code</th>
<th>Program Name</th>
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<tbody>
<tr>
<td>5272</td>
<td>Aircraft Airframe Mechanics</td>
</tr>
<tr>
<td>5273</td>
<td>Aircraft Powerplant Mechanics</td>
</tr>
<tr>
<td>5299</td>
<td>Avionics</td>
</tr>
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</table>
Associate of Arts
Program Code 1010

Program Description: The Associate of Arts (AA) degree is the traditional transfer degree. Students who earn the AA are able to remain at Broward College, transfer to another state college, or a state university in order to continue their education and pursue a baccalaureate degree.

Career Pathway: Industry, Manufacturing, Construction & Transportation (IMCT)

Program Entrance Requirements: HS Diploma or GED

Additional Program Information: The Associate of Arts degree includes 36 credit hours of General Education and an additional 24 credit hours of electives. The elective credit hours should be selected based on the student’s transfer major. Students are encouraged to review the state’s Common Course Prerequisite Manual (www.flvc.org/partner-portal/common-prerequisite-manual) for additional guidance.

Location(s): Courses are offered at all college locations, including online. Please consult the course schedule for specific semester locations.

Bachelor Degree Majors Include:

<table>
<thead>
<tr>
<th>at Broward College</th>
<th>at a Transfer Institution</th>
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</thead>
<tbody>
<tr>
<td>Exceptional Student Education</td>
<td>Aerospace Engineering</td>
</tr>
<tr>
<td>Middle Grades General Science Education</td>
<td>Architecture</td>
</tr>
<tr>
<td>Secondary Biology Education</td>
<td>Interior Design</td>
</tr>
<tr>
<td>Middle Grades Mathematics Education</td>
<td>Transportation Management</td>
</tr>
<tr>
<td>Secondary Mathematics Education</td>
<td>Urban and Regional Planning</td>
</tr>
<tr>
<td>Environmental Science - Biosecurity</td>
<td></td>
</tr>
<tr>
<td>Environmental Science - Physical Science</td>
<td></td>
</tr>
<tr>
<td>Supervision &amp; Management</td>
<td></td>
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<tr>
<td>Technology Management</td>
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<tr>
<td>Information Technology</td>
<td></td>
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<tr>
<td>Supply Chain Management</td>
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Recommended First Semester Courses

<table>
<thead>
<tr>
<th>Exempt Students</th>
<th>Non-Exempt Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC1101 Composition I 3</td>
<td>ENC XXXX* 3</td>
</tr>
<tr>
<td>MAT/STA/MAC XXXX* 3</td>
<td>MAT/STA/MAC XXXX* 3</td>
</tr>
<tr>
<td>CGS1060C Computer and Internet Literacy 3</td>
<td>CGS1060C Computer and Internet Literacy 3</td>
</tr>
<tr>
<td>SPC1608 Introduction to Public Speaking or</td>
<td>SPC1608 Introduction to Public Speaking or</td>
</tr>
<tr>
<td>SPC1024 Introduction to Speech</td>
<td>SPC1024 Introduction to Speech</td>
</tr>
<tr>
<td>Communications 3</td>
<td>Communications 3</td>
</tr>
<tr>
<td>ASC1010 History of Aviation or</td>
<td>ASC1010 History of Aviation or</td>
</tr>
<tr>
<td>EET1084C Introduction to Electronics or</td>
<td>EET1084C Introduction to Electronics or</td>
</tr>
<tr>
<td>BCT2760 Building Codes and Regulation 3</td>
<td>BCT2760 Building Codes and Regulation 3</td>
</tr>
</tbody>
</table>

*The specific English and Math course will depend on the student’s test score.
**Registration depends on the student’s test score.
- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

If the student attends part-time (less than 12 credits), it is highly recommended that the student complete English and Math in the first term.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Associate of Applied Science in Automotive Service Management Technology  
Program Code A004

**Program Description:** This Automotive Service Management Technology program is designed to prepare entry-level automotive technicians and to provide academic background for advancement to management positions in the automotive service industry.

**Career Pathway:** Industry, Manufacturing, Construction & Transportation (IMCT)

**Program Entrance Requirements:** HS Diploma or GED. Students must also possess and maintain a valid and unrestricted driver’s license in order to participate in Co-op courses.

**Additional Program Information:** In order to graduate with the Automotive Service Management Technology AAS degree students must complete the prescribed coursework, earn a “C” or better in all courses, maintain an overall GPA of 2.5, and earn a passing score on two of the either ASE industry standard certification tests (A1-A8).

**Related Industry Certifications:** Students will be eligible to sit for up to 8 ASE industry standard certifications.

**Location(s):** The required general education courses may be taken at any college location, except AER2070 which is solely taught at the AutoNation Center for Excellence in Automotive Technology. The core requirements are only taught at the AutoNation Center for Excellence in Automotive Technology. Please consult the course schedule for specific semester locations.

**Contact information:** Program contact information can be found at [http://www.broward.edu/academics/programs/auto/Pages/default.aspx](http://www.broward.edu/academics/programs/auto/Pages/default.aspx)

**Related Programs at Broward College:**  
Automotive Service Technician Technical Certificate (6310)  
General Automotive Service Technician Technical Certificate (6326)

| General Education Credit Hours | 15 | AER2298C | Automatic Transmissions | 4 |
| ENC1101 | English Composition I | 3 | AER2398C | Manual Drive Transmissions and Axles | 4 |
| Humanities | 3 | AER2498C | Steering and Suspension | 4 |
| Social Science | 3 | AER2598C | Brake Systems | 4 |
| Mathematics/Science | 3 | AER2758C | Heating and Air Conditioning Theory | 4 |
| Speech Communications | 3 | AER2895C | Advanced Engine Performance | 4 |
| Core Requirements Credit Hours | 53 | AER2898C | Engine Performance | 4 |
| AER1081C | Introduction to Automotive Technology | 4 | AER2949 | Cooperative Education | 6 |
| AER1198C | Engine Repair | 4 | Automotive Elective* | 3 |
| AER1695C | Electronics | 4 | **Total Program Credit Hours** | **68** |
| AER1698C | Electrical Systems | 4 | |

**Notes:**  
*Program electives – Student may have to take MAT1033 or STA1001 based on placement score. If the student does not need MAT1033 or STA1001, the student must take an Automotive elective – MNA2345, AER2070 or MNA1161 course.  
- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.  
Students are strongly encouraged to meet with an advisor to create an educational plan.
Associate of Applied Science in Automotive Technology, Dealer Specific  
Program Code A037

Program Description: This Automotive Technology program, offered at the AutoNation Center for Excellence in Automotive Technology is designed to prepare entry-level automotive technicians and to provide academic background for advancement to management positions in the automotive service industry.

Career Pathway: Industry, Manufacturing, Construction & Transportation (IMCT)

Program Entrance Requirements: HS Diploma or GED. Students must also possess and maintain a valid and unrestricted driver’s license in order to participate in Co-op courses.

Additional Program Information: Automotive Technology Programs sponsored by Automobile Manufacturers are limited enrollment programs and require an internship at a dealership.

In order to graduate with the AAS degree students must complete the prescribed coursework, earn a “C” or better in all courses, maintain an overall GPA of 2.5, and earn a passing score on two of the either ASE industry standard certification tests (A1-A8).

Related Industry Certifications: Students will be eligible to sit for up to 8 ASE industry standard certifications.

Location(s): The required general education courses may be taken at any college location, except AER2070 which is solely taught at the AutoNation Center for Excellence in Automotive Technology. The core requirements are only taught at the AutoNation Center for Excellence in Automotive Technology. Please consult the course schedule for specific semester locations.

Contact information: Program contact information can be found at http://www.broward.edu/academics/programs/auto/Pages/default.aspx

Related Programs at Broward College:
- Dealer Specific Automotive Technology AAS (A037)
- Automotive Service Technician Technical Certificate (6310)
- General Automotive Service Technician Technical Certificate (6326)

<table>
<thead>
<tr>
<th>General Education Credit Hours</th>
<th>ENCI1101 English Composition I</th>
<th>Humanities</th>
<th>Social Science</th>
<th>Mathematics/Science</th>
<th>Speech Communications</th>
<th>Core Requirements Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>15</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>59</td>
</tr>
</tbody>
</table>

- AER1082C Introduction to GM Automotive Technology 4  
- AER1197C GM Engine Repair 4  
- AER1694C GM Electronics 4  
- AER1690C GM Electrical Systems 4  
- AER2291C GM Automatic Transmissions 4  
- AER1396C GM Manual Drive Train 4

<table>
<thead>
<tr>
<th>General Education Credit Hours</th>
<th>ENCI1101 English Composition I</th>
<th>Humanities</th>
<th>Social Science</th>
<th>Mathematics/Science</th>
<th>Speech Communications</th>
<th>Core Requirements Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
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<td>15</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>59</td>
</tr>
</tbody>
</table>

- AER1496C GM Steering and Suspension 4  
- AER1594C GM Brake Systems 4  
- AER2798C GM Heating and Air Conditioning Theory 4  
- AER2899C GM Advanced Engine Performance 4

<table>
<thead>
<tr>
<th>Total Program Credit Hours</th>
<th>ENC1101 English Composition I</th>
<th>Humanities</th>
<th>Social Science</th>
<th>Mathematics/Science</th>
<th>Speech Communications</th>
<th>Core Requirements Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>74</td>
<td>15</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>59</td>
</tr>
</tbody>
</table>

Total Program Credit Hours 74
Applied Science in Automotive Technology, Dealer Specific
Program Code A037

Notes:
*Program electives – Student may have to take MAT1033 or STA1001 based on placement score. If the student does not need MAT1033 or STA1001, the student must take an Automotive elective – MNA2345, AER2070 or MNA1161 course.

- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements

Students are strongly encouraged to meet with an advisor to create an educational plan.
Associate of Applied Science in Marine Engineering Management
Program Code A040

Program Description: The Marine Engineering Management degree is designed to prepare students interested in a career in the large yacht maintenance, repair, and retrofit industry. Broward County is the world leader in the yacht industry and is in need of qualified technicians to work on yachts with diesel engines and sophisticated sustainable systems. Completers of the program may be employed in shipyards working on multi-million dollar vessels and the latest technology in marine equipment. The career may also include the option of being part of the on-board crew and traveling around the world. Career advancement in management is a probable progression in the field.

Career Pathway: Industry, Manufacturing, Construction & Transportation (IMCT)

Program Entrance Requirements: HS Diploma or GED

Additional Program Information: In order to graduate with the Marine Engineering Management AAS degree students must earn a “C” or better in all courses, and maintain an overall GPA of 2.5.

Related Industry Certifications: Students will earn various American Boat and Yacht Council (ABYC) Certifications.

Location(s): While most of the program can be completed at any BC location, the Marine (MTE) courses are only offered at the Marine Center of Excellence. Please consult the course schedule for specific semester locations.

Contact information: Program contact information can be found at http://www.broward.edu/academics/programs/marine/Pages/default.aspx

Related Programs at Broward College:
Marine Systems Technician Technical Certificate (6342)
Marine Electrician Technical Certificate (6327)
Marine Propulsion Technician Technical Certificate (6328)

| General Education Credit Hours | MTE2041C Marine Diesel 2 | 3 |
| ENC1101 English Composition I | MTE1062C Marine Corrosion & Prevention | 3 |
| Humanities | MTE1312C Advanced Marine Composites | 3 |
| Social Science | MTE2541C Marine Auxiliary Equipment | 3 |
| Mathematics/Natural Science | MTE1073C Gasoline Engine Diagnostics and Repair | 3 |
| Speech Communications | MTE2234C Inboard/Outboard Saildrive & Transmission | 3 |
| Core Requirements Credit Hours | MTE2420C Advanced Electrical Systems | 3 |
| MTE1004C Introduction to Marine Technology | MTE2949 Internship | 2 |
| MTE1400C Marine Electricity | MTE1651C Basic Welding | 4 |
| MTE2490C Marine Electronics | Electives* | 9 |
| MTE1018C Rigging | Total Program Credit Hours | 66 |
| MTE1040C Marine Diesel 1 | |

Notes:
*Program electives – Student may have to take MAT1033 or STA1001 based on placement score. If the student does not need MAT1033 or STA1001, the student must take three of the following electives – MAN2021, MKA1021, GEB1011, MAR1011, MNA1161, MNA2345, OST2335 course. - Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements. Students are strongly encouraged to meet with an advisor to create an educational plan.
Associate of Science in Professional Pilot Technology  
Program Code 2107

**Program Description:** This program offers the knowledge and skills required to become a FAA certificated professional pilot. Pilot ground school and flight courses are offered through Part 141 FAA approved curriculum. The college is certified as a FAA Air Agency under Federal Aviation Regulations Part 141 to offer pilot ground school. The college partners with an onsite contracted flight training provider for flight courses.

**Career Pathway:** Industry, Manufacturing, Construction & Transportation (IMCT)

**Program Entrance Requirements:** Students must test into college-level English Reading and Math. TSA background check may apply for an additional cost.

**Additional Program Information:** Articulation opportunities in bachelor offerings at Broward College include the Bachelors of Supervision and Management. By completing this AS degree, graduates will earn a series of FAA pilot certificates and ratings: private pilot certificate, instrument rating, commercial pilot certificate, and students may also earn multi-engine and flight instructor ratings.

**Location(s):** While most of the program can be completed at any BC location, the FAA Airframe and Powerplant (ASC, ATF, ATT) courses are only offered at the Judson A. Samuels South Campus. Please consult the course schedule for specific semester locations.

**Contact information:** Program contact information can be found at [http://www.broward.edu/academics/programs/aviation/Pages/default.aspx](http://www.broward.edu/academics/programs/aviation/Pages/default.aspx)

**Related Programs at Broward College:**
- Commercial Flight Operations Technical Certificate (6321)
- Airport Management Technical Certificate (6304)
- Associate of Science in Aviation Administration (2509)
- Associate of Science in Aviation Maintenance Management (2204)
- Aircraft Airframe Mechanics Vocational Certificate (5272)
- Aircraft Power Plant Mechanics Vocational Certificate (5273)
- Avionics Vocational Certificate (5299)

<table>
<thead>
<tr>
<th>General Education Credit Hours</th>
<th>15</th>
<th>Communications</th>
<th>3</th>
<th>ASC1610</th>
<th>Aircraft Engines, Structures, and Systems</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Humanities</td>
<td>3</td>
<td>CGS1060C</td>
<td>Computer and Internet Literacy</td>
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<tr>
<td></td>
<td></td>
<td>Social Science</td>
<td>3</td>
<td>ATT1100</td>
<td>Aeronautical Science</td>
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<tr>
<td></td>
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<td>Mathematics*</td>
<td>3</td>
<td>ATT2120</td>
<td>Instrument Flight Theory</td>
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<td>Speech Communications</td>
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<td>ATF2600</td>
<td>Flight Simulator Training</td>
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<tr>
<td>Core Requirements Credit Hours</td>
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<td>ATF2205</td>
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<tr>
<td></td>
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<td>ASC1010 Aviation History</td>
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<td>ATT2204</td>
<td>Commercial Flight II</td>
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<tr>
<td></td>
<td></td>
<td>ASC1210 Aviation Weather*</td>
<td>3</td>
<td>ATT2110</td>
<td>Commercial Flight Theory</td>
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<tr>
<td></td>
<td></td>
<td>ASC2870 Aviation Safety*</td>
<td>3</td>
<td>PHY1001</td>
<td>Applied Physics</td>
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<tr>
<td></td>
<td></td>
<td>ASC2110 Navigational Science II*</td>
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<td></td>
<td></td>
<td>ATF1100 Primary Flight</td>
<td>3</td>
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<tr>
<td></td>
<td></td>
<td>ATF2305 Commercial Flight I*</td>
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<tr>
<td><strong>Total Program Credit Hours</strong></td>
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</tbody>
</table>
## Associate of Science in Professional Pilot Technology

**Program Code 2107**

### Recommended Course Sequencing

#### First Year Term I

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ATT1100</td>
<td>Aeronautical Science</td>
<td>3</td>
</tr>
<tr>
<td>ASC1100</td>
<td>Navigational Science I</td>
<td>3</td>
</tr>
<tr>
<td>ASC1010</td>
<td>Aviation History</td>
<td>3</td>
</tr>
<tr>
<td>CGS1060C</td>
<td>Computer and Internet Literacy or Aviation Elective</td>
<td>3</td>
</tr>
<tr>
<td>ATF1100</td>
<td>Primary Flight</td>
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</table>

**Total Term Credit Hours 15**

#### First Year Term II

<table>
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<tr>
<td>ASC1210</td>
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<tr>
<td>ASC2110</td>
<td>Navigational Science II</td>
<td>3</td>
</tr>
<tr>
<td>ATT2120</td>
<td>Instrument Flight Theory</td>
<td>3</td>
</tr>
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<td>ATF2305</td>
<td>Commercial Flight I</td>
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<tr>
<td>ATF2600</td>
<td>Flight Simulator Training</td>
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**Total Term Credit Hours 13**

#### First Year Term III

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<tbody>
<tr>
<td>GE Course</td>
<td>General Education Humanities</td>
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<tr>
<td>GE Course</td>
<td>General Education Social Science</td>
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**Total Term Credit Hours 6**

#### Second Year Term I

<table>
<thead>
<tr>
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<tr>
<td>ASC1610</td>
<td>Aircraft Engines, Structures, and Systems</td>
<td>3</td>
</tr>
<tr>
<td>ATF2204</td>
<td>Commercial Flight II</td>
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<tr>
<td>ATT2110</td>
<td>Commercial Flight Theory</td>
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<td>GE Course*</td>
<td>General Education Mathematics</td>
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**Total Term Credit Hours 15**

#### Second Year Term II

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<td>ATF2205</td>
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<tr>
<td>Technical Elective**</td>
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<tr>
<td>ASC2870</td>
<td>Aviation Safety</td>
<td>3</td>
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<tr>
<td>PHY1001</td>
<td>Applied Physics</td>
<td>3</td>
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<tr>
<td>SPC1024</td>
<td>Introduction to Speech or</td>
<td></td>
</tr>
<tr>
<td>SPC1608</td>
<td>Introduction to Public Speaking</td>
<td>3</td>
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</table>

**Total Term Credit Hours 15**

**Total Program Credit Hours 64**
Notes:
*Must be one of the following: MAC1105, MAC2233, MGF1106, MGF1107 or STA2023
**Technical Elective: Student may be required to take MAT1033 based on placement. If the student does not need MAT1033, then the student must take one of the following technical courses:

- AVM1440 Airport/Airline Security
- AVM2410 Airport Management
- ASC1550 Aerodynamics
- AVM2450 Airport Planning and Design
- ASC2320 Aviation Law and Regulations
- AVM2510 Airline Management
- AVM2301 GA Marketing and Management
- ATF2400 Multi-Engine
- ATF2630 Multi–Engine Simulator
- ATF2500 Flight Instructor Training
- ATF2600 Flight Simulator Training

Flight training costs apply

Credit for Prior Learning: Students who possess FAA certifications or ratings obtained prior to enrolling in the Professional Pilot program should contact the department regarding the policy to request credit for certain courses.

- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Associate of Science in Building Construction Technology  
Program Code 2184

Program Description: The Building Construction Technology Program, offered at the Willis Holcombe Center (Downtown), prepares students for employment in the construction industry as superintendents, project managers, and assistant: building inspectors, estimators, plan examiners, and schedulers. The courses emphasize fundamentals and techniques of building construction management.

Career Pathway: Industry, Manufacturing, Construction, & Technology (IMCT)

Program Entrance Requirements: HS Diploma or GED

Additional Program Information: N/A

Related Industry Certifications: This program helps graduates satisfy part of the eligibility requirements for the Florida Certified Residential Contractor’s License exam.

Location(s): General Education courses can be taken at any college location. The specific program courses are only offered at the Willis Holcombe Center in Downtown Fort Lauderdale. Please consult the course schedule for specific semester locations.

Contact information: Program contact information can be found at http://www.broward.edu/academics/programs/construction/Pages/default.aspx

Related Programs at Broward College:
Building Construction Specialist Technical Certificate (6315)

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General Education Credit Hours 18
ENC1101 Composition I 3  BCT1743 Construction Law 2
MAC1105 College Algebra 3  BCT1767 OHSA Standards 2
GLY1010 Physical Geology BCT1770 Construction Estimating I 2

PHY1001 Applied Physics 3  BCT2040 MEP Plans Interpretation 2
Humanities 3  BCT2710 Infrastructure Coordination 2
Social/Behavioral Science 3  BCT2720 Construction Scheduling 3
Speech Communications 3  BCT2760 Building Codes and Regulations 3

Core Requirements Credit Hours 40
ARC2461 Materials and Methods 4  FFP1510 Codes and Standards 2
Construction  
BCN1251C Building Construction GRA2403 Project Management 3
Drawing I 
BCN1272 Building Construction Plans CGS1060C Computer and Internet Literacy 3
Interpretation  
BCN2560 Mechanical and Electrical MAT1033 Intermediate Algebra 3
Systems  
BCN2614C Construction Estimating II Specialized Courses Credit Hours 6
BCT1706 Construction Documents 2  BCN2721C Construction Planning and Cost

Total Program Credit Hours 64
# Associate of Science in Building Construction Technology

**Program Code 2184**

## Recommended Course Sequencing

### First Year Term I

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCN1272</td>
<td>Building Construction Plans Interpretation</td>
<td>2</td>
</tr>
<tr>
<td>BCT1767</td>
<td>OHSA Standards</td>
<td>2</td>
</tr>
<tr>
<td>CGS1060C</td>
<td>Computer and Internet Literacy</td>
<td>3</td>
</tr>
<tr>
<td>ENC1101</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>FFP1510</td>
<td>Codes and Standards</td>
<td>2</td>
</tr>
<tr>
<td>MAC1105</td>
<td>College Algebra</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Term Credit Hours: 15**

### First Year Term II

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARC2461</td>
<td>Materials and Methods Construction</td>
<td>4</td>
</tr>
<tr>
<td>BCN1251C</td>
<td>Building Construction Drawing I</td>
<td>4</td>
</tr>
<tr>
<td>BCT1770</td>
<td>Construction Estimating I</td>
<td>2</td>
</tr>
<tr>
<td>BCT2040</td>
<td>MEP Plans Interpretation</td>
<td>2</td>
</tr>
<tr>
<td>BCT2760</td>
<td>Building Codes and Regulations</td>
<td>3</td>
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</table>

**Total Term Credit Hours: 15**

### First Year Term III

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE Course</td>
<td>Social/Behavioral Science*</td>
<td>3</td>
</tr>
<tr>
<td>GE Course</td>
<td>Humanities*</td>
<td>3</td>
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**Total Term Credit Hours: 6**

### Second Year Term I

<table>
<thead>
<tr>
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<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>GLY1010</td>
<td>Physical Geology or</td>
<td>3</td>
</tr>
<tr>
<td>PHY1001</td>
<td>Applied Physics</td>
<td></td>
</tr>
<tr>
<td>BCN2560</td>
<td>Mechanical and Electrical Systems</td>
<td>3</td>
</tr>
<tr>
<td>BCN2614C</td>
<td>Construction Estimating II</td>
<td>3</td>
</tr>
<tr>
<td>BCT1706</td>
<td>Construction Documents</td>
<td>2</td>
</tr>
<tr>
<td>BCT2720</td>
<td>Construction Scheduling</td>
<td>3</td>
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**Total Term Credit Hours: 14**

### Second Year Term II

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elective</td>
<td>Building Construction Elective**</td>
<td>3</td>
</tr>
<tr>
<td>BCT1743</td>
<td>Construction Law</td>
<td>2</td>
</tr>
<tr>
<td>BCT2710</td>
<td>Infrastructure Coordination</td>
<td>2</td>
</tr>
<tr>
<td>BCT2941L</td>
<td>Building Construction Field Experience</td>
<td>1</td>
</tr>
<tr>
<td>GRA2403</td>
<td>Project Management</td>
<td>3</td>
</tr>
<tr>
<td>SPC1024</td>
<td>Introduction to Speech Communications</td>
<td>or</td>
</tr>
<tr>
<td>SPC1608</td>
<td>Introduction to Public Speaking</td>
<td>3</td>
</tr>
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</table>

**Total Term Credit Hours: 14**

**Total Program Credit Hours: 64**

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**Notes:**

*Humanities: ARH2051, PHI1100, or PHI2600; Social/Behavioral Science: ECO2013, GEO2370, or POS2112

** Student may have to take MAT1033 based on placement score. If the student does need MAT1033, it must be completed before MAC1105. If the student does not need MAT1033, the student must take BCN2721C.

- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements. **Students are strongly encouraged to meet with an advisor to create an educational plan.**
**Associate of Science in Industrial Management Technology**  
Program Code 2194

**Program Description:** This program provides students, who have obtained competency in a variety of fields, an opportunity to pursue college level education that is appropriate for management roles and upward mobility in their respective fields.

**Career Pathway:** Industry, Manufacturing, Construction & Transportation (IMCT)

**Program Entrance Requirements:** HS Diploma or GED

**Additional Program Information:** This program is part of an Articulation Agreement with the local Technical Colleges. Upon successful completion of the specific programs available at the Technical Colleges, students will be eligible for 27 credits toward the Associate of Science in Industrial Management Technology program. More information about the Articulation Agreement can be found online at [http://www.broward.edu/academics/accelerated/Pages/careerpathways.aspx](http://www.broward.edu/academics/accelerated/Pages/careerpathways.aspx)

**Location(s):** All courses are offered at all BC locations. Please consult the course schedule for specific semester locations.

**Contact Information:** Program contact information can be found at [http://www.broward.edu/academics/programs/Pages/business.aspx](http://www.broward.edu/academics/programs/Pages/business.aspx)

**Related Programs at Broward College:** N/A

<table>
<thead>
<tr>
<th>General Education Credit Hours</th>
<th>18</th>
<th>Core Requirements Credit Hours*</th>
<th>42</th>
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<tbody>
<tr>
<td>ENC1101 Composition I</td>
<td>3</td>
<td>ENC2210 Professional and Technical Writing</td>
<td>or</td>
</tr>
<tr>
<td>Social/Behavioral Science</td>
<td>3</td>
<td>MKA1021 Salesmanship</td>
<td></td>
</tr>
<tr>
<td>Biological/Physical Science</td>
<td>3</td>
<td>MAN2021 Introduction to Management</td>
<td></td>
</tr>
<tr>
<td>Speech Communications</td>
<td>3</td>
<td>MNA1161 Introduction to Customer Service</td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
<td>3</td>
<td>MNA2345 Principles of Supervision</td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td>3</td>
<td>Elective**</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Elective</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>MNA1949*** Industrial Technical Practicum</td>
<td>27</td>
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</tbody>
</table>

**Total Program Credit Hours** 60

**Notes:**
*Students are required to meet the college’s Computer Competency Requirement. This requirement can be met by passing the Computer Competency test. However, if a student is unable to pass the test, they will be required to take CGS1060C. The student’s eligible for Federal Financial Aid for the CGS1060C course may be limited.

**Program elective –** Student may have to take MAT1033 or STA1001 based on placement score. If the student is not required to take MAT1033 or STA1001, the student will have to take an elective from the list provided - MNA2905, MAR1011, or OST2335.

**These credits are awarded based on an established Articulation Agreement. The credits are awarded when the student has provided documentation of successful completion of one of the specific identified program at a partnering Technical College. Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

**Students are strongly encouraged to meet with an advisor to create an educational plan.**
Associate of Science in Aviation Maintenance Management
Program Code 2204

Program Description: The Aviation Maintenance Management Associate of Science degree provides students with the academic skills to complement their technical training. The plan of study complies with the Federal Aviation Regulations Part 147 for an approved aviation maintenance technician's school, and, in addition, offers the advantages of college level academic and management courses.

Students seeking an Associate of Science degree in Aviation Maintenance Management must complete the general requirements for both the Airframe Mechanics and Power Plant Mechanics diplomas and/or possess a valid FAA Airframe & Powerplant certificate.

Career Pathway: Industry, Manufacturing, Construction & Transportation (IMCT)

Program Entrance Requirements: HS Diploma or GED

Additional Program Information: General Education courses must be selected from the list of eligible courses provided in the College Catalog.

Related Industry Certifications: The Aviation Maintenance Management Associate of Science degree is intended to be inclusive of properly obtaining a Federal Aviation Administration (FAA) Airframe and Powerplant certification.

Location(s): While most of the program can be completed at any BC location, the FAA Airframe and Powerplant (AMT, ATT) courses are only offered at the Judson A. Samuels South Campus. Please consult the course schedule for specific semester locations.

Contact information: Program contact information can be found at http://www.broward.edu/academics/programs/aviation/Pages/default.aspx

Related Programs at Broward College:
Aircraft Airframe Mechanics Vocational Certificate (5272)
Aircraft Power Plant Mechanics Vocational Certificate (5273)
Avionics Vocational Certificate (5299)

<table>
<thead>
<tr>
<th>General Education Credit Hours</th>
<th>18</th>
<th>Specialized Course Credit Hours*</th>
<th>5</th>
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</thead>
<tbody>
<tr>
<td>Communications</td>
<td>3</td>
<td>CGS1060C Computers and Internet</td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td>3</td>
<td>ASC1010 History of Aviation</td>
<td></td>
</tr>
<tr>
<td>Social Science</td>
<td>3</td>
<td>ATT1100 Aeronautical Science</td>
<td></td>
</tr>
<tr>
<td>Natural Science</td>
<td>3</td>
<td>Elective** Business Elective</td>
<td>1</td>
</tr>
<tr>
<td>Mathematics</td>
<td>3</td>
<td>Elective** Business Elective</td>
<td>1</td>
</tr>
</tbody>
</table>

Core Requirements: Core Courses encompass instruction for the FAA Airframe and Powerplant certifications and are taught as PSAV under major codes 5272 Airframe and 5273 Powerplant. These courses and/or an authenticated FAA Airframe and Powerplant certification are articulated into the Aviation Maintenance Management Associate of Science Major Code 2204 degree via an Inter-Institutional Articulation Agreement or in the case of possession of a valid FAA Airframe and Powerplant Certification Experiential Learning Credits.
### Associate of Science in Aviation Maintenance Management
**Program Code 2204**

<table>
<thead>
<tr>
<th>Core Requirement</th>
<th>Credit Hours</th>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMT1001 Basic Electricity</td>
<td>2</td>
<td>AMT1230</td>
<td>Aircraft Instrument Systems</td>
</tr>
<tr>
<td>AMT1010 Aircraft Drawings</td>
<td>1</td>
<td>AMT1240</td>
<td>Communications and</td>
</tr>
<tr>
<td>AMT1020 Weight &amp; Balance</td>
<td>1</td>
<td>AMT1260</td>
<td>Navigation Systems</td>
</tr>
<tr>
<td>AMT1030 Fluid Lines &amp; Fittings</td>
<td>1</td>
<td>AMT1270</td>
<td>Aircraft Fuel Systems</td>
</tr>
<tr>
<td>AMT1040 Material Processes</td>
<td>2</td>
<td>AMT1285</td>
<td>Ice/Rain/Fire Protection</td>
</tr>
<tr>
<td>AMT1050 Ground Operations and</td>
<td>1</td>
<td>AMT1285</td>
<td>Reciprocating Engines</td>
</tr>
<tr>
<td>Servicing</td>
<td></td>
<td>AMT1300</td>
<td>Turbine Engines &amp; Turbine</td>
</tr>
<tr>
<td>AMT1060 Cleaning and Corrosion</td>
<td>1</td>
<td>AMT1290</td>
<td>Engine Troubleshooting</td>
</tr>
<tr>
<td>Control</td>
<td>1</td>
<td>AMT1310</td>
<td>Engine Instrument Systems</td>
</tr>
<tr>
<td>AMT1070 Applied Mathematics</td>
<td>1</td>
<td>AMT1320</td>
<td>Engine Electrical Systems</td>
</tr>
<tr>
<td>AMT1081 FAR's, Forms and Privileges</td>
<td>1</td>
<td>AMT1330</td>
<td>Engine Fire Protection Systems</td>
</tr>
<tr>
<td>AMT1090 Basic Physics</td>
<td>1</td>
<td>AMT1340</td>
<td>Lubrication Systems</td>
</tr>
<tr>
<td>AMT1110 Aircraft Wood Structures</td>
<td>1</td>
<td>AMT1350</td>
<td>Ignition Systems</td>
</tr>
<tr>
<td>AMT1115 Aircraft Covering</td>
<td>1</td>
<td>AMT1360</td>
<td>Engine Cooling and Exhaust</td>
</tr>
<tr>
<td>AMT1120 Aircraft Finishes</td>
<td>1</td>
<td>AMT1370</td>
<td>Systems</td>
</tr>
<tr>
<td>AMT1130 Sheet Metal Structures</td>
<td>4</td>
<td>AMT1380</td>
<td>1</td>
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<tr>
<td>AMT1140 Aircraft Welding</td>
<td>1</td>
<td>AMT1390</td>
<td>Engine Inspection</td>
</tr>
<tr>
<td>AMT1155 Assembly and Rigging</td>
<td>2</td>
<td>AMT1400</td>
<td>Engine Fuel Systems</td>
</tr>
<tr>
<td>AMT1200 Landing Gear Systems</td>
<td>2</td>
<td>AMT1410</td>
<td>Fuel Metering Systems</td>
</tr>
<tr>
<td>AMT1160 Airframe Inspection</td>
<td>1</td>
<td>AMT1420</td>
<td>Induction Systems</td>
</tr>
<tr>
<td>AMT1210 Hydraulic and Pneumatic System</td>
<td>2</td>
<td>AMT1430</td>
<td>1</td>
</tr>
<tr>
<td>AMT1220 Cabin Atmosphere Control Systems</td>
<td>1</td>
<td>AMT1440</td>
<td>1</td>
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</tbody>
</table>

**Total Program Credit Hours**: 83

**Notes:**
*Student may have to take MAT1033 or STA1001 based on placement score. The student’s eligible for Federal Financial Aid for the MAT1033/STA1001 course may be limited.*

**Business Elective select from the following courses: GEB2430, OST1330, OST2053, or BCT1767.**

- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

**Students are strongly encouraged to meet with an advisor to create an educational plan.**
Associate of Science in Supply Chain Management Operations  
Program Code 2205

Program Description: The Associate of Science degree in Supply Chain Management Operations (formally known as Global Trade and Logistics) prepares students for initial employment with the basic and cross-functional skills necessary for working in areas such as planning, procurement, flow and distribution of goods and services.

Career Pathway: Industry, Manufacturing, Construction & Transportation (IMCT)

Program Entrance Requirements: HS Diploma or GED

Additional Program Information: N/A

Related Industry Certifications: Upon completing this program, graduates will be eligible to sit for the following industry certifications/licenses:
- American Society of Transportation and Logistics Global Logistics Associate (GLA) certification (www.astl.org).

Location(s): While most of the program can be completed at any BC location, the Supply Chain Management Operations (TRA) courses are only offered at the Judson A. Samuels South Campus and online. Please consult the course schedule for specific semester locations.

Contact information: Program contact information can be found at http://www.broward.edu/academics/programs/logistics/Pages/default.aspx

Related Programs at Broward College:  
Logistics & Transportation Specialist Technical Certificate (6308)  
Supply Chain Management Bachelor of Applied Science (T400)

General Education Credit Hours 18
ENC1101 Composition I 3
ECO2013 Macroeconomics 3
STA2023 Statistics 3
PHI2600 Introduction to Ethics 3
Biological/Physical Science* 3
Speech Communications 3

Core Requirements Credit Hours 30
CGS1060C Computer and Internet Literacy 3
ACG2001 Principles of Accounting I 3
ACG2011 Principles of Accounting II 3
BUL2241 Business Law I 3
CGS1510C Electronic Spreadsheet 3

Specialized Course Credit Hours 12
ECO2023 Microeconomics 3
FIN2051 Finance of International Trade 3
MAN2021 Introduction to Management 3
MAR2141 International Marketing 3
Business Elective** 3
TRA1154 Supply Chain Management 3
TRA1010 Transportation and Logistics 3
MAN2542 Supply Chain Modeling 3
TRA2098 Warehouse Management 3

Total Program Credits Hours 60

Notes:
*It is preferred that students take the EVR1001, Environmental Science course to meet the General Education Science requirement
**Student may have to take MAT1033 or STA1001 based on placement score. If the student does not need MAT1033 or STA1001, the student must take one of the following Business electives - ACG2071, MAN2604, or GEB2955.
- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Associate of Science in Engineering Technology  
Program Code 2207  

**Program Description:** The purpose of this program is to prepare students for employment or provide additional training for persons previously or currently employed in the manufacturing, medical, electronics, aerospace, or other related industries. This degree is a planned sequence of instruction consisting of the three specializations; electronics, alternative energy, and biomedical systems with one common core. It is recommended that students complete the core before advancing to the courses in the next level of specialization. The coverage includes communication skills, technical competency, safe and efficient work practices and a combination of theory and laboratory activities to gain the necessary cognitive and manipulative skills to support engineering design, processes, production, testing, and product quality.

**Career Pathway:** Industry, Manufacturing, Construction & Transportation (IMCT)

**Program Entrance Requirements:** High School Diploma or GED

**Additional Program Information:** N/A

**Related Industry Certifications:** The 18 credit hour technical core has also been aligned with the Manufacturing Skills Standards Council’s (MSSC) skills standards. The MSSC skill standards define the knowledge, skills, and performance needed for positions in manufacturing. After completing this core and the General Education requirements, the students will be eligible to take the exam for the MSSC Certified Production Technician.

**Location(s):** While most of the program can be completed at any BC location, the Engineering Technology core courses are only offered at North Campus. Please consult the course schedule for specific semester locations.

**Contact information:** Program contact information can be found at [http://www.broward.edu/academics/programs/engineering/Pages/default.aspx](http://www.broward.edu/academics/programs/engineering/Pages/default.aspx)

**Related Programs at Broward College:**
Alternative Energy Systems Specialist Technical Certificate (6325)
Electronics Aide Technical Certificate (6322)
Engineering Technology Support Specialist Technical Certificate (6314)

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>ENC1101 Composition I</td>
<td>3</td>
</tr>
<tr>
<td>PHY1001 Applied Physics I</td>
<td>3</td>
</tr>
<tr>
<td>Humanities</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>Social Science</td>
<td>3</td>
</tr>
<tr>
<td>Speech Communication</td>
<td>3</td>
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<table>
<thead>
<tr>
<th>MSSSC Core Requirements Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>EET1084C Introduction to Electronics</td>
<td>3</td>
</tr>
<tr>
<td>ETD11320 Basic Introduction to CAD</td>
<td>3</td>
</tr>
<tr>
<td>ETI1110C Intro to Quality Assurance</td>
<td>3</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Technical Core Requirements Credit Hours*</th>
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</tr>
</thead>
<tbody>
<tr>
<td>ETI1420 Process and Materials</td>
<td>3</td>
</tr>
<tr>
<td>ETI1701 Safety</td>
<td>3</td>
</tr>
<tr>
<td>ETM1010C Measurement and Instrumentation</td>
<td>3</td>
</tr>
<tr>
<td>EET1015C DC Circuits</td>
<td>3</td>
</tr>
<tr>
<td>EET1025C AC Circuits</td>
<td>3</td>
</tr>
<tr>
<td>CET1114C Digital Techniques</td>
<td>3</td>
</tr>
<tr>
<td>EET1141C Linear Techniques I</td>
<td>3</td>
</tr>
<tr>
<td>CET1117C Microprocessors I</td>
<td>3</td>
</tr>
</tbody>
</table>
Associate of Science in Engineering Technology
Program Code 2207

Specialized Courses Credit Hours 9
(choose one group of courses)

Biomedical Specialization
HSC1531 Medical Terminology 3
ETS2436C Biomedical Instrumentation 3
ETS2940 Biomedical Engineering Technology Internship 3

OR

Electronics Specialization
EET2142C Linear Techniques II 3
EET2326C Electronic Communications 3
ETS2542C Programmable Logic Controllers (L) 3

OR

Alternative Energy Specialization
ETP2402C Introduction to Solar Photovoltaic (PV) Systems 3
ETP2410C Installation of Solar Photovoltaic (PV) Systems 3
ETS2542C Programmable Logic Controllers (L) 3

Total Program Credits 60

Notes:
*Student may have to take MAT1033 or STA1001 based on placement score. The student’s eligibility for Federal Financial Aid for the MAT1033/STA1001 course may be limited.

Students who complete the AS in Engineering Technology program will successfully meet the college’s Computer Competency requirement.

- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

Students are strongly encouraged to meet with an advisor to create an educational plan.
**Associate of Science Aviation Administration**  
**Program Code 2509**

**Program Description:** This program offers three concentrations: aviation business, airport management and air traffic control. The Air Traffic courses are approved through the FAA’s Collegiate Training Initiative (CTI) program.

**Career Pathway:** Industry, Manufacturing, Construction & Transportation (IMCT)

**Program Entrance Requirements:** Students must test into college-level English Reading and Math. TSA background check may apply for those seeking airport internships.

**Additional Program Information:** The Airport Management track includes international airport internships opportunities. Internship, in the Air Traffic Control track, are offered in conjunction with local facilities and at Ft. Lauderdale International Airport.

**Location(s):** General Education courses can be taken at any college location. The program’s core courses are primarily offered at the Judson A. Samuels South Campus and the Miramar Town Center. Please consult the course schedule for specific semester locations.

**Contact information:** Program contact information can be found at [http://www.broward.edu/academics/programs/aviation/Pages/default.aspx](http://www.broward.edu/academics/programs/aviation/Pages/default.aspx)

**Related Programs at Broward College:**  
Accounting Technology Specialist Technical Certificate (6324)  
Airport Management Technical Certificate (6304)

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### General Education Credit Hours 18

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
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<tbody>
<tr>
<td>ENC1101</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>PHI2600</td>
<td>Introduction to Ethics</td>
<td>3</td>
</tr>
<tr>
<td>ECO2013</td>
<td>Principles of Economics</td>
<td>3</td>
</tr>
<tr>
<td>EVR1001</td>
<td>Introduction to Environment Science</td>
<td>3</td>
</tr>
<tr>
<td>MAC1105</td>
<td>College Algebra</td>
<td>3</td>
</tr>
<tr>
<td>SPC1024</td>
<td>Introduction to Speech Communications</td>
<td>3</td>
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</tbody>
</table>

### Core Requirements Credit Hours 24

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATT1100</td>
<td>Aeronautical Science</td>
<td>3</td>
</tr>
<tr>
<td>ASC1100</td>
<td>Navigational Science I</td>
<td>3</td>
</tr>
<tr>
<td>ASC1010</td>
<td>Aviation History</td>
<td>3</td>
</tr>
<tr>
<td>ASC2320</td>
<td>Aviation Law &amp; Regulations</td>
<td>3</td>
</tr>
<tr>
<td>AVM1440</td>
<td>Airport/Airline Security</td>
<td>3</td>
</tr>
<tr>
<td>ASC2870</td>
<td>Aviation Safety</td>
<td>3</td>
</tr>
<tr>
<td>Electives*</td>
<td>Technical Electives</td>
<td>6</td>
</tr>
</tbody>
</table>

### Specialized Courses Credit Hours 18

(choose one group of courses)

### Business Specialization

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
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<tbody>
<tr>
<td>ENC2210</td>
<td>Technical Report Writing</td>
<td>3</td>
</tr>
<tr>
<td>ACG2001</td>
<td>Principles of Accounting I</td>
<td>3</td>
</tr>
</tbody>
</table>
# Associate of Science Aviation Administration

**Program Code 2509**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACG2011</td>
<td>Principles of Accounting II</td>
<td>3</td>
</tr>
<tr>
<td>ECO2023</td>
<td>Principles of Economics II</td>
<td>3</td>
</tr>
<tr>
<td>BUL2241</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>STA2023</td>
<td>Elementary Statistics</td>
<td>3</td>
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</tbody>
</table>

**OR**

### Air Traffic Control Specialization

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATT2820</td>
<td>Introduction to Air Traffic Control</td>
<td>3</td>
</tr>
<tr>
<td>ATT2822C</td>
<td>Tower Operations</td>
<td>4</td>
</tr>
<tr>
<td>ATT2821C</td>
<td>Radar Operations</td>
<td>4</td>
</tr>
<tr>
<td>ATT2824C</td>
<td>Enroute Operations</td>
<td>4</td>
</tr>
<tr>
<td>AVM2410</td>
<td>Airport Management</td>
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</tr>
</tbody>
</table>

**OR**

### Airport Operations Management Specialization

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVM2301</td>
<td>General Aviation Marketing &amp; Management</td>
<td>3</td>
</tr>
<tr>
<td>AVM2410</td>
<td>Airport Management</td>
<td>3</td>
</tr>
<tr>
<td>AVM2510</td>
<td>Airline Management</td>
<td>3</td>
</tr>
<tr>
<td>AVM1940</td>
<td>Internship I</td>
<td>3</td>
</tr>
<tr>
<td>AVM2450</td>
<td>Airport Planning and Design</td>
<td>3</td>
</tr>
<tr>
<td>AVM2941</td>
<td>Internship II</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Program Credit Hours** | **60**

## Notes:

*Technical Electives - Students may have to take MAT1033 based on placement score. Students are also required to meet the college’s Computer Competency Requirement. This requirement can be met by passing the Computer Competency test. However, if students are unable to pass the test, they will be required to take CGS1060C. If students still need to take a course (or two) to meet the elective credit requirement, students must take a course from the following list: ACG2071, GEB2430, or any ATT, AVM, or ASC course.

- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

**Students are strongly encouraged to meet with an advisor to create an educational plan.**
Bachelor of Applied Science in Supply Chain Management  
Program Code T400

Program Description: The Bachelor of Applied Science (BAS) program in Supply Chain Management (SCM) is designed to develop a professional and competent supply chain manager. Broward College does this through a learner-centered degree program that provides specific program learning outcomes in logistics and supply chain management. Students, who successfully complete the Supply Chain Management degree program, will gain technical hands-on skills through case studies and an independent study research project or practicum/internship; which will include analysis and problem solving through simulations and similar activities. This program will focus on current and emerging issues in global logistics and supply chain management, such as the planning and management of all activities involved in sourcing and procurement, conversion, and all logistics management activities. Importantly, including coordination and collaboration with channel partners, which can be suppliers, intermediaries, third party service providers, and customers, and will focus on developing comprehensive solutions to real-world problems associated with current management and organizational leadership challenges. Students will acquire knowledge related to the major concepts, principles, and techniques associated with leading cultural diversity in the global marketplace. General program outcomes for the Supply Chain Management degree are comprised of specific learning objectives embedded into each of the courses.

The Bachelor of Applied Science Degree in Supply Chain Management uses a 2+2 model designed to provide individuals who have obtained an Associate of Science (AS) or Associate of Arts (AA) degree from a regionally accredited college or university the opportunity to further their education. The curriculum offers a learner-centered practical approach to understanding Global Logistics and Supply Chain Management.

Career Pathway: Industry, Manufacturing, Construction & Transportation (IMCT)

Program Entrance Requirements: The Bachelor of Applied Science is an open access program designed for the adult learner who has earned an Associate of Science or an Associate of Arts degree and wishes to advance professionally. General admission to Broward College is required, and students will submit a supplemental application to the program. Applicants for the BAS program should have completed a minimum of 15 semester hours of general education requirements as part of their AS degree. The remaining general education semester hours (totaling 36) will be completed during the Bachelor of Applied Science degree program. Students will meet all of the State of Florida Bachelor of Applied Science general education requirements to be awarded the Bachelor of Applied Science (BAS) degree in Supply Chain Management. Students with an Associate in Arts degree (AA) or 60 college credits may be admitted to the program upon recommendation of the Dean or Associate Dean of the Bachelor of Applied Science for Supply Chain Management program.

Applicants are required to have a cumulative grade point average (GPA) of 2.0 on a 4.0 scale in all post-secondary coursework. Applicants must be in good academic standing at the last institution they attended. Broward College will automatically access the transcripts of previous or current students applying to the BAS program. As part of the admission process students are required to complete an educational plan; please access the website for more specific procedural information regarding the assistance that will be provided through a personal advisor or counselor in developing the student’s educational success plan [www.broward.edu/academics/programs/Pages/bachelors.aspx](http://www.broward.edu/academics/programs/Pages/bachelors.aspx)

General admission to Broward College does not constitute admission to the BAS Program; a supplemental application is also required. The general admission, supplemental, and reentry applications are available on the Broward College website; please use the following links to access these applications: [www.broward.edu/academics/programs/Pages/bachelors.aspx](http://www.broward.edu/academics/programs/Pages/bachelors.aspx)
Bachelor of Applied Science in Supply Chain Management  
Program Code T400

Students currently attending Broward College who wish to apply for the BAS program are required to complete the supplemental program application.

Graduates or returning Broward College students who wish to apply for the BAS program are required to complete the re-entry application and the supplemental program application.

New students to Broward College must complete the Broward College admissions application and complete the supplemental application for the BAS program.

International students must first be admitted into Broward College. They are also required to complete the BAS program supplemental application. Please refer to the international admission requirements listed in the online Broward College catalog at www.broward.edu.

Transfer students must submit a general admission application and complete the supplemental application for the BAS program.

**Graduation Requirements:** The Bachelor of Applied Science degree will be awarded to students who meet the following requirements:

- A minimum of 120 semester credit hours in the prescribed coursework is required for the Bachelor of Applied Science degree. Coursework is comprised of both lower division (AA or AS) and upper division (BAS) as specified by the program sheet.
- Successful completion of the Internship/Practicum or Directed Independent Study.
- Students must maintain an overall GPA of 2.0 to meet their graduation requirements.
- Be recommended for graduation by the faculty of the student’s major field department.

**Additional Program Information:** Students interested in applying for the Bachelor of Applied Science in Supply Chain Management program that have an Associate of Arts degree or do not have the Associate of Science degree in Global Trade and Logistics must meet the following prerequisite courses in addition to the BAS required courses:

ACG2001 Principles of Accounting I  
ACG2011 Principles of Accounting II  
ECO2013 Principles of Macroeconomics  
ECO2023 Principles of Microeconomics  
STA2023 Statistics  
TRA1010 Introduction to Transportation  
TRA1154 Supply Chain Management I

Students may be able to complete these requirements as part of their upper division coursework. Students must meet with an academic advisor to determine specific requirements based on previously completed lower division courses.
Bachelor of Applied Science in Supply Chain Management  
Program Code T400 

Related Industry Certifications:  
- Council of Supply Chain Management Professionals (CSCMP) - SCPro Level 1  
- American Production and Inventory Control Society (APICS) - Certified Supply Chain Professional (CSCP)  
- American Society of Transportation and Logistics (ASTL) - Certified in Transportation and Logistics (CTL), Professional Designator in Logistics and Supply Chain Management (PLS), Global Logistics Associate (GLA)  

Foreign Language Requirement: Students must successfully complete the foreign language requirement as prescribed in college policy and the college catalog.  

Location(s): General Education courses can be taken at any college location. Upper-level courses are available at the Judson A. Samuels South Campus and Partnership Centers.  

Contact information: Program contact information can be found at www.broward.edu/academics/programs/logistics/Pages/default.aspx  

Related Programs at Broward College:  
Logistics & Transportation Specialist Technical Certificate (6308)  
Supply Chain Management Operations Associate of Science (2205)  

<table>
<thead>
<tr>
<th>General Education Credit Hours*</th>
<th>Core Requirements Credit Hours</th>
<th>Total Program Credit Hours</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>GEA2000 World Geography 3</td>
<td>TRA3155 Supply Chain Management II 3</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td>HLP1081 Wellness 2</td>
<td>TRA3112 Procurement Management 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENC2210 Technical Writing or</td>
<td>TRA4945 Internship/Practicum**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENC1102 Composition II 3</td>
<td>Directed Independent Study** 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social/Behavioral Science 3</td>
<td>TRA3132 Procurement Management 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biological/Physical Science 3</td>
<td>TRA4945 Internship/Practicum**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biological/Physical Science Lab</td>
<td>TRA4910 Directed Independent Study** 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics 3</td>
<td>TRA4945 Internship/Practicum**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td></td>
<td>60</td>
<td></td>
</tr>
</tbody>
</table>

Notes: Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.  
*Required courses will depend on the student’s transcript. The student must meet with an academic advisor to determine specific requirements based on previously completed lower division courses.  
**TRA4910 or TRA4945 must be taken in the final semester. Each course requires instructor approval before registration.  

Students are strongly encouraged to meet with an advisor to create an educational plan.
Program Description: The Airport Management Certificate is offered as a concentration of specific aviation operations and airport management courses combined with one business course to prepare students who are seeking employment in the airport operations field. This certificate provides insight into the day-to-day operational and managerial aspects of the airport environment expanding upon several topics to include: investigation of incidents and accidents, aviation safety on the ground, human factors in aviation, hazardous materials and the identification of hazards, passenger safety, land use, wildlife control, airport security, and an overall working knowledge of airports.

Career Pathway: Industry, Manufacturing, Construction & Transportation (IMCT).

Program Entrance Requirements: HS Diploma or GED

Additional Program Information: Students seeking this technical certificate can continue their students and pursue the Associate of Science degree in Aviation Administration.

Location(s): Certificate courses are generally offered at the Aviation Institute on the Judson A. Samuels South Campus. Please consult the course schedule for specific semester locations.

Contact information: Program contact information can be found at http://www.broward.edu/academics/programs/aviation/Pages/default.aspx

Related Programs at Broward College:
Commercial Flight Operations Technical Certificate (6321)
Associate of Science in Professional Pilot Technology (2107)
Associate of Science in Aviation Administration (2509)
Associate of Science in Aviation Maintenance Management (2204)
Aircraft Airframe Mechanics Vocational Certificate (5272)
Aircraft Power Plant Mechanics Vocational Certificate (5273)
Avionics Vocational Certificate (5299)

Required Courses
- AVM2450 Airport Planning and Design 3
- ASC2870 Aviation Safety* 3
- AVM1440 Airport and Airline Security 3
- AVM2410 Airport Management 3
- ASC2320 Aviation Law and Regulations 3
- GEB2430 Business Ethics 1

Total Program Credit Hours 16

Notes:
- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Marine Technology Technical Certificate
Program Code 6306

Program Description: The Marine Technology Certificate is designed to prepare students interested in a career in the large yacht maintenance, repair and retrofit industry. Broward County is the world leader in the yacht industry and is in high demand of qualified technicians to work on yachts with diesel engines and sophisticated sustainable systems. Completers of the program may be employed in boat yards working on multi-million dollar vessels and the latest technology in marine equipment. The lifestyle may also include being part of the on-board crew and traveling around the world.

Career Pathway: Industry, Manufacturing, Construction & Transportation (IMCT)

Program Entrance Requirements: HS Diploma or GED

Additional Program Information: N/A

Location(s): The program specific courses are only offered at the AutoNation Center. Please consult the course schedule for specific semester locations.

Contact information: Program contact information can be found at http://www.broward.edu/academics/programs/aviation/Pages/default.aspx

Related Programs at Broward College:
Marine Engineering Management Associate in Applied Science (A040)
Marine Propulsion Technician Technical Certificate (6328)
Marine Systems Technician Technical Certificate (6342)

Required Courses
MTE1004C Introduction to Marine Technology 3
MTE1543C Marine Auxiliary 3
MTE1040C Marine Diesel Engines I 3
MTE1073C Gasoline Engine Diagnostics and Repair 3
MTE1062C Marine Corrosion and Prevention 3
MTE1400C Marine Electricity 3
MTE2541C Marine Auxiliary Systems 3
MTE2041C Diesel Engines II 3
MTE2234C Inboard/Outboard Saildrive and Transmissions 3
MTE2420C Advance Electrical Systems 3
MTE2490C Marine Electronics 3

Total Program Credit Hours 33

Notes: Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Logistics & Transportation Specialist Technical Certificate  
Program Code 6308

Program Description: The Logistics & Transportation Specialist Technical Certificate prepares students for initial employment with an occupational title or to provide supplemental training for persons previously or currently employed in these occupations with cross-functional skills necessary for planning, acquisition, flow and distribution of goods and services.

Career Pathway: Industry, Manufacturing, Construction & Transportation (IMCT)

Program Entrance Requirements: HS Diploma or GED

Additional Program Information: N/A

Related Industry Certifications: Upon completing this program, graduates will be eligible to sit for the following industry certifications/licenses:
- American Society of Transportation and Logistics Global Logistics Associate (GLA) certification ([www.astl.org](http://www.astl.org)).

Location(s): The Technical Certificate courses are only offered at the Judson A. Samuels South Campus and online. Please consult the course schedule for specific semester locations.

Contact information: Program contact information can be found at [http://www.broward.edu/academics/programs/logistics/Pages/default.aspx](http://www.broward.edu/academics/programs/logistics/Pages/default.aspx)

Related Programs at Broward College:
Supply Chain Management Operations Associate of Science (2205)
Supply Chain Management Bachelor of Applied Science (T400)

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Law I</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Management</td>
<td>3</td>
</tr>
<tr>
<td>Warehouse Management</td>
<td>3</td>
</tr>
<tr>
<td>Transportation and Logistics</td>
<td>3</td>
</tr>
<tr>
<td>Supply Chain Management</td>
<td>3</td>
</tr>
<tr>
<td>Finance of International Trade</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Program Credit Hours: 18

Notes:  
- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Automotive Service Technician Technical Certificate
Program Code 6310

Program Description: The Automotive Service Technician Technical Certificate is designed to provide the automotive industry with qualified line technicians. These technicians perform entry-level tasks on the quick-service lines at dealers and independent repair facilities. It will provide a person with a post-secondary certification from a NATEF-accredited program in specific areas of high demand, and allow him/her to take the ASE (Automotive Service Excellence) exam in those areas (A4, A5, A6, A7). The certificate program would easily articulate into the Associate of Applied Science in Automotive Service Management, should a student later decide to pursue that degree.

Career Pathway: Industry, Manufacturing, Construction & Transportation (IMCT)

Program Entrance Requirements: HS Diploma or GED

Additional Program Information: In order to successfully complete the technical certificate program in Automotive Service Technician students must meet the following requirements:

• Minimum of 24 semester credit hours in the prescribed coursework required for the TC
• Earn a “C” or better in all courses, and maintain an overall GPA of 2.5
• Earn a passing score on two of the four ASE industry Standard Certification Tests (A4-A7)

Related Industry Certifications: Students will be eligible to sit for various ASE industry standard certifications.

Location(s): The technical course requirements are taught at the AutoNation Center for Excellence in Automotive Technology. Please consult the course schedule for specific semester locations.

Contact information: Program contact information can be found at
http://www.broward.edu/academics/programs/auto/Pages/default.aspx

Related Programs at Broward College:
Automotive Service Management Technology Associate of Applied Science (A004)
Dealer Specific Automotive Technology Associate of Applied Science (A037)
General Automotive Technician Technical Certificate (6326)

Required Courses
AER1081C  Introduction to Automotive Technology   4
AER1695C  Automotive Electronics        4
AER1698C  Electrical Systems           4
AER2498C  Steering and Suspension Systems  4
AER2598C  Brake Systems and Chassis Repair  4
AER2758C  Heating and Air Conditioning Theory  4

Total Program Credit Hours 24

Notes:
- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Engineering Technology Support Specialist Technical Certificate
Program Code 6314

Program Description: Engineering Technology Support Specialist Technical Certificate is part of the existing Associate of Science Degree in Engineering Technology. The 18 credit hour technical core has been defined to align with the Manufacturing Skills Standards Council’s (MSSC) skills standards. The purpose of this program is to prepare students for manufacturing and engineering technician occupations. This certificate can be taken as a stand-alone program or in conjunction with the AS degree in Engineering Technology.

Career Pathway: Industry, Manufacturing, Construction & Transportation (IMCT)

Program Entrance Requirements: HS Diploma or GED

Additional Program Information: N/A

Related Industry Certifications: The Engineering Technology Support Specialist Technical Certificate has been aligned with the Manufacturing Skills Standards Council’s (MSSC) skills standards. The MSSC skill standards define the knowledge, skills, and performance needed for positions in manufacturing. After completing this Technical Certificate students will be eligible to take the exam for the MSSC Certified Production Technician.

Location(s): General Education courses can be taken at any college location. Core courses are available at North Campus. Please consult the course schedule for specific semester locations.

Contact information: Program contact information can be found at [http://www.broward.edu/academics/programs/engineering/Pages/default.aspx](http://www.broward.edu/academics/programs/engineering/Pages/default.aspx)

Related Programs at Broward College:
Associate of Science in Engineering Technology (2207)
Electronics Aide Technical Certificate (6322)
Alternative Energy Systems Specialist Technical Certificate (6325)

<table>
<thead>
<tr>
<th>Required Courses</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>EET1084C Introduction to Electronics</td>
<td>3</td>
</tr>
<tr>
<td>ETD1320 Basic Introduction to CAD</td>
<td>3</td>
</tr>
<tr>
<td>ETI1110C Introduction to Quality Assurance</td>
<td>3</td>
</tr>
<tr>
<td>ETI1420 Processes and Materials</td>
<td>3</td>
</tr>
<tr>
<td>ETI1701 Safety</td>
<td>3</td>
</tr>
<tr>
<td>ETM1010C Measurement and Instrumentation</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Program Credit Hours 18

Notes:
- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

**Students are strongly encouraged to meet with an advisor to create an educational plan.**
Building Construction Specialist Technical Certificate
Program Code 6315

Program Description: The Building Construction Specialist Technical Certificate, offered at the Willis Holcombe Center (Downtown), is part of the existing Associate of Science Degree in Building Construction Technology. This certificate is designed for those currently employed in the construction industry, or for persons seeking entry-level employment in areas such as estimators, construction inspectors, material testers, quality control assistants, or schedulers. This certificate can be taken as a stand-alone program or in conjunction with the Building Construction Technology AS degree.

Career Pathway: Industry, Manufacturing, & Construction

Program Entrance Requirements: HS Diploma or GED

Additional Program Information: N/A

Related Industry Certifications: N/A

Location(s): The program specific courses are only offered at the Willis Holcombe Center in Downtown Fort Lauderdale. Please consult the course schedule for specific semester locations.

Contact information: Program contact information can be found at

Related Programs at Broward College:
Associate of Science Degree in Building Construction Technology, Major Code 2184.

Required Courses
<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARC2461</td>
<td>Materials and Methods Construction</td>
<td>4</td>
</tr>
<tr>
<td>BCN1251C</td>
<td>Building Construction Drawing I I</td>
<td>4</td>
</tr>
<tr>
<td>BCN1272</td>
<td>Building Construction Plans Interpretation</td>
<td>2</td>
</tr>
<tr>
<td>BCN2560</td>
<td>Mechanical and Electrical Systems</td>
<td>3</td>
</tr>
<tr>
<td>BCT1770</td>
<td>Construction Estimating I</td>
<td>2</td>
</tr>
<tr>
<td>BCT2760</td>
<td>Building Codes and Regulations</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Program Credit Hours 18

Notes:
- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Commercial Flight Operations Certificate
Program Code 6321

Program Description: This program provides the knowledge and instruction regarding the safe and efficient work practices, FAA pilot certification procedures, aircraft systems and components, flight safety, instrumentation, and employability skills.

Career Pathway: Industry, Manufacturing, Construction, & Transportation (IMCT)

Program Entrance Requirements: HS Diploma or GED

Additional Program Information: This program is included within the Professional Pilot Technology Associate of Science degree. However, this certificate does not require flight training.

Location(s): The program specific courses (ASC, ATT) courses are only offered at the Aviation Institute on the Judson A. Samuels South Campus. Please consult the course schedule for specific semester locations.

Contact information: Program contact information can be found at http://www.broward.edu/academics/programs/aviation/Pages/default.aspx

Related Programs at Broward College:
Professional Pilot Technology Associate of Science (2107)

<table>
<thead>
<tr>
<th>Required Courses</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ATT1100</td>
<td>Aeronautical Science 3</td>
</tr>
<tr>
<td>ASC1100</td>
<td>Navigational Science I 3</td>
</tr>
<tr>
<td>ASC1210</td>
<td>Aviation Weather 3</td>
</tr>
<tr>
<td>ASC1610</td>
<td>Aircraft Engines, Structures, and Systems 3</td>
</tr>
<tr>
<td>ATT2120</td>
<td>Instrument Flight Theory 3</td>
</tr>
<tr>
<td>ASC2110</td>
<td>Navigational Science II 3</td>
</tr>
<tr>
<td>ASC2870</td>
<td>Aviation Safety 3</td>
</tr>
<tr>
<td>ATT2110</td>
<td>Commercial Flight Theory 3</td>
</tr>
</tbody>
</table>

Total Program Credit Hours 24

Notes:
Credit for Prior Learning: Students who possess FAA certifications or ratings obtained prior to enrolling in the Professional Pilot program should contact the department regarding the policy to request credit for certain courses.

- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Electronics Aide Technical Certificate
Program Code 6322

Program Description: The Electronics Aide Technical Certificate is part of the existing Associate of Science in Engineering Technology. The purpose of this program is to prepare students for entry-level manufacturing and engineering technician positions or to provide supplementary training for persons previously or currently employed in these occupations. This certificate can be taken as a stand-alone program or in conjunction with the AS degree in Engineering Technology.

Career Pathway: Industry, Manufacturing, Construction & Transportation (IMCT)

Program Entrance Requirements: HS Diploma or GED

Additional Program Information: N/A

Related Industry Certifications: N/A

Location(s): The program specific courses (EET, ETS) are only offered at North Campus. Please consult the course schedule for specific semester locations.

Contact information: Program contact information can be found at http://www.broward.edu/academics/programs/engineering/Pages/default.aspx

Related Programs at Broward College:
Engineering Technology Associate in Science (2207)
Alternative Energy Systems Specialist Technical Certificate (6325)
Engineering Technology Support Specialist (6314)

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EET1025C</td>
<td>AC Circuits</td>
<td>3</td>
</tr>
<tr>
<td>EET1141C</td>
<td>Linear Techniques I</td>
<td>3</td>
</tr>
<tr>
<td>EET1015C</td>
<td>DC Circuits</td>
<td>3</td>
</tr>
<tr>
<td>ETS2542C</td>
<td>Programmable Logic Controllers</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Program Credit Hours 12

Notes:
- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Alternative Energy Systems Specialist Technical Certificate
Program Code 6325

Program Description: The Alternative Energy Systems Specialist Technical Certificate is part of the existing Associate of Science Degree in Engineering Technology. The purpose of this program is to prepare students for occupations such as solar photovoltaic technicians, solar thermal installers, and electrical and electronic engineering technicians. This certificate can be taken as a stand-alone program or in conjunction with the AS degree in Engineering Technology.

Career Pathway: Industry, Manufacturing, Construction & Transportation (IMCT)

Program Entrance Requirements: HS Diploma or GED

Additional Program Information: N/A

Related Industry Certifications: N/A

Location(s): The program specific courses (EET, ETI, ETP, CET) are only offered at North Campus. Please consult the course schedule for specific semester locations.

Contact information: Program contact information can be found at http://www.broward.edu/academics/programs/engineering/Pages/default.aspx

Related Programs at Broward College:
Associate of Science in Engineering Technology (2207)
Electronics Aide Technical Certificate (6322)
Engineering Technology Support Specialist (6314)

Required Courses
EET1084C Introduction to Electronics 3
ETI1110C Introduction to Quality 3
ETI1701 Safety 3
CET1114C Digital Techniques 3
ETP2402C Introduction to Solar Photovoltaic Systems 3
ETP2410C Installation of Solar Photovoltaic Systems 3

Total Program Credit Hours 18

Notes:
- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

Students are strongly encouraged to meet with an advisor to create an educational plan.
General Automotive Technician Technical Certificate  
Program Code 6326

Program Description: The General Automotive Technician Technical Certificate is designed to provide the automotive industry with qualified service technicians. These technicians perform entry-level tasks at dealers and independent repair facilities. It will provide a person with a post-secondary certification from a NATEF-accredited program in specific areas of high demand, and allow him/her to take the ASE (Automotive Service Excellence) exam in those areas (A1-A8). The certificate program would easily articulate into the Associate of Applied Science in Automotive Service Management, should a student later decide to pursue that degree.

Career Pathway: Industry, Manufacturing, Construction & Transportation (IMCT)

Program Entrance Requirements: HS Diploma or GD

Additional Program Information: In addition to the required coursework, in order to successfully complete the program in students must meet the following requirements:
- Earn a “C” or better in all courses, and maintain an overall GPA of 2.5
- Earn a passing score on two of the eight ASE industry Standard Certification Tests (A1-A8)

Related Industry Certifications: Students will be eligible to sit for various ASE industry standard certifications.

Location(s): The program specific courses are only offered at the AutoNation Center for Excellence in Automotive Technology. Please consult the course schedule for specific semester locations.

Contact information: Program contact information can be found at http://www.broward.edu/academics/programs/auto/Pages/default.aspx

Related Programs at Broward College:
- Automotive Service Management Technology AAS (A004)
- Dealer Specific Automotive Technology AAS (A037)
- Automotive Service Technician Technical Certificate (6310)

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>AER1081C</td>
<td>Introduction to Automotive Technology</td>
<td>4</td>
</tr>
<tr>
<td>AER1698C</td>
<td>Electrical Systems</td>
<td>4</td>
</tr>
<tr>
<td>AER1695C</td>
<td>Electronics</td>
<td>4</td>
</tr>
<tr>
<td>AER1198C</td>
<td>Engine Repair</td>
<td>4</td>
</tr>
<tr>
<td>AER2598C</td>
<td>Brake Systems &amp; Chassis</td>
<td>4</td>
</tr>
<tr>
<td>AER2498C</td>
<td>Steering and Suspension</td>
<td>4</td>
</tr>
<tr>
<td>AER2758C</td>
<td>Heating and Air Conditioning Theory</td>
<td>4</td>
</tr>
<tr>
<td>AER2398C</td>
<td>Manual Drive Trains &amp; Transaxles</td>
<td>4</td>
</tr>
<tr>
<td>AER2298C</td>
<td>Automatic Transmissions</td>
<td>4</td>
</tr>
<tr>
<td>AER2898C</td>
<td>Engine Performance</td>
<td>4</td>
</tr>
<tr>
<td>AER2895C</td>
<td>Advanced Engine Performance</td>
<td>4</td>
</tr>
</tbody>
</table>

Total Program Credit Hours 44

Notes:
- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements. Students are strongly encouraged to meet with an advisor to create an educational plan.
Marine Electrician Technical Certificate
Program Code 6327

Program Description: The Marine Electrician Certification is designed to provide the Marine industry with qualified yard technicians. These technicians perform entry-level tasks in the yards and shops at marinas and independent repair facilities. It will provide a person with a post-secondary certification from an approved Program in specific areas of high demand, and allow him/her to take the ABYC (American Boat and Yacht Council) Certification exam in Marine Electricity (Perkins IV Technical Skill Attainment ABAYC003 Electrical Certification) and the NMEA Certification as a Marine Electronic Installer. The certificate program would provide a completion point for post-secondary education and build a foundation for additional ABYC Certifications provided in more advanced courses.

Career Pathway: Industry, Manufacturing, Construction & Transportation (IMCT)

Program Entrance Requirements: HS Diploma or GD

Additional Program Information: N/A

Related Industry Certifications: N/A

Location(s): The program specific courses are only offered at the AutoNation Center for Excellence in Automotive Technology. Please consult the course schedule for specific semester locations.

Contact Information: Program contact information can be found at www.broward.edu/academics/programs/auto/Pages/default.aspx

Related Programs at Broward College:
Marine Engineering Management Associate of Applied Science (A040)

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTE1004C Introduction to Marine Technology</td>
<td>3</td>
</tr>
<tr>
<td>MTE1400C Marine Electricity</td>
<td>3</td>
</tr>
<tr>
<td>MTE2420C Advance Electrical Systems</td>
<td>3</td>
</tr>
<tr>
<td>MTE2490C Marine Electronics</td>
<td>3</td>
</tr>
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</table>

Total Program Credit Hours 12

Notes: Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Marine Propulsion Technician Technical Certificate
Program Code 6328

Program Description: The Marine Propulsion Certification is designed to provide the Marine industry with qualified mechanical technicians. These technicians perform entry-level task in the yards and shops at marinas and independent repair facilities. It will provide a person with a post-secondary certification from an approved Program in specific areas of high demand, and allow him/her to take the ABYC (American Boat and Yacht Council) Certification exam in Marine Electricity, Gas Engine Systems, and Diesel Engine Systems. The certificate program would provide a completion point for post-secondary education and build a foundation for additional ABYC Certifications provided in more advanced courses.

Career Pathway: Industry, Manufacturing, Construction & Transportation (IMCT)

Program Entrance Requirements: HS Diploma or GD

Additional Program Information: N/A

Related Industry Certifications: N/A

Location(s): The program specific courses are only offered at the AutoNation Center for Excellence in Automotive Technology. Please consult the course schedule for specific semester locations.

Contact information: Program contact information can be found at http://www.broward.edu/academics/programs/auto/Pages/default.aspx

Related Programs at Broward College:
- Marine Engineering Management Associate of Applied Science (A040)
- Marine Technology Technical Certificate (6306)
- Marine Systems Technician Technical Certificate (6342)

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTE1004C</td>
<td>Introduction to Marine Technology</td>
<td>3</td>
</tr>
<tr>
<td>MTE1400C</td>
<td>Marine Electricity</td>
<td>3</td>
</tr>
<tr>
<td>MTE2420C</td>
<td>Advance Electrical Systems</td>
<td>3</td>
</tr>
<tr>
<td>MTE2490C</td>
<td>Marine Electronics</td>
<td>3</td>
</tr>
<tr>
<td>MTE1073C</td>
<td>Gasoline Engine Diagnostics and Repair</td>
<td>3</td>
</tr>
<tr>
<td>MTE2234C</td>
<td>Inboard/Outboard Saildrive and Transmissions</td>
<td>3</td>
</tr>
<tr>
<td>MTE1040C</td>
<td>Marine Diesel Engines I</td>
<td>3</td>
</tr>
<tr>
<td>MTE2041C</td>
<td>Diesel Engines II</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Program Credit Hours 24

Notes:
- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Marine Systems Technician Technical Certificate  
Program Code 6342

Program Description: The Marine Systems Technician Certification is designed to provide the Marine industry with qualified mechanical technicians. These technicians perform entry-level task in the yards and shops at marinas and independent repair facilities. It will provide a person with a post-secondary certification from an approved Program in specific areas of high demand, and allow him/her to take the ABYC (American Boat and Yacht Council) Certification exam in Marine Electricity, Marine Corrosion and Prevention, Air Conditioning & Refrigeration, and Marine Composites. The certificate program would provide a completion point for post-secondary education and build a foundation for additional ABYC Certifications provided in more advanced courses.

Career Pathway: Industry, Manufacturing, Construction & Transportation (IMCT)

Program Entrance Requirements: HS Diploma or GED

Additional Program Information: N/A

Location(s): The Marine (MTE) courses are only offered at the Marine Center of Excellence. Please consult the course schedule for specific semester locations.

Contact information: Program contact information can be found at http://www.broward.edu/academics/programs/marine/Pages/default.aspx

Related Programs at Broward College:
Marine Engineering Management Associate of Applied Science (A040)

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>MTE1004C</td>
<td>Introduction to Marine Technology</td>
<td>3</td>
</tr>
<tr>
<td>MTE1400C</td>
<td>Marine Electricity</td>
<td>3</td>
</tr>
<tr>
<td>MTE2420C</td>
<td>Advanced Electrical Systems</td>
<td>3</td>
</tr>
<tr>
<td>MTE2490C</td>
<td>Marine Electronics</td>
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<tr>
<td>MTE1062C</td>
<td>Marine Corrosion and Prevention</td>
<td>3</td>
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<tr>
<td>MTE1312C</td>
<td>Advanced Marine Composites</td>
<td>3</td>
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<tr>
<td>MTE1543C</td>
<td>Marine Systems</td>
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</tr>
<tr>
<td>MTE2541C</td>
<td>Marine Auxiliary Systems</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Program Credit Hours 24

Notes: Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

Students are strongly encouraged to meet with an advisor to create an educational plan.
FAA Aircraft Airframe Mechanics Post-Secondary Adult Vocational Certificate
Program Code 5272

Program Description: The Aviation Institute links Broward College's (BC) South Campus with North Perry Airport in Pembroke Pines. It's the only public facility in South Florida with direct access to an airport dedicated to the training of aviation professionals. Since 1966 our aviation school has been preparing students for careers in: Professional Pilot Technology, Aviation Maintenance Management, Aviation Operations, Airport Operations Management, and Air Traffic Control. The Aviation Institute also provides hands-on training to prepare students in the competitive field of aviation maintenance. It provides FAA-approved certificate programs in Airframe Mechanic and Powerplant Mechanic, and also offers FCC and NCATT approved Avionics Technician certifications.

Career Pathway: Industry, Manufacturing, Construction & Transportation (IMCT)

Program Entrance Requirements: HS Diploma or GED

Additional Program Information: Completion of the program is contingent upon student being exempt from, or passing, the Test of Adult Basic Education (TABE) in math, reading and language. The TABE test must be taken within six weeks of enrollment into the general portion of the program. These courses are offered in 400 hour blocks and require entry approval by an Aviation Admissions Coordinator or the Associate Dean for Aviation Maintenance prior to enrollment.

Related Industry Certifications: The Airframe Maintenance certificate program leads to a Federal Aviation Administration (FAA) airframe license.

Location(s): The program is only offered at the Judson A. Samuels South Campus. Please consult the course schedule for specific semester locations.

Contact information: Program contact information can be found at http://www.broward.edu/academics/programs/aviation/Pages/default.aspx

Related Programs at Broward College:
Aviation Maintenance Management Associate of Science (2204)
Aircraft Power Plant Mechanics Vocational Certificate (5273)
Avionics Vocational Certificate (5299)

Required Courses

<table>
<thead>
<tr>
<th>BLOCK I</th>
<th>GENERAL</th>
</tr>
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<tbody>
<tr>
<td>AMT0070C</td>
<td>Applied Mathematics</td>
</tr>
<tr>
<td>AMT0090C</td>
<td>Basic Physics</td>
</tr>
<tr>
<td>AMT0010C</td>
<td>Aircraft Drawings</td>
</tr>
<tr>
<td>AMT0050C</td>
<td>Ground Operations and Servicing</td>
</tr>
<tr>
<td>AMT0040C</td>
<td>Materials and Processes</td>
</tr>
<tr>
<td>AMT0030C</td>
<td>Fluid Lines and Fittings</td>
</tr>
<tr>
<td>AMT0081C</td>
<td>FARs, Forms, Privilege</td>
</tr>
<tr>
<td>AMT0020C</td>
<td>Weight and Balance</td>
</tr>
<tr>
<td>AMT0060C</td>
<td>Corrosion Control</td>
</tr>
<tr>
<td>AMT0091C</td>
<td>Basic Electricity</td>
</tr>
</tbody>
</table>

Total Clock Hours 400
FAA Aircraft Airframe Mechanics Post-Secondary Adult Vocational Certificate
Program Code 5272

BLOCK 2  AIRFRAME I
AMT0130C  Sheet Metal and Non-Metallic  157
AMT0110C  Wood Structures  11
AMT0115C  Aircraft Covering  12
AMT0120C  Aircraft Finishes  30
AMT0140C  Welding  40
AMT0155C  Assembly and Rigging  65
AMT0200C  Landing Gear Systems  85

Total Clock Hours  400

BLOCK 3  AIRFRAME II
AMT0160C  Airframe Inspection  20
AMT0210C  Hydraulic Pneumatics Systems  75
AMT0220C  Cabin Atmosphere Control Systems  50
AMT0230C  Aircraft Instrument Systems  25
AMT0240C  Comm. / Nav. Systems  30
AMT0250C  Aircraft Fuel Systems  40
AMT0260C  Aircraft Electrical Systems  100
AMT0270C  Position and Warning  30
AMT0285C  Ice, Rain and Fire Protection  30

Total Clock Hours  400

Total Program Clock Hours  1,200

Notes:
- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

Students are strongly encouraged to meet with an advisor to create an educational plan.
FAA Aircraft Power Plant Mechanics Post-Secondary Adult Vocational Certificate
Program Code 5273

Program Description: The Aviation Institute links Broward College's (BC) South Campus with North Perry Airport in Pembroke Pines. It's the only public facility in South Florida with direct access to an airport dedicated to the training of aviation professionals. Since 1966 our aviation school has been preparing students for careers in: Professional Pilot Technology, Aviation Maintenance Management, Aviation Operations, Airport Operations Management, and Air Traffic Control. The Aviation Institute also provides hands-on training to prepare students in the competitive field of aviation maintenance. It provides FAA approved certificate programs in Airframe Mechanic and Power Plant Mechanic, and also offers FCC and NCATT approved Avionics Technician certifications.

Career Pathway: Industry, Manufacturing, Construction & Transportation (IMCT)

Program Entrance Requirements: HS Diploma or GED

Additional Program Information: Completion of the program is contingent upon student being exempt from, or passing, the Test of Adult Basic Education (TABE) in math, reading and language. The TABE test must be taken within six weeks of enrollment into the general portion of the program. These courses are offered in 400 hour blocks and require entry approval by an Aviation Admissions Coordinator or the Associate Dean for Aviation Maintenance prior to enrollment.

Related Industry Certifications: The Power Plant Maintenance certificate program leads to a Federal Aviation Administration (FAA) Power Plant license.

Location(s): The program is only offered at the Judson A. Samuels South Campus. Please consult the course schedule for specific semester locations.

Contact information: Program contact information can be found at http://www.broward.edu/academics/programs/aviation/Pages/default.aspx

Related Programs at Broward College:
Aviation Maintenance Management Associate of Science (2204)
Aircraft Airframe Mechanics Vocational Certificate (5272)
Avionics Vocational Certificate (5299)

Required Courses

<table>
<thead>
<tr>
<th>BLOCK I</th>
<th>GENERAL</th>
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<tbody>
<tr>
<td>AMT0070C</td>
<td>Applied Mathematics</td>
</tr>
<tr>
<td>AMT0090C</td>
<td>Basic Physics</td>
</tr>
<tr>
<td>AMT0100C</td>
<td>Aircraft Drawings</td>
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<tr>
<td>AMT0050C</td>
<td>Ground Operations and Servicing</td>
</tr>
<tr>
<td>AMT0040C</td>
<td>Materials and Processes</td>
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<tr>
<td>AMT0030C</td>
<td>Fluid Lines and Fittings</td>
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<tr>
<td>AMT0081C</td>
<td>FARs, Forms, Privilege</td>
</tr>
<tr>
<td>AMT0020C</td>
<td>Weight and Balance</td>
</tr>
<tr>
<td>AMT0060C</td>
<td>Corrosion Control</td>
</tr>
<tr>
<td>AMT0091C</td>
<td>Basic Electricity</td>
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</table>

Total Clock Hours 400
### FAA Aircraft Power Plant Mechanics Post-Secondary Adult Vocational Certificate
#### Program Code 5273

<table>
<thead>
<tr>
<th>BLOCK 2</th>
<th>POWER PLANT I</th>
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<tbody>
<tr>
<td>AMT0300C</td>
<td>Reciprocating Engines</td>
<td>152.25</td>
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<tr>
<td>AMT0310C</td>
<td>Turbine Engines</td>
<td>147</td>
</tr>
<tr>
<td>AMT0400C</td>
<td>Engine Instrument Systems</td>
<td>31.5</td>
</tr>
<tr>
<td>AMT0420C</td>
<td>Engine Electrical and APUs</td>
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**Total Clock Hours**: 400

<table>
<thead>
<tr>
<th>BLOCK 3</th>
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<tbody>
<tr>
<td>AMT0460C</td>
<td>Induction Systems</td>
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<td>AMT0450C</td>
<td>Engine Fuel Systems</td>
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<tr>
<td>AMT0451C</td>
<td>Fuel Metering Systems</td>
<td>63</td>
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<td>AMT0440C</td>
<td>Ignition Systems</td>
<td>84</td>
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<tr>
<td>AMT0435C</td>
<td>Lubrication Systems</td>
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</tr>
<tr>
<td>AMT0475C</td>
<td>Engine Cooling and Exhaust Systems</td>
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</tr>
<tr>
<td>AMT0410C</td>
<td>Engine Fire Protection</td>
<td>15.75</td>
</tr>
<tr>
<td>AMT0490C</td>
<td>Propellers and Unducted Fans</td>
<td>89.25</td>
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<tr>
<td>AMT0320C</td>
<td>Engine Inspection</td>
<td>32.5</td>
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**Total Clock Hours**: 400

**Total Program Clock Hours**: 1,200

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**Notes:**
- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

**Students are strongly encouraged to meet with an advisor to create an educational plan.**
Avionics Post-Secondary Adult Vocational Certificate  
Program Code 5299

Program Description:  
Broward College's Aviation Institute is proud to offer a 720-hour certificate program in Avionics. It’s a blended course that meets twice weekly on campus and three times a week online. On campus days will be dedicated to NIDA electronics labs, aircraft visits and projects. State-of-the-art NIDA electronics training equipment is utilized for this program. FCC General Radiotelephone Operator (GROL) license and NCATT Aircraft Electronics Technician (AET) testing is available on site. Avionics systems’ testing and troubleshooting is accomplished utilizing Boeing 727 aircraft.

Avionics systems are an integral part of aircraft design and have vastly increased aircraft capability. As a result, the growing use of technology in aviation is requiring technicians to spend more time on repairing electronic systems, such as computerized controls. The course content includes, but is not limited to, troubleshooting, repair and installation of airborne radio communications, radio navigation and radar equipment systems in accordance with regulatory and industry standards. Also included is instruction in basic AM and FM transmitters/receivers and avionics equipment. Skills preparation for passing licensing/certification tests required by industry forms an integral part of the curriculum.

These courses are offered in 360 hour blocks and require entry approval by an Aviation Admissions Coordinator or the Associate Dean for Aviation Maintenance Programs prior to enrollment.

Career Pathway:  Industry, Manufacturing, Construction & Transportation (IMCT)

Program Entrance Requirements:  HS Diploma or GED

There are three optional entry points into this program:
1. Completion of Airframe and/or Power Plant training or Certification.
2. Electronics training to include:
   - EET1015C  DC Circuits
   - CET1114C  Digital Techniques
   - MTB1325  Engineering Tech. Mathematics I
   - EET1025C  AC circuits
   - EET1141C  Linear Techniques I
   - MBT1326  Engineering Tech. Mathematics II
   - CET1117C  Microprocessors I
3. Previous Industry experience: To be evaluated by the Associate Dean for Aviation Maintenance.

Additional Program Information:  Completion of the program is contingent upon student being exempt from, or passing, the Test of Adult Basic Education (TABE) in math, reading and language. The TABE test must be taken within six weeks of enrollment into the general portion of the program. These courses are offered in 400 hour blocks and require entry approval by an Aviation Admissions Coordinator or the Associate Dean for Aviation Maintenance prior to enrollment.

Related Industry Certifications:  Obtaining the FCC General Radiotelephone Operator (GROL) license is an integral part of the program. NCATT Aircraft Electronics Technician (AET) License testing is available on site.

Location(s):  The program is only offered at the Judson A. Samuels South Campus. Please consult the course schedule for specific semester locations.
Avionics Post-Secondary Adult Vocational Certificate
Program Code 5299

Contact information: Program contact information can be found at http://www.broward.edu/academics/programs/aviation/Pages/default.aspx

Related Programs at Broward College:
Aviation Maintenance Management Associate of Science (2204)
Aircraft Airframe Mechanics Vocational Certificate (5272)
Aircraft Power Plant Vocational Certificate (5273)

Required Courses
BLOCK I
AVS0090C  Avionics Fundamentals  180
AVS0091C  Avionics Installer  180
Total Clock Hours  360

BLOCK II
AVS0092C  Avionics Communication Systems  180
AVS0093C  Navigation/Support Systems Items  180
Total Clock Hours  360
Total Program Clock Hours  720

Notes: Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Public Safety

Take your passion for safety and crime prevention to the next level. Check out the programs Broward College has to offer you that can make your desire to help others and maintain order a career you’ll enjoy for years to come. Learn more today.

Articulation Agreements

Broward College has numerous articulation agreements with our local high schools and Technical Colleges. Students may be able to earn college credit for select programs completed at the secondary and postsecondary level. The programs listed below with an asterisk (*) have a current articulation agreement. For more information about articulation agreements, please contact the Career and Technical Education office at 954-201-7830. You can also find information online at www.broward.edu/careerpath

<table>
<thead>
<tr>
<th>Program Code</th>
<th>Program Title</th>
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<tbody>
<tr>
<td><strong>Associate of Arts degree</strong></td>
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<tr>
<td>1010</td>
<td>Associate of Arts</td>
</tr>
<tr>
<td><strong>Associate of Science degrees</strong></td>
<td></td>
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<tr>
<td>2118</td>
<td>Fire Science Technology</td>
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<tr>
<td>21101</td>
<td>Criminal Justice*</td>
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<tr>
<td>21102</td>
<td>Crime Scene</td>
</tr>
<tr>
<td>21104</td>
<td>Polygraph</td>
</tr>
<tr>
<td><strong>Technical Certificates</strong></td>
<td></td>
</tr>
<tr>
<td>6313</td>
<td>Fire Science Management</td>
</tr>
<tr>
<td>6347</td>
<td>Crime Scene Technician</td>
</tr>
<tr>
<td><strong>Post-Secondary Adult Vocational Certificate</strong></td>
<td></td>
</tr>
<tr>
<td>5269</td>
<td>Broward County Police Academy</td>
</tr>
<tr>
<td>5270</td>
<td>Corrections Officer Academy</td>
</tr>
<tr>
<td>5271</td>
<td>Police Service Aide Academy (Note: Must be hired by law enforcement agency to enter program)</td>
</tr>
<tr>
<td>5278</td>
<td>Crossover From Corrections To Law Enforcement</td>
</tr>
</tbody>
</table>

Median Earnings (for Broward County)

- Corrections Officer - $30.64/hr
- Fire Inspector - $35.62/hr
- Police Officer - $34.54/hr
Associate of Arts
Program Code 1010

Program Description: The Associate of Arts (AA) degree is the traditional transfer degree. Students who earn the AA are able to remain at Broward College, transfer to another state college, or a state university in order to continue their education and pursue a baccalaureate degree.

Career Pathway: Public Safety

Program Entrance Requirements: HS Diploma or GED

Additional Program Information: The Associate of Arts degree includes 36 credit hours of General Education and an additional 24 credit hours of electives. The elective credit hours should be selected based on the student’s transfer major. Students are encouraged to review the state’s Common Course Prerequisite Manual (www.flvc.org/partner-portal/common-prerequisite-manual) for additional guidance.

Location(s): Courses are offered at all college locations, including online. Please consult the course schedule for specific semester locations.

Bachelor Degree Majors Include:

at Broward College
Exceptional Student Education
Middle Grades General Science Education
Secondary Biology Education
Middle Grades Mathematics Education
Secondary Mathematics Education
Environmental Science - Biosecurity
Environmental Science - Physical Science
Supervision & Management
Technology Management
Information Technology
Supply Chain Management

at a Transfer Institution
Criminal Justice
Fire and Emergency Services
Pre-Law
Public Administration

Recommended First Semester Courses

<table>
<thead>
<tr>
<th>Exempt Students</th>
<th>Non-Exempt Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC1101 Composition I</td>
<td>ENC XXXX* 3</td>
</tr>
<tr>
<td>MAT/STA/MAC XXXX*</td>
<td>MAT/STA/MAC XXXX* 3</td>
</tr>
<tr>
<td>PSY2012 General Psychology</td>
<td>PSY2012 General Psychology or</td>
</tr>
<tr>
<td>SYG2000 Principles of Sociology</td>
<td>SYG2000** Principles of Sociology 3</td>
</tr>
<tr>
<td>CGS1060C Computer and Internet Literacy</td>
<td>CGS1060C Computer and Internet Literacy or</td>
</tr>
<tr>
<td>POS2041 National Government</td>
<td>POS2041** National Government 3</td>
</tr>
<tr>
<td>CCJ1020 Introduction to Criminal Justice</td>
<td>CCJ1020 Introduction to Criminal Justice 3</td>
</tr>
</tbody>
</table>

*The specific English and Math course will depend on the student’s test score.
**Registration depends on the student’s test score.
- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.
If the student attends part-time (less than 12 credits), it is highly recommended that the student complete English and Math in the first term.
Students are strongly encouraged to meet with an advisor to create an educational plan.
Associate of Science in Fire Science  
Program Code 2118

Program Description: The AS degree in Fire Science is designed for fire service or fire protection related professionals to enhance technical competencies and to prepare them for career advancement. The program has courses that help prepare students for state certifications in such areas as Fire Officer, Fire Inspector and Fire Investigator. This AS degree does not qualify students for state certification as a fire fighter. To become certified as a fire fighter, a student must complete an Emergency Medical Technician program and a Florida certified Basic Fire Fighter program (Fire Academy).

Career Pathway: Public Safety

Program Entrance Requirements: HS Diploma or GED. However, the program is recommended for currently employed fire service professionals.

Additional Program Information: N/A

Related Industry Certifications: N/A

Location(s): The General Education courses can be completed at any BC location. The Fire Science courses are taught primarily online or at the A. Hugh Adams Central Campus in Davie. On occasion, courses may be taught on site at local fire departments. Please consult the course schedule for specific semester locations.

Contact information: Program contact information can be found at http://www.broward.edu/academics/programs/ips/Pages/default.aspx

Related Programs at Broward College:
Fire Officer Supervision Technical Certificate (6313)

<table>
<thead>
<tr>
<th>General Education Credit Hours</th>
<th>FFP1740 Fire Service Course Delivery 3</th>
<th>FFP1810 Firefighting Tactics &amp; Strategy (Tactics 1) 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC1101 Composition I</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>POS2041 National Government</td>
<td>3 or</td>
<td></td>
</tr>
<tr>
<td>POS2112 State and Local Government</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Biological/Physical Science</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Speech Communications</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Core Requirements Credit Hours</th>
<th>FFP2120 Fire Service Building Construction 3</th>
<th>FFP2720 Company Officer 3</th>
<th>FFP2811 Firefighting Tactics &amp; Strategy (Tactics 2) 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC1102  Composition II</td>
<td>3</td>
<td>Fire Science Elective*</td>
<td></td>
</tr>
<tr>
<td>ENC2210  Tech. Report Writing</td>
<td>3</td>
<td>Fire Science Elective*</td>
<td></td>
</tr>
<tr>
<td>FFP1505  Fire Prevention Practices</td>
<td>3</td>
<td>Fire Science Elective*</td>
<td></td>
</tr>
<tr>
<td>FFP1540  Private Fire Protection Systems I</td>
<td>3</td>
<td>Elective**</td>
<td></td>
</tr>
<tr>
<td>or</td>
<td>3 or</td>
<td>Elective**</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3 or</td>
<td>Elective**</td>
<td></td>
</tr>
</tbody>
</table>

Total Program Credit Hours 60
**Associate of Science in Fire Science**  
**Program Code 2118**

*Fire Science Elective – Must take 3 of the following courses (9 credits):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>FFP1000</td>
<td>Intro to Firefighting</td>
<td>3</td>
<td>FFP2670</td>
<td>Legal Issues in Fire Investigation</td>
<td>3</td>
</tr>
<tr>
<td>FFP1510</td>
<td>Codes &amp; Standards</td>
<td>3</td>
<td>FFP2521</td>
<td>Construct. Docs &amp; Plans Review</td>
<td>3</td>
</tr>
<tr>
<td>FFP2111</td>
<td>Fire Chemistry</td>
<td>3</td>
<td>FFP2401</td>
<td>Hazardous Materials 1</td>
<td>3</td>
</tr>
<tr>
<td>FFP2780</td>
<td>Fire Dept. Admin.</td>
<td>3</td>
<td>FFP2402</td>
<td>Hazardous Materials 2</td>
<td>3</td>
</tr>
<tr>
<td>FFP2610</td>
<td>Fire Origin &amp; Cause</td>
<td>3</td>
<td>FFP2801</td>
<td>Introduction to Command</td>
<td>3</td>
</tr>
<tr>
<td>FFP2630</td>
<td>Latent Investigation</td>
<td>3</td>
<td>FFP2741</td>
<td>Fire Service Course Design</td>
<td>3</td>
</tr>
<tr>
<td>FFP2770</td>
<td>Ethical and Legal Issues</td>
<td>3</td>
<td>FFP2706</td>
<td>Public Information Officer</td>
<td>3</td>
</tr>
<tr>
<td>FFP1793</td>
<td>Fire/Life Safety Educator</td>
<td>3</td>
<td>FFP2541</td>
<td>Private Fire Protection Sys II</td>
<td>3</td>
</tr>
<tr>
<td>FFP2301</td>
<td>Fire Hydraulics</td>
<td>3</td>
<td>FFP2302</td>
<td>Fire Apparatus &amp; Procedures</td>
<td>3</td>
</tr>
</tbody>
</table>

**Elective Courses (9 credits)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGS1060C</td>
<td>Computer and Internet Literacy</td>
<td>3</td>
</tr>
<tr>
<td>MAT1033</td>
<td>Intermediate Algebra</td>
<td>or MAT1033</td>
</tr>
<tr>
<td>STA1001</td>
<td>Pathway to Statistics</td>
<td>3</td>
</tr>
<tr>
<td>Any college level course*</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Notes:**

**If a student successfully passes the Computer Competency Test, the student can take any college level course to meet the elective requirement. If the student does not need to take MAT1033/STA1001 based on their placement score, the student can take any college level course to meet the elective requirement.

- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

**Students are strongly encouraged to meet with an advisor to create an educational plan.**
**Program Description:** The AS degree in Criminal Justice is designed for students who hope to work in the field of law enforcement, corrections or public safety. The AS degree in Criminal Justice provides students with a valuable credential when applying for such jobs as police officer, corrections officer, state trooper/state officer, US Customs/Immigration inspector and community/police service aide. The AS degree does not qualify students for state certification as a law enforcement or corrections officer. To become certified as a corrections or law enforcement officer a student must complete a Florida state certified Basic Recruit Training Program (Police Academy or Corrections Academy).

**Career Pathway:** Public Safety

**Program Entrance Requirements:** HS Diploma or GED

**Additional Program Information:** N/A

**Related Industry Certifications:** N/A

**Location(s):** While most of the program can be completed at any BC location, the Criminal Justice (CCJ, CJE, CJL) courses are only offered at the A. Hugh Adams Central Campus. Please consult the course schedule for specific semester locations.

**Contact information:** Program contact information can be found at [http://www.broward.edu/academics/programs/ips/Pages/default.aspx](http://www.broward.edu/academics/programs/ips/Pages/default.aspx)

**Related Programs at Broward College:**
Associate of Science in Criminal Justice-Crime Scene Emphasis (21102)
Associate of Science in Criminal Justice-Polygraph Emphasis (21104)
Criminal Justice certificates including Police Academy (5269) (restricted admission)
Corrections Officer Academy (5270) (restricted admission)
Police Service Aide Academy (5271)

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**General Education Credit Hours**  
ENC1101 Composition I 3  
POS2041 National Government or 3  
POS2112 State & Local Government 3  
Humanities 3  
Biological/Physical Science 3  
Mathematics 3  
Speech Communications 3

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC1101 Composition I</td>
<td>3</td>
</tr>
<tr>
<td>POS2041 National Government or</td>
<td>3</td>
</tr>
<tr>
<td>POS2112 State &amp; Local Government</td>
<td>3</td>
</tr>
</tbody>
</table>

**Core Requirements Credit Hours**  
CCJ1020 Introduction to Criminal Justice 3  
CJL1062 Constitutional Law 3

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCJ1020 Introduction to Criminal Justice</td>
<td>3</td>
</tr>
<tr>
<td>CJL1062 Constitutional Law</td>
<td>3</td>
</tr>
</tbody>
</table>

**Additional Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCJ2191 Human Behavior in Criminal Justice</td>
<td>3</td>
</tr>
<tr>
<td>CJE2600 Criminal Investigation</td>
<td>3</td>
</tr>
<tr>
<td>ENC1102 Composition II or</td>
<td>3</td>
</tr>
<tr>
<td>ENC2210 Professional and Technical Writing</td>
<td>3</td>
</tr>
<tr>
<td>PSY2012 General Psychology or</td>
<td>3</td>
</tr>
<tr>
<td>SYG2000 General Sociology</td>
<td>3</td>
</tr>
<tr>
<td>Criminal Justice Electives*</td>
<td>12</td>
</tr>
<tr>
<td>Electives**</td>
<td>12</td>
</tr>
</tbody>
</table>

Total Program Credit Hours 60
Associate of Science in Criminal Justice
Program Code 21101

*Criminal Justice Elective Courses – Must take 4 of the following courses (12 credits):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CJC2000</td>
<td>Introduction to Corrections</td>
<td>3</td>
</tr>
<tr>
<td>CJI1100</td>
<td>Criminal Law</td>
<td>3</td>
</tr>
<tr>
<td>CJC2162</td>
<td>Probation &amp; Parole Procedures</td>
<td>3</td>
</tr>
<tr>
<td>CJI1130</td>
<td>Criminal Evidence</td>
<td>3</td>
</tr>
<tr>
<td>CCJ2933</td>
<td>Corrections Practicum</td>
<td>3</td>
</tr>
<tr>
<td>CJI2060</td>
<td>Civil Rights</td>
<td>3</td>
</tr>
<tr>
<td>CJI1140</td>
<td>Corrections Law</td>
<td>3</td>
</tr>
<tr>
<td>CII2001</td>
<td>Juvenile Justice</td>
<td>3</td>
</tr>
<tr>
<td>CJE2640</td>
<td>Introduction to Criminalistics</td>
<td>3</td>
</tr>
<tr>
<td>CJE1300</td>
<td>CJ Administration</td>
<td>3</td>
</tr>
<tr>
<td>CJE2170</td>
<td>Comparative World Police</td>
<td>3</td>
</tr>
<tr>
<td>CJE2400</td>
<td>Police Community Relations</td>
<td>3</td>
</tr>
<tr>
<td>DSC1002</td>
<td>Terrorism &amp; Domestic Security</td>
<td>3</td>
</tr>
<tr>
<td>DSC1006</td>
<td>Introduction to Homeland</td>
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<tr>
<td>DSC2590</td>
<td>Intelligence Analysis and Security</td>
<td>3</td>
</tr>
<tr>
<td>DSC2242</td>
<td>Transportation &amp; Border Security</td>
<td>3</td>
</tr>
<tr>
<td>FES2010</td>
<td>Introduction to Emergency Management</td>
<td>3</td>
</tr>
</tbody>
</table>

**Electives – Students must complete an additional 15 credits of electives. The student may have to take MAT1033/STA1001 based on placement score. If the student needs these courses, then 3 credits of the elective area can be used to fulfill the requirements. Other elective courses may be selected from the following: any Criminal Justice, Fire Science, or Emergency Management course OR any other college level course.

- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Associate of Science in Criminal Justice-Crime Scene Emphasis  
Program Code 21102

Program Description: This program is designed for students who hope to work in the field of law enforcement as crime scene technicians and/or police service aides and/or law enforcement officers. The program provides students with the knowledge, skills and training necessary to perform quality work as a crime scene technician, including the collection, preservation, documentation and presentation of criminal evidence. Students will also learn about the criminal justice and criminal courts system. This AS degree does not qualify students for state certification as a law enforcement or corrections officer. To become certified as a corrections or law enforcement officer a student must complete a Florida state certified Basic Recruit Training Program (Police Academy or Corrections Academy).

Career Pathway: Public Safety

Program Entrance Requirements: HS Diploma or GED

Additional Program Information: N/A

Related Industry Certifications: N/A

Location(s): While most of the program can be completed at any BC location, the Criminal Justice (CCJ, CJE, CJL) courses are only offered at the A. Hugh Adams Central Campus. Please consult the course schedule for specific semester locations.

Contact information: Program contact information can be found at http://www.broward.edu/academics/programs/ips/Pages/default.aspx

Related Programs at Broward College:
Associate of Science in Criminal Justice (21101)
Associate of Science in Criminal Justice-Polygraph Emphasis (21104)
Crime Scene Technology Technical Certificate
Police Service Aide Academy (5271)

<table>
<thead>
<tr>
<th>General Education Credit Hours</th>
<th>21</th>
<th>CCJ1020 Introduction to Criminal Justice</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC1101 Composition I</td>
<td>3</td>
<td>CCJ2191 Human Behavior in Criminal Justice</td>
</tr>
<tr>
<td>POS2041 National Government or</td>
<td></td>
<td>POS2112 State &amp; Local Government 3</td>
</tr>
<tr>
<td>PSY2012 General Psychology or</td>
<td></td>
<td>PSY2012 General Psychology or</td>
</tr>
<tr>
<td>SYG2000 Principles of Sociology</td>
<td>3</td>
<td>CCJ1062 Constitutional Law</td>
</tr>
<tr>
<td>Humanities</td>
<td>3</td>
<td>CJI1100 Criminal Law</td>
</tr>
<tr>
<td>Mathematics</td>
<td>3</td>
<td>CJE2600 Criminal Investigation</td>
</tr>
<tr>
<td>Biological/Physical Science</td>
<td>3</td>
<td>CJE2640 Introduction to Criminalistics</td>
</tr>
<tr>
<td>Speech Communications</td>
<td>3</td>
<td>CJE2770 Forensics Photography</td>
</tr>
<tr>
<td>Core Requirements Credit Hours</td>
<td>39</td>
<td>CJE2643 Adv. Forensic Investigation</td>
</tr>
<tr>
<td>ENC1102 Composition II or</td>
<td>3</td>
<td>CJE2642 Criminalistics Practicum</td>
</tr>
<tr>
<td>ENC2210 Tech. Report Writing</td>
<td></td>
<td>Electives* 6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total Program Credit Hours 60</td>
</tr>
</tbody>
</table>

Broward College 380 College Catalog 2015-2016
Associate of Science in Criminal Justice-Crime Scene Emphasis
Program Code 21102

Notes:
* Students must complete an additional 6 credits of electives. The student may have to take MAT1033/STA1001 based on placement score. If the student needs these courses, then 3 credits of the elective area can be used to fulfill the requirements. Other elective courses may be selected from the following: any Criminal Justice, Fire Science, or Emergency Management course or any other college level course.

Successful completion of this AS program meets the college’s computer literacy requirement.

- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

**Students are strongly encouraged to meet with an advisor to create an educational plan.**
Associate in Science - Criminal Justice-Polygraph Emphasis  
Program Code 21104

**Program Description:** The AS degree in Criminal Justice-Polygraph Emphasis is designed for students who hope to work in the field of law enforcement, corrections or public safety. The AS degree in Criminal Justice-Polygraph provides students with a valuable credential when applying for such jobs as police officer, corrections officer, state trooper/state officer, US Customs/Immigration inspector and community/police service aide or polygrapher. The AS degree does not qualify students for state certification as a law enforcement or corrections officer. To become certified as a corrections or law enforcement officer a student must complete a Florida state certified Basic Recruit Training Program (Police Academy or Corrections Academy).

**Career Pathway:** Public Safety

**Program Entrance Requirements:** HS Diploma or GED

**Additional Program Information:** The specific polygraph courses are offered through a private training school, the International Academy of the Polygraph (IAP) at Deception Control, Inc., Fort Lauderdale (Tel: 954-771-6900 or 1-800-776-1660 or [http://deception.com/polygraph_school.html](http://deception.com/polygraph_school.html)). See the IAP webpage for their program entrance requirements and tuition costs. Students who complete the IAP at Deception Control will be awarded prior learning assessment credits that may be used toward this AS degree after submitting verification of their completed training to the Broward College Associate Dean for Criminal Justice.

**Related Industry Certifications:** N/A

**Location(s):** The General Education courses can be completed at any BC location. However, the Criminal Justice (CCJ, CJE, CJL) courses are only offered at the A. Hugh Adams Central Campus. Please consult the course schedule for specific semester locations. *The specific polygraph courses are offered through a private training school, the International Academy of the Polygraph (IAP) at Deception Control, Inc., Fort Lauderdale.*

**Contact information:** Program contact information can be found at [http://www.broward.edu/academics/programs/ips/Pages/default.aspx](http://www.broward.edu/academics/programs/ips/Pages/default.aspx)

**Related Programs at Broward College:**
Associate of Science in Criminal Justice (21101)  
Associate of Science in Criminal Justice-Crime Scene Emphasis (21102)  
Criminal Justice Technical Certificate - Crime Scene Technician  
Criminal Justice certificates including Police Academy (5269) (restricted admission)  
Corrections Officer Academy (5270) (restricted admission)  
Police Service Aide Academy (5271)
# Associate in Science - Criminal Justice-Polygraph Emphasis

## Program Code 21104

<table>
<thead>
<tr>
<th>General Education Credit Hours</th>
<th>21</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC1101 Composition I</td>
<td>3</td>
</tr>
<tr>
<td>POS2041 National Government or POS2112 State &amp; Local Government</td>
<td>3</td>
</tr>
<tr>
<td>PSY2012 General Psychology or SYG2000 Principles of Sociology</td>
<td>3</td>
</tr>
<tr>
<td>Humanities</td>
<td>3</td>
</tr>
<tr>
<td>Biological/Physical Science</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>Speech Communications</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Core Requirements Credit Hours</th>
<th>21</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC1102 Composition II or ENC2210 Professional and Technical Writing</td>
<td>3</td>
</tr>
<tr>
<td>CCJ1020 Introduction to Criminal Justice</td>
<td>3</td>
</tr>
<tr>
<td>CCJ2191 Human Behavior in Criminal Justice</td>
<td>3</td>
</tr>
<tr>
<td>CJL1062 Constitutional Law</td>
<td>3</td>
</tr>
<tr>
<td>CJE2600 Criminal Investigation</td>
<td>3</td>
</tr>
<tr>
<td>Electives*</td>
<td>6</td>
</tr>
</tbody>
</table>

### Polygraph courses taken through the International Academy of the Polygraph, Deception Control (Ft. Lauderdale, Tel: 954-771-6900, [www.deception.com](http://www.deception.com)) Students who successfully complete the IAP, Deception Control Polygraph Training will receive prior learning assessment credits for the following courses:

- CJE2580 Interviews & Interrogations
- CJE2723 Test Questions/Personnel Screening
- CJE2724 Test Questions/Criminal Cases
- CJE2722 Polygraph Theory and Operations
- CJE2725 Chart Analysis, Validity and Reliability
- CJE2726 Polygraph Operations Practicum

## Total Program Credit Hours

60

### Notes:

*Electives- Students must complete an additional 6 credits of electives. The student may have to take MAT1033/STA1001 based on their placement score. If the student needs these courses, then 6 credits of the elective area can be used to fulfill the requirements. If the student does not need to take these course, the student must take electives from the following courses – CCJ2949, any Criminal Justice course, any Fire Science/Emergency Management course, or any other college level course.

- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

**Students are strongly encouraged to meet with an advisor to create an educational plan.**
Fire Officer Supervision Technical Certificate
Program Code 6313

Program Description: The Fire Officer Supervision Certificate is part of the existing Associate in Science Degree in Fire Science. This certificate is designed for firefighting or fire prevention related professionals with the purpose of preparing them to work as supervisors in Fire Service agencies. This certificate may be taken as a stand-alone program or along with the Fire Science AS degree.

Career Pathway: Public Safety

Program Entrance Requirements: HS Diploma or GED. However, the program is recommended for currently employed fire service professionals.

Additional Program Information: N/A

Related Industry Certifications: N/A

Location(s): The Fire Science courses are offered primarily online or at the A. Hugh Adams Central Campus. On occasion, courses may be taught on site at local fire departments. Please consult the course schedule for specific semester locations.

Contact information: Program contact information can be found at http://www.broward.edu/academics/programs/ips/Pages/default.aspx

Related Programs at Broward College:
Fire Science Technology Associate of Science (2118)

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FFP1505 Fire Prevention Practices</td>
<td>3</td>
</tr>
<tr>
<td>FFP1740 Fire Service Course Delivery</td>
<td>3</td>
</tr>
<tr>
<td>FFP2120 Fire Service Building Construction</td>
<td>3</td>
</tr>
<tr>
<td>FFP2720 Company Officer</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Program Credit Hours 12

Notes:
- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Crime Scene Technician Technical Certificate
Program Code 6347

Program Description: The Crime Scene Technician vocational certificate, offered through the BC Institute of Public Safety on the Central Campus in Davie (954-201-6791), is designed for students seeking entry level jobs in law enforcement, including the positions of Crime Scene Technician, Police Service Aide and/or Police Officer. This certificate is also appropriate for current law enforcement personnel seeking career advancement by obtaining knowledge and skills in the area of crime scene technology. Students who successfully complete the certificate program may use the credits earned toward the A.S. degree in Criminal Justice-Crime Scene Emphasis.

Career Pathway: Public Safety

Program Entrance Requirements: HS Diploma or GED

Additional Program Information: This certificate program is composed of 10 courses (28 credits total). Two of the ten courses have prerequisite course requirements that are not offered every semester. Thus, it is strongly recommended that students take the courses in the order listed below.

Related Industry Certifications: N/A

Location(s): All courses for this program are offered at the Institute of Public Safety on the A. Hugh Adams Central Campus in Davie. Please consult the course schedule for specific semester locations.

Contact information: Program contact information can be found at http://www.broward.edu/academics/programs/ips/Pages/default.aspx

Related Programs at Broward College:
Criminal Justice Associate of Science (21101)
Criminal Justice-Crime Scene Emphasis Associate of Science (21102)
Criminal Justice-Polygraph Emphasis Associate of Science (21104)
Police Service Aide Post-Secondary Adult Vocational Certificate (5271)
Police Academy (restricted admission) Post-Secondary Adult Vocational Certificate (5269)
Corrections Officer Academy (restricted admission) Post-Secondary Adult Vocational Certificate (5270)

Required Courses
CJE2600 Criminal Investigation 3
CJE2640 Introduction to Criminalistics 3
CCJ1020 Introduction to Criminal Justice 3
CJL1100 Criminal Law 3
CJE2770 Forensic Photography 3
CJE2643 Advanced Forensic Investigation 3
CJL1062 Constitutional Law 3
CJL1130 Criminal Evidence 3
CJE2642 Criminalistics Practicum 3
Elective Any college level transferrable course 1

Total Program Credit Hours 28
Crime Scene Technician Technical Certificate
Program Code 6347

Recommended Course Sequencing

First Year Term I
CJE2600  Criminal Investigation  3
CJE2640  Introduction to Criminalistics  3
CCJ1020  Introduction to Criminal Justice  3
CJL1100  Criminal Law  3

Total Term Credit Hours  12

First Year Term II
CJE2770  Forensic Photography*  3
CJE2643  Advanced Forensic Investigation**  3
CJL1062  Constitutional Law  3
CJL1130  Criminal Evidence  3

Total Term Credit Hours  12

First Year Term III
CJE2642  Criminalistics Practicum***  3
Elective  Any college level transferrable course  1

Total Term Credit Hours  4

Total Program Credit Hours  28

Notes:
*This course is only offered in the evenings.
**This course is only offered in the evenings and is typically only offered in the Spring term.
*** This course is only offered in the evenings and is typically only offered in the Summer term.

- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Police Academy Basic Recruit Training  
Program Code 5269  
(Restricted Admission-Limited Access)

**Program Description:** The Police Academy Basic Training Program is a limited access program. Courses are held at the Institute of Public Safety, located at A. Hugh Adams Central Campus. The Institute is certified by the Florida Criminal Justice Standards and Training Commission to provide basic and advanced training.

The Law Enforcement Basic Recruit Training prepares students as entry-level law enforcement officers in the State of Florida. Practical skills and simulated activities complement the classroom instruction. This minimum standards program is regulated by Florida statutes and is a highly structured and disciplined program.

Upon successful completion of the Basic Training Program, a student is eligible to take the Florida Department of Law Enforcement State Officer Certification exam. Upon achieving a passing score on the exam, the student, if not already hired, will be eligible to seek employment with a law enforcement agency. For additional information on agency requirements for hire, students should refer to the standards as prescribed by Florida State Statute 943.17 and should contact the hiring agency.

**Career Pathway:** Public Safety

**Program Entrance Requirements:** All candidates entering the program must have proof of a standard high school diploma or GED and are required to complete the pre-program Testing through Broward College Institute of Public Safety Regional Selection Center. The candidate must complete and achieve passing scores on the Basic Abilities Test for Law Enforcement (BAT), and pass a physical fitness ability test (Basic Motor Skills), and a Swim Test. Some agencies will also require a Test of Adult Basic Ability (TABE). All test registrations must be completed on line at [www.broward.edu/testingcenter](http://www.broward.edu/testingcenter).

Candidates who are seeking to sponsor themselves must complete the above tests first before contacting the open enrollment coordinator. All open enrollment candidates must also complete and achieve passing scores on the TABE test. Additional information on this process is available on our website at [www.broward.edu/ips](http://www.broward.edu/ips).

Seating is limited to 40 students per academy program.

**Additional Program Information:** Students completing their law enforcement academy training who do not already have a degree are strongly encouraged to continue their education by completing the A.S. degree in Criminal Justice Technology. Student who successfully complete the Law Enforcement program are eligible to receive 15 college credits towards the A.S. degree in Criminal Justice Technology. For additional information, contact the program manager at 954-201-6803.

**Related Industry Certifications:** Upon successful completion of this program, graduates will be eligible to sit for the following industry certifications/licenses: Florida Department of Law Enforcement, State Officer Certification Exam for Law Enforcement.

**Location(s):** All testing and courses for this program are offered at the Institute of Public Safety on the A. Hugh Adams Central Campus in Davie. Please consult the course schedule for specific semester locations.
Police Academy Basic Recruit Training
Program Code 5269
(Restricted Admission-Limited Access)

Contact information: Program contact information can be found at http://www.broward.edu/academics/programs/ips/Pages/default.aspx

Related Programs at Broward College: The Florida Department of Law Enforcement, Criminal Justice Standards and Training Commission, recognizes the Broward College Institute of Public Safety, located at A. Hugh Adams Central Campus, as a Law Enforcement and Corrections Training Center. As a certified training Center, the Institute of Public Safety offers criminal justice certificate of achievement programs: The Broward County Police Academy Basic Recruit Certificate Program, The Broward County Correctional Officer Academy Basic Recruit Certificate Program, and Correctional Officer-crossover to Law Enforcement Certificate Program, and Police Service Aide Certificate Program.

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>CJK0001</td>
<td>Introduction to Law Enforcement</td>
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<tr>
<td>CJK0012</td>
<td>Legal</td>
<td>62</td>
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<tr>
<td>CJK0013</td>
<td>Interactions in a Diverse Community</td>
<td>40</td>
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<tr>
<td>CJK0014</td>
<td>Interviewing and Report Writing</td>
<td>56</td>
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<tr>
<td>CJK0064</td>
<td>Fundamentals of Patrol</td>
<td>35</td>
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<tr>
<td>CJK0065</td>
<td>Calls for Service</td>
<td>36</td>
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<tr>
<td>CJK0077</td>
<td>Criminal Investigations</td>
<td>50</td>
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<tr>
<td>CJK0078</td>
<td>Crime Scene to Courtroom</td>
<td>35</td>
</tr>
<tr>
<td>CJK0092</td>
<td>Critical Incidents</td>
<td>44</td>
</tr>
<tr>
<td>CJK0087</td>
<td>Traffic Stops</td>
<td>30</td>
</tr>
<tr>
<td>CJK0084</td>
<td>DUI Traffic Stops</td>
<td>24</td>
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<tr>
<td>CJK0088</td>
<td>Traffic Investigations</td>
<td>32</td>
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<tr>
<td>CJK0031</td>
<td>First Aid for Criminal Justice Officers</td>
<td>40</td>
</tr>
<tr>
<td>CJK0040</td>
<td>Criminal Justice Firearms</td>
<td>80</td>
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<tr>
<td>CJK0051</td>
<td>Criminal Justice Defensive Tactics</td>
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<tr>
<td>CJK0020</td>
<td>Emergency Vehicle Operations</td>
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<tr>
<td>CJK0422</td>
<td>Dart Firing Stun Gun</td>
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</tr>
<tr>
<td>CJK0096</td>
<td>Physical Fitness</td>
<td>60</td>
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</table>

Total Program Clock Hours: 770

Notes:
Students attend the Broward County Police Academy Monday-Friday, 7:45am-5 pm. Schedules are subject to change. Students must maintain excellent attendance at all required courses. Students will wear uniforms and must follow the IPS Academy Rules and Regulations and Broward College Student Code of Conduct.

- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Corrections Officer Academy Basic Recruit Training
Program Code 5270
(Restricted Admission-Limited Access)

Program Description: The Corrections Academy Basic Training Program is a limited access program. The Institute is certified by the Florida Criminal Justice Standards and Training Commission to provide basic and advanced training.

The Corrections Basic Recruit Training prepares students as entry-level corrections officers/deputies in the State of Florida. Practical skills and simulated activities complement the classroom instruction. This minimum standards program is regulated by Florida statutes and is a highly structured and disciplined program.

Upon successful completion of the Basic Training Program, a student is eligible to take the Florida Department of Law Enforcement, Corrections State Officer Certification exam. Upon achieving a passing score on the exam, the student, if not already hired, will be eligible to seek employment with a state corrections or local jail facility. For additional information on agency requirements for hire, students should refer to the standards as prescribed by Florida State Statute 943.17 and should contact the hiring agency.

Career Pathway: Public Safety

Program Entrance Requirements: All candidates entering the program must have proof of a standard high school diploma or GED. Candidates are required to complete the pre-program testing through Broward College Institute of Public Safety Regional Selection Center. The candidate must complete and achieve passing scores on the Basic Abilities Test for Corrections (BAT), and pass a physical fitness ability test (Basic Motor Skills). Some agencies will also require a Test of Adult Basic Ability (TABE). All test registrations must be completed online at www.broward.edu/testingcenter.

Seating is limited to 40 students per academy program.

Additional Program Information: Students completing their corrections academy training who do not already have a degree are strongly encouraged to continue their education by completing the A.S. degree in Criminal Justice. Students completing the Corrections Officer program are eligible to receive 6 college credits towards the A.S. degree in Criminal Justice.

Related Industry Certifications: Upon successful completion of this program, graduates will be eligible to sit for the following industry certifications/licenses: Florida Department of Law Enforcement, State Officer Certification Exam for Corrections.

Location(s): All testing and courses for this program are offered at the Institute of Public Safety on the A. Hugh Adams Central Campus in Davie. Please consult the course schedule for specific semester locations.

Contact information: Program contact information can be found at http://www.broward.edu/academics/programs/ips/Pages/default.aspx
Corrections Officer Academy Basic Recruit Training  
Program Code 5270  
(Restricted Admission-Limited Access)  

Related Programs at Broward College: The Florida Department of Law Enforcement, Criminal Justice Standards and Training Commission, recognizes the Broward College Institute of Public Safety, located at A. Hugh Adams Central Campus, as a Law Enforcement and Corrections Training Center. As a certified training Center, the Institute of Public Safety offers criminal justice certificate of achievement programs: The Broward County Police Academy Basic Recruit Certificate Program, The Broward County Correctional Officer Academy Basic Recruit Certificate Program, and Correctional Officer-crossover to Law Enforcement Certificate Program, and Police Service Aide Certificate Program.

Required Courses  
CJK0300 Introduction to Corrections 32  
CJK0305 Communications 40  
CJK0310 Officer Safety 16  
CJK0315 Facility and Equipment 8  
CJK0320 Intake and Release 18  
CJK0325 Supervising in a Correctional Facility 40  
CJK0330 Supervising Special Populations 20  
CJK0335 Responding to Incidents and Emergencies 16  
CJK0031 First Aid for Criminal Justice Officers 40  
CJK0040 Criminal Justice Firearms 80  
CJK0051 Criminal Justice Defensive Tactics 80  
CJK0340 Officer Wellness and Physical Abilities 30  

Total Program Clock Hours 420  

Notes:  
Students attend the Broward Corrections Academy Monday-Friday, 7:45am-5 pm. Schedules are subject to change. Students must maintain excellent attendance at all required courses. Students will wear uniforms and must follow the IPS Academy Rules and Regulations and Broward College Student Code of Conduct.  

- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.  

Students are strongly encouraged to meet with an advisor to create an educational plan.
Police Service Aide Academy  
Program Code 5271  
(Restricted Admission-Limited Access)

Program Description: The Police Service Aide Academy Training Program is a limited access program. The Institute is certified by the Florida Criminal Justice Standards and Training Commission to provide basic and advanced training.

The Police Service Aide Academy prepares students for employment as Parking Enforcement Specialists, Traffic Crash Investigators, and Community Service Officers in accordance with Chapters 316.640 and 943, Florida Statute. Courses of study include but are not limited to First Responder, Vehicle Operation, Interpersonal Skills Traffic Control, Legal, Ethics, Crime Scene Investigation and Courtroom Preparation and Testimony. Practical skills and simulated activities complement the classroom instruction. This minimum standards program is regulated by Florida statutes, The Florida Department of Education, The Florida Department of Law Enforcement and is a highly structured and disciplined program.

Upon successful completion of the training Program, a student is eligible to seek employment as a Police Service Aide or Community Service Officer. For additional information on agency requirements for hire, students should refer the hiring agency.

Career Pathway: Public Safety

Program Entrance Requirements: All candidates entering the program must have proof of a standard high school diploma or GED and are required to complete the pre-program testing through Broward College Institute of Public Safety Regional Selection Center. The candidate must complete and achieve passing scores (10.0 on all sections) on the TABE test (Adult Basic Ability Test). All test registrations must be completed on line at www.broward.edu/testingcenter.

Candidates who are seeking to sponsor themselves must complete the above test first before contacting the open enrollment coordinator. For additional information on this process, please visit our website at www.broward.edu/ips.

Seating is limited to 40 students per academy program.

Additional Program Information: Students completing their academy training who do not already have a degree are strongly encouraged to continue their education by completing the A.S. degree in Criminal Justice Technology. Students who complete the Police Service Aide Academy are eligible to receive 3 college credits towards the A.S. degree in Criminal Justice Technology. For additional information, contact the program manager at 954-201-6803.

Related Industry Certifications: Broward College, Institute of Public Safety, Certificate of Completion

Location(s): All testing and courses for this program are offered at the Institute of Public Safety on the A. Hugh Adams Central Campus in Davie. Please consult the course schedule for specific semester locations.

Contact information: Program contact information can be found at http://www.broward.edu/academics/programs/ips/Pages/default.aspx
Police Service Aide Academy  
Program Code 5271  
(Restricted Admission-Limited Access)

Related Programs at Broward College: The Florida Department of Law Enforcement, Criminal Justice Standards and Training Commission, recognizes the Broward College Institute of Public Safety, located at A. Hugh Adams Central Campus, as a Law Enforcement and Corrections Training Center. As a certified training Center, the Institute of Public Safety offers criminal justice certificate of achievement programs: The Broward County Police Academy Basic Recruit Certificate Program, The Broward County Correctional Officer Academy Basic Recruit Certificate Program, and Correctional Officer-crossover to Law Enforcement Certificate Program, and Police Service Aide Certificate Program.

Required Courses
CJK0441C Police Service Aide 110
CJK0442 Traffic Accident/Crash Investigator 80
CJK0451 Parking Enforcement Specialist 16

Total Program Clock Hours 206

Notes:

For Self Sponsored candidates:

- Must be 18 years of age or older.
- High School diploma or GED.
- Must possess a valid Florida Driver’s License- applicants must provide a copy of their current driving history for review. – Contact the Florida Department of Highway Safety and Motor Vehicles.
- United States Citizenship not a requirement.
- Be of Good Moral Character; having no felony convictions; no misdemeanor convictions involving moral character, perjury, false statement as outlined in Florida State Statute.
- Not have been dishonorably discharged from the Armed Forces of the United States and provide copy of military documents
- Must successfully pass the TABE test. Test Registration is to be completed on line at www.broward.edu/ips.
- For more information on testing, please call us at 954-201-6931 or 207-6790.

Live scan: All students must schedule an appointment for the Live Scan (fingerprinting)

Applications are available on our website- Click on the Police Service Aide link or visit our office at the Central Campus, Building 21, and Institute of Public Safety

Students attend the Broward Police Service Aide Academy Monday-Friday, 7:45am-5 pm. Schedules are subject to change. Students must maintain excellent attendance at all required courses. Students will wear uniforms and must follow the IPS Academy Rules and Regulations and Broward College Student Code of Conduct.

- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Correctional Officer Crossover to Florida Law Enforcement Officer Academy
Program Code 5278
(Restricted Admission-Limited Access)

Program Description: The Correctional Officer Crossover to Law Enforcement Academy Basic Training Program is a limited access program. The Institute is certified by the Florida Criminal Justice Standards and Training Commission to provide basic and advanced training.

The Correctional Officer Crossover to Law Enforcement Basic Recruit Training is designed to prepare students who are currently certified in the Corrections discipline to laterally move to the Law Enforcement discipline. Practical skills and simulated activities complement the classroom instruction. This minimum standards program is regulated by Florida statutes and is a highly structured and disciplined program.

Upon successful completion of the Basic Training Program, a student is eligible to take the Florida Department of Law Enforcement State Officer Certification exam for Law Enforcement. Upon achieving a passing score on the exam, the student, if not already hired, will be eligible to seek employment with a state of Florida Law Enforcement agency. For additional information on agency requirements for hire, students should refer to the standards as prescribed by Florida State Statute 943.17 and should contact the hiring agency.

Career Pathway: Public Safety

Program Entrance Requirements: Interested candidates must have possess a current Florida Department of Law Enforcement certification in corrections. The certification must be active and not exceed a 4 year break in service. All candidates entering the program must have proof of a standard high school diploma or GED. Candidates are required to complete the pre-program testing through Broward College Institute of Public Safety Regional Selection Center. The candidate must complete and achieve passing scores on the Basic Abilities Test for Law Enforcement (BAT), and pass a modified physical fitness ability test (Basic Motor Skills). Some agencies will also require a Test of Adult Basic Ability (TABE). All test registrations must be completed on line at www.broward.edu/testingcenter. Officers who are currently working must have their registration signed by the authorized department administrator to attend.

Seating is limited to 40 students per academy program.

Additional Program Information: Students completing their academy training who do not already have a degree are strongly encouraged to continue their education by completing the A.S. degree in Criminal Justice Technology. Students completing the Crossover program are eligible to receive 15 college credits towards the A.S. degree in Criminal Justice Technology. For additional information, contact the program manager at 954-201-6803.

Related Industry Certifications: Upon successful completion of this program, graduates will be eligible to sit for the following industry certifications/licenses: Florida Department of Law Enforcement, State Officer Certification Exam for Law Enforcement.

Location(s): All testing and courses for this program are offered at the Institute of Public Safety on the A. Hugh Adams Central Campus in Davie. Please consult the course schedule for specific semester locations.
Correctional Officer Crossover to Florida Law Enforcement Officer Academy  
Program Code 5278  
(Restricted Admission-Limited Access)

Contact information: Program contact information can be found at http://www.broward.edu/academics/programs/ips/Pages/default.aspx

Related Programs at Broward College: The Florida Department of Law Enforcement, Criminal Justice Standards and Training Commission, recognizes the Broward College Institute of Public Safety, located at A. Hugh Adams Central Campus, as a Law Enforcement and Corrections Training Center. As a certified training Center, the Institute of Public Safety offers criminal justice certificate of achievement programs: The Broward County Police Academy Basic Recruit Certificate Program, The Broward County Correctional Officer Academy Basic Recruit Certificate Program, and Correctional Officer-crossover to Law Enforcement Certificate Program, and Police Service Aide Certificate Program.

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Clock Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CJK0293</td>
<td>Overview of Law Enforcement</td>
<td>64</td>
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<tr>
<td>CJK0297</td>
<td>Interactions in Crisis Situations</td>
<td>10</td>
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<tr>
<td>CJK0296</td>
<td>Reporting Procedures</td>
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<tr>
<td>CJK0064</td>
<td>Fundamentals of Patrol</td>
<td>35</td>
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<td>CJK0065</td>
<td>Calls for Service</td>
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<td>CJK0077</td>
<td>Criminal Investigations</td>
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<td>CJK0078</td>
<td>Crime Scene to Courtroom</td>
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<tr>
<td>CJK0092</td>
<td>Critical Incidents</td>
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<td>CJK0087</td>
<td>Traffic Stops</td>
<td>30</td>
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<td>CJK0084</td>
<td>DUI Traffic Stops</td>
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<td>CJK0393</td>
<td>Crossover Program Updates</td>
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<td>CJK0020</td>
<td>CMS Law Enforcement Vehicle Operations</td>
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<td>CJK0422</td>
<td>Dart firing Stun Gun</td>
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<td>CJK0392</td>
<td>Crossover Handgun Transition Course</td>
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<td>CJK0295</td>
<td>Correctional Crossover to Law Enforcement</td>
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<tr>
<td></td>
<td>Officer Wellness</td>
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</table>

Total Program Clock Hours: 515

Notes:
Students attend the Broward Corrections Officer Crossover to Law Enforcement Officer Academy, Monday-Friday, 8:30am - 12:30pm. Schedules are subject to change. Students must maintain excellent attendance at all required courses. Students will wear academy approved attire and must follow the IPS Academy Rules and Regulations and Broward College Student Code of Conduct.

- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Florida Education and Training Placement Information Program (FETPIP) Data

### Public Safety

<table>
<thead>
<tr>
<th>Program Title</th>
<th>Award Type</th>
<th>Program Code</th>
<th>CIP Code</th>
<th>2009-10 FETPIP Current Placement Rate</th>
<th>2010-11 FETPIP Current Placement Rate</th>
<th>2011-12 FETPIP Current Placement Rate</th>
<th>2012-13 FETPIP Current Placement Rate</th>
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<tbody>
<tr>
<td>Fire Science Technology</td>
<td>AS</td>
<td>2118</td>
<td>1743020100</td>
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<tr>
<td>Criminal Justice Emphasis</td>
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<td>100%</td>
<td>100%</td>
<td>80%</td>
</tr>
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<td>Crossover from Correctional Officer</td>
<td></td>
<td></td>
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<td></td>
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</tr>
</tbody>
</table>
Science, Technology, Engineering & Math

One of the most exciting industries to be part of is the STEM industry. If you have good analytical skills, are interested in computers and high tech, cutting-edge innovations this is where you want to focus your energy. Take on your next big challenge and get your degree or certificate at Broward College.

Articulation Agreements
Broward College has numerous articulation agreements with our local high schools and Technical Colleges. Students may be able to earn college credit for select programs completed at the secondary and postsecondary level. The programs listed below with an asterisk (*) have a current articulation agreement. For more information about articulation agreements, please contact the Career and Technical Education office at 954-201-7830. You can also find information online at [www.broward.edu/careerpath](http://www.broward.edu/careerpath)

<table>
<thead>
<tr>
<th>Program Code</th>
<th>Program Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associate of Arts degree</td>
<td></td>
</tr>
<tr>
<td>1010</td>
<td>Associate of Arts</td>
</tr>
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</table>

Advanced Technical Certification

<table>
<thead>
<tr>
<th>Program Code</th>
<th>Program Title</th>
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<tbody>
<tr>
<td>4277</td>
<td>Geographic Information Systems</td>
</tr>
</tbody>
</table>

Associate of Science degrees

<table>
<thead>
<tr>
<th>Program Code</th>
<th>Program Title</th>
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<tbody>
<tr>
<td>2149</td>
<td>Computer Information Technology</td>
</tr>
<tr>
<td>2149C</td>
<td>Computer Systems Specialist</td>
</tr>
<tr>
<td>2182</td>
<td>Environmental Science Technology</td>
</tr>
<tr>
<td>2195</td>
<td>Computer Programming and Analysis*</td>
</tr>
<tr>
<td>2196</td>
<td>Internet Services Technology</td>
</tr>
<tr>
<td>2503</td>
<td>Networking Systems Technology*</td>
</tr>
<tr>
<td>2506</td>
<td>Computer and Network Security</td>
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<tr>
<td>2507</td>
<td>Technology Project Management</td>
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Bachelor of Applied Science degree

<table>
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<tr>
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<th>Program Title</th>
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<tr>
<td>T200</td>
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<td>T300</td>
<td>Information Technology</td>
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Bachelor of Science degrees

<table>
<thead>
<tr>
<th>Program Code</th>
<th>Program Title</th>
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</thead>
<tbody>
<tr>
<td>S600</td>
<td>Biosecurity - Environmental Science</td>
</tr>
</tbody>
</table>

Median Earnings (for Broward County)

- Environmental Science Protection Technician - $15.93/hr
- Computer User Support Specialist - $18.88/hr
- Network & Computer Systems Administrator - $36.86/hr
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>S700</td>
<td>Physical Science - Environmental Science</td>
</tr>
<tr>
<td>6329</td>
<td>Network Infrastructure - Cisco CCNA Certificate</td>
</tr>
<tr>
<td>6330</td>
<td>Advanced Network Infrastructure - Cisco CCNP Certificate</td>
</tr>
<tr>
<td>6331</td>
<td>Computer Programming Specialist</td>
</tr>
<tr>
<td>6332</td>
<td>Computer Programmer</td>
</tr>
<tr>
<td>6333</td>
<td>Web Design Specialist</td>
</tr>
<tr>
<td>6334</td>
<td>Web Development Specialist</td>
</tr>
<tr>
<td>6335</td>
<td>Network Server Administration - Microsoft MCSA Certificate</td>
</tr>
<tr>
<td>6336</td>
<td>Network Enterprise Administration - Microsoft MCSE Certificate</td>
</tr>
<tr>
<td>6337</td>
<td>Information Technology Support Specialist (Option 1)</td>
</tr>
<tr>
<td>6338</td>
<td>Information Technology Analyst (Option 1)</td>
</tr>
<tr>
<td>6339</td>
<td>Information Technology Support Specialist (Option21)</td>
</tr>
<tr>
<td>6340</td>
<td>Information Technology Analyst (Option 2)</td>
</tr>
<tr>
<td>6341</td>
<td>Cybersecurity Technical Certificate</td>
</tr>
</tbody>
</table>
**Program Description:** The Associate of Arts (AA) degree is the traditional transfer degree. Students who earn the AA are able to remain at Broward College, transfer to another state college, or a state university in order to continue their education and pursue a baccalaureate degree.

**Career Pathway:** Science, Technology, Engineering & Math (STEM)

**Program Entrance Requirements:** HS Diploma or GED

**Additional Program Information:** The Associate of Arts degree includes 36 credit hours of General Education and an additional 24 credit hours of electives. The elective credit hours should be selected based on the student’s transfer major. Students are encouraged to review the state’s Common Course Prerequisite Manual (www.flvc.org/partner-portal/common-prerequisite-manual) for additional guidance.

**Location(s):** Courses are offered at all college locations, including online. Please consult the course schedule for specific semester locations.

**Bachelor Degree Majors Include:**

<table>
<thead>
<tr>
<th>at Broward College</th>
<th>at a Transfer Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exceptional Student Education</td>
<td>Actuarial Science</td>
</tr>
<tr>
<td>Middle Grades General Science Education</td>
<td>Astronomy</td>
</tr>
<tr>
<td>Secondary Biology Education</td>
<td>Biochemistry</td>
</tr>
<tr>
<td>Middle Grades Mathematics Education</td>
<td>Civil Engineering</td>
</tr>
<tr>
<td>Secondary Mathematics Education</td>
<td>Coastal and Ocean Engineering</td>
</tr>
<tr>
<td>Environmental Science - Biosecurity</td>
<td>Computer Science</td>
</tr>
<tr>
<td>Environmental Science - Physical Science</td>
<td>Forensic Science</td>
</tr>
<tr>
<td>Supervision &amp; Management</td>
<td>Geology</td>
</tr>
<tr>
<td>Technology Management</td>
<td>Information Sciences</td>
</tr>
<tr>
<td>Information Technology</td>
<td>Management Information Systems</td>
</tr>
<tr>
<td>Supply Chain Management</td>
<td>Nuclear Engineering</td>
</tr>
</tbody>
</table>

**Recommended First Semester Courses**

<table>
<thead>
<tr>
<th>Exempt Students</th>
<th>Non-Exempt Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC1101 Composition I</td>
<td>ENC XXXX*</td>
</tr>
<tr>
<td>MAT/MAC XXXX*</td>
<td>MAT/MAC XXXX*</td>
</tr>
<tr>
<td>SPC1608 Introduction to Public Speaking</td>
<td>SPC1608 Introduction to Public Speaking</td>
</tr>
<tr>
<td>SPC1024 Introduction to Speech Communications</td>
<td>SPC1024 Introduction to Speech Communications</td>
</tr>
<tr>
<td>CHM1045 General Chemistry I</td>
<td>CHM1045** General Chemistry I</td>
</tr>
<tr>
<td>CHM1045L General Chemistry I Lab</td>
<td>CHM1045L** General Chemistry I Lab</td>
</tr>
<tr>
<td>HLP1081 Total Wellness</td>
<td>HLP1081 Total Wellness</td>
</tr>
</tbody>
</table>

*The specific English and Math course will depend on the student’s test score.

**Registration depends on the student’s test score.

- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

*If the student attends part-time (less than 12 credits), it is highly recommended that the student complete English and Math in the first term.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Geographic Information Systems Advanced Technical Certificate
Program Code 4277

Program Description: This certificate program prepares students for employment as a geographic information systems (GIS) technician or provides GIS training to those currently employed in these occupations. The curriculum includes basic computer skill classes, use of spatial databases for the storage of geographic data, creation of maps and analysis of spatial information, and related technologies of remote sensing and GPS and how they integrate with GIS. The classes provide extensive training with the popular ArcGIS software.

Career Pathway: Science, Technology, Engineering & Math (STEM)

Program Entrance Requirements: Students must hold a minimum of an Associate’s degree.

Additional Program Information: N/A

Related Industry Certifications: N/A

Location(s): Most courses are offered at all BC locations, including online. However, some courses may only be offered at the A. Hugh Adams Central Campus. Please consult the course schedule for specific semester locations.

Contact Information: Program contact information can be found at www.broward.edu/academics/programs/environmental/environmentaltechnology/Pages/default.aspx

Related Programs at Broward College:
Environmental Science Technology Associate in Science (2182)

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GIS1030 Remote Sensing and Applications</td>
<td>3</td>
</tr>
<tr>
<td>GIS1040C Introduction to Geographic Information System I</td>
<td>4</td>
</tr>
<tr>
<td>GIS1042C Introduction to Geographic Information Systems II</td>
<td>3</td>
</tr>
<tr>
<td>GIS1047C Applications of Geographic Information Systems</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Program Credit Hours 13

Notes: Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Associate of Science in Computer Information Technology  
Program Code 2149

Program Description: The Computer Information Technology Associate in Science degree exposes students to applications programming, networking, systems administration, database management, information security, project management and web development. It is designed for students seeking the skills set needed to be successful in their careers in the field of information technology.

Career Pathway: Science, Technology, Engineering & Math (STEM)

Program Entrance Requirements: HS Diploma or GED

Additional Program Information: N/A

Related Industry Certifications: Upon completing this program, graduates may be eligible to sit for the following industry certifications/licenses: A+, Network+, Security+, Linux+, and CIW Foundations.

Location(s): The majority of the courses are offered at all BC locations, including online. However, some courses may only be offered at the A. Hugh Adams Central Campus. Please consult the course schedule for specific semester locations.

Contact Information: Program contact information can be found at www.broward.edu/academics/programs/computer/Pages/default.aspx

Related Programs at Broward College:
Information Technology Support Specialist – Option 1 Technical Certificate (6337)
Information Technology Support Specialist – Option 2 Technical Certificate (6339)
Information Technology Analyst – Option 1 Technical Certificate (6338)
Information Technology Analyst – Option 2 Technical Certificate (6340)

General Education Credit Hours 18
ENC1101 Composition I 3
MAC1105 College Algebra 3
SPC1608 Introduction to Public Speaking or SPC1024 Introduction to Speech Communications 3
Humanities 3
Social/Behavioral Science 3
Biological/Physical Science 3

Core Requirements Credit Hours 24
CGS2100C Computer Applications 3
CIS1000C Introduction to Computer Science 3
COP1334C Introduction to C++ 3
CTS1133C A+ Essentials 3
CTS2131C A+ Practical 3
CTS2120C Security+ 3
CIS1513C Project Management 3
Computer Science Elective* 3
### Associate of Science in Computer Information Technology

**Program Code 2149**

<table>
<thead>
<tr>
<th>Specialized Courses (choose one option)</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Option 1</strong></td>
<td></td>
</tr>
<tr>
<td>CTS1134C Network+</td>
<td>3</td>
</tr>
<tr>
<td>CTS1111C Linux+</td>
<td>3</td>
</tr>
<tr>
<td>CTS1390C Installing &amp; Configuring Windows Server</td>
<td>3</td>
</tr>
<tr>
<td>CTS1391C Administering Windows Server</td>
<td>3</td>
</tr>
<tr>
<td>CTS1851C CIW Foundations</td>
<td>3</td>
</tr>
<tr>
<td>COP2071C Database Design &amp; Programming using SQL</td>
<td>3</td>
</tr>
<tr>
<td><strong>Option 2</strong></td>
<td></td>
</tr>
<tr>
<td>CET2486C Networking Technology</td>
<td>3</td>
</tr>
<tr>
<td>CET2742C Advanced Networking Technology</td>
<td>3</td>
</tr>
<tr>
<td>CTS2383C Managing a Server Network</td>
<td>3</td>
</tr>
<tr>
<td>CTS1106C UNIX</td>
<td>3</td>
</tr>
<tr>
<td>CGS1557C Internet Site Design</td>
<td>3</td>
</tr>
<tr>
<td>CGS1540C Database Management</td>
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</tr>
</tbody>
</table>

**Total Program Credit Hours**: 60

---

**Notes**: Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

*Electives – Student may have to take MAT1033 based on placement score. If the student does not need to take MAT1033, the student must take one of the following courses: CTS1851C, CTS2120C, CTS1111C, CTS1390C, CET2486C, CIS2028, CET1600C or CGS1060C.

**Students are strongly encouraged to meet with an advisor to create an educational plan.**
Associate of Science in Computer Systems Specialist
Program Code 2149C

Program Description: The Computer Information Technology Associate in Science degree exposes students to applications programming, networking, systems administration, database management, information security, project management and web development. It is designed for students seeking the skills set needed to be successful in their careers in the field of information technology. The program is a competency-based program.

Career Pathway: Science, Technology, Engineering & Math (STEM)

Program Entrance Requirements: HS Diploma or GED
- Students are required to complete the SmarterMeasure Online Learning Readiness Assessment
- Students are required to meet with an academic coach to create an educational plan and sign a coaching agreement

Additional Program Information: Competency-based learning allows students to study and accelerate their course completion time if they are able. It is ideal for those students who have the self-discipline and motivation to complete the course work without attending. Some students’ learning style is especially well-suited for self-study and those with family or job responsibilities can complete much of their school work around their other responsibilities rather than having to fit their lives around classroom time. Broward College has initiated rolling start dates so that, if desired, students can begin new courses much sooner than the traditional model of waiting for the next semester to begin.

Related Industry Certifications: Upon completing this program, graduates may be eligible to sit for the following industry certifications/licenses: A+, Network+, Security+, Linux+, Microsoft Excel, Microsoft Access and CIW Foundations.

Location(s): The majority of the courses are offered at all BC locations, including online. However, some courses may only be offered at the A. Hugh Adams Central Campus. Please consult the course schedule for specific semester locations.

Contact Information: Program contact information can be found at www.broward.edu/academics/programs/computer/Pages/default.aspx

Related Programs at Broward College:
Information Technology Support Specialist – Option 1 Technical Certificate (6337)
Information Technology Support Specialist – Option 2 Technical Certificate (6339)
Information Technology Analyst – Option 1 Technical Certificate (6338)
Information Technology Analyst – Option 2 Technical Certificate (6340)

<table>
<thead>
<tr>
<th>General Education Credit Hours</th>
<th>18</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC1101 Composition I</td>
<td>3</td>
</tr>
<tr>
<td>MAC1105 College Algebra*</td>
<td>3</td>
</tr>
<tr>
<td>SPC1608 Introduction to Public Speaking</td>
<td>or</td>
</tr>
<tr>
<td>SPC1024 Introduction to Speech Communications</td>
<td>3</td>
</tr>
<tr>
<td>Humanities</td>
<td>3</td>
</tr>
<tr>
<td>Social/Behavioral Science</td>
<td>3</td>
</tr>
<tr>
<td>Biological/Physical Science</td>
<td>3</td>
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</tbody>
</table>
**Associate of Science in Computer Systems Specialist**  
**Program Code 2149C**

### Core Requirements Credit Hours

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGS1060C</td>
<td>Computer &amp; Internet Literacy</td>
<td>or 3</td>
</tr>
<tr>
<td>CGS2100C</td>
<td>Computer Applications</td>
<td>3</td>
</tr>
<tr>
<td>CGS1510C</td>
<td>Electronic Spreadsheets</td>
<td>3</td>
</tr>
<tr>
<td>CGS1540C</td>
<td>Database Management</td>
<td>3</td>
</tr>
<tr>
<td>CGS1557C</td>
<td>Internet Site Design</td>
<td>3</td>
</tr>
<tr>
<td>CIS1000C</td>
<td>Introduction to Computer Science**</td>
<td>3</td>
</tr>
<tr>
<td>COP1334C</td>
<td>Introduction to C++</td>
<td>3</td>
</tr>
<tr>
<td>CTS1133C</td>
<td>A+ Essentials</td>
<td>3</td>
</tr>
<tr>
<td>CTS2131C</td>
<td>A+ Practical</td>
<td>3</td>
</tr>
<tr>
<td>CET2486C</td>
<td>Networking Technology</td>
<td>3</td>
</tr>
<tr>
<td>CET2742C</td>
<td>Advanced Networking Technology</td>
<td>3</td>
</tr>
<tr>
<td>CTS2383C</td>
<td>Managing a Server Network</td>
<td>3</td>
</tr>
<tr>
<td>CTS1106C</td>
<td>UNIX*</td>
<td>3</td>
</tr>
<tr>
<td>CTS2120C</td>
<td>Security+</td>
<td>3</td>
</tr>
<tr>
<td>CIS1513C</td>
<td>Project Management</td>
<td>3</td>
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</table>

### Total Program Credit Hours 60

**Notes:** Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

*The student may need to take MAT1033 based on placement score. If the student does not need to take MAT1033 then the student will take CTS1106C.*

**The computer literacy requirement will be met through completion of CIS1000C.**

**Students are strongly encouraged to meet with an advisor to create an educational plan.**
Associate of Science in Environmental Science Technology
Program Code 2182

**Program Description:** This program prepares students for employment in various positions such as environmental laboratory technicians, environmental samplers, environmental health inspectors, instrumentation technicians, pollution control technicians, groundwater contamination technicians and geology technicians. This degree is designed to articulate into the BS in Environmental Science.

**Career Pathway:** Science, Technology, Engineering, and Math (STEM)

**Program entrance Requirements:** HS Diploma or GED

**Additional program information:** N/A

**Location(s):** General Education courses can be taken at any college location. Some of the program specific courses are only taught at the A. Hugh Adams Central Campus. Please consult the course schedule for specific semester locations.

**Contact information:** Program contact information can be found at www.broward.edu/academics/programs/environmental/environmentaltechnology/Pages/default.aspx.

**Related Programs at Broward College:**
Environmental Science Bachelor of Science (S600 and S700)
Geographic Information Systems Advanced Technical Certificate (4277)

<table>
<thead>
<tr>
<th>General Education Credit Hours</th>
<th>18</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC1101 Composition I</td>
<td>3</td>
</tr>
<tr>
<td>ENC2210 Professional and Technical Writing</td>
<td>3</td>
</tr>
<tr>
<td>SPC1024 Introduction to Speech Communications</td>
<td>or</td>
</tr>
<tr>
<td>SPC1608 Introduction to Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>STA2023 Statistics</td>
<td>3</td>
</tr>
<tr>
<td>Humanities</td>
<td>3</td>
</tr>
<tr>
<td>Social/Behavioral Science</td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Core Requirement Credit Hours</th>
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</tr>
</thead>
<tbody>
<tr>
<td>BSC2010 Introduction to Biology I</td>
<td>3</td>
</tr>
<tr>
<td>BSC2010L Introduction to Biology I Lab</td>
<td>1</td>
</tr>
<tr>
<td>CHM1045 General Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CHM1045L General Chemistry I Lab</td>
<td>1</td>
</tr>
<tr>
<td>EVR1263 Fundamentals of Air Pollution</td>
<td>3</td>
</tr>
<tr>
<td>EVR1858 Environmental Regulations</td>
<td>3</td>
</tr>
<tr>
<td>EVR2930 Environmental Science Seminar</td>
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</tr>
<tr>
<td>GIS1040C Introduction to Geographic Information Systems I</td>
<td>4</td>
</tr>
<tr>
<td>EVR2949 Co-op internship</td>
<td>3</td>
</tr>
<tr>
<td>ORH2527 Florida Flora and Ecosystem Landscapes</td>
<td>3</td>
</tr>
<tr>
<td>PSC1121 Physical Science</td>
<td>or</td>
</tr>
<tr>
<td>PHY1001 Applied Physics</td>
<td>3</td>
</tr>
<tr>
<td>SWS2242C Wetlands Management I</td>
<td>3</td>
</tr>
<tr>
<td>GEO2370 Conservation of Natural Resources</td>
<td>3</td>
</tr>
<tr>
<td>Electives*</td>
<td>8</td>
</tr>
</tbody>
</table>
# Associate of Science in Environmental Science Technology

**Program Code 2182**

<table>
<thead>
<tr>
<th>Specialized Course Credit Hours</th>
<th>4</th>
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</thead>
<tbody>
<tr>
<td>BOT2010 Botany</td>
<td>3</td>
</tr>
<tr>
<td>BOT2010L Botany Lab</td>
<td>1</td>
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<tr>
<td><strong>OR</strong></td>
<td></td>
</tr>
<tr>
<td>BSC2011 Introduction to Biology II</td>
<td>3</td>
</tr>
<tr>
<td>BSC20111L Introduction to Biology II Lab</td>
<td>1</td>
</tr>
<tr>
<td><strong>OR</strong></td>
<td></td>
</tr>
<tr>
<td>MCB2010 Microbiology</td>
<td>3</td>
</tr>
<tr>
<td>MCB2010L Microbiology Lab</td>
<td>1</td>
</tr>
<tr>
<td><strong>OR</strong></td>
<td></td>
</tr>
<tr>
<td>ZOO2010 Zoology</td>
<td>3</td>
</tr>
<tr>
<td>ZOO2010L Zoology Lab</td>
<td>1</td>
</tr>
</tbody>
</table>

| Total Program Credit Hours | 64 |

**Notes:** Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

*Electives – Students must complete 8 credits of electives. The student may have to take MAT1033/STA1001 based on their placement score. The student may have to also take CGS1060C in order to meet the Computer Competency requirement. If the student needs these courses, then 6 credits of the elective area can be used to fulfill the requirements. If the student does not need to take these course, the student must take electives from the following courses - CHM1040, CHM1041, GLY1010, GLY1010L, GIS1000, GIS1030, GIS1042C, and GIS1047C.

**Students are strongly encouraged to meet with an advisor to create an educational plan.**
Associate of Science in Computer Programming and Analysis  
Program Code 2195

Program Description: The Associate in Science Degree in Computer Programming and Analysis is designed to prepare students for the dynamic world of application and web development. Students will use current technology to learn procedural and object-oriented programming as well as web design including client-side and server-side scripting. The program will culminate with a capstone course in which students will work on a hands-on group project that can be used in their portfolios.

Career Pathway: Science, Technology, Engineering & Math (STEM)

Program Entrance Requirements: HS Diploma or GED

Additional Program Information: N/A

Related Industry Certifications: Upon completing this program, graduates will be eligible to sit for the following industry certifications/licenses: CIW Foundations, CIW JavaScript, Linux+

Location(s): The majority of the courses are offered at all BC locations, including online. However, some courses may only be offered at the A. Hugh Adams Central Campus. Please consult the course schedule for specific semester locations.

Contact Information: Program contact information can be found at
www.broward.edu/academics/programs/computer/Pages/default.aspx

Related Programs at Broward College:
Computer Programming Specialist Technical Certificate (6331)
Computer Programmer Technical Certificate (6332)

<table>
<thead>
<tr>
<th>General Education Credit Hours</th>
<th>18</th>
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<tbody>
<tr>
<td>ENC1101 Composition</td>
<td>3</td>
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<tr>
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<td>SPC1024 Introduction to Speech Communications</td>
<td>or</td>
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<tr>
<td>SPC1608 Introduction to Public Speaking</td>
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<td>Humanities</td>
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<tr>
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<tr>
<td>Biological/Physical Science</td>
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<table>
<thead>
<tr>
<th>Core Requirements Credit Hours</th>
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<tbody>
<tr>
<td>CIS1000C Introduction to Computer Science</td>
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</tr>
<tr>
<td>COP1334C Introduction to C++ Programming</td>
<td>3</td>
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<tr>
<td>CTS1851C Certified Internet Webmaster Foundations</td>
<td>3</td>
</tr>
<tr>
<td>COP2071C Database Design &amp; SQL Programming</td>
<td>3</td>
</tr>
<tr>
<td>COP2361C Object Oriented Analysis and Design</td>
<td>3</td>
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<tr>
<td>COP2335C Intermediate C++ Programming</td>
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<tr>
<td>CTS2852C Client-Side Scripting</td>
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<td>CTS2857C Server-Side Scripting</td>
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<tr>
<td>CIS1513C Project Management</td>
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<td>CTS1111C Linux+</td>
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# Associate of Science in Computer Programming and Analysis

**Program Code 2195**

<table>
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<tr>
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<tr>
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<tr>
<td>Computer Programming Elective**</td>
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<tr>
<td>CIS2910C</td>
<td>Systems Design and Development</td>
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</table>

**Total Program Credit Hours** 60

**Notes:** Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

*Object Oriented Programming Electives: COP2360C or COP2800C or COP 2222C

**Student may have to take MAT1033 based on placement score. If the student does not need MAT1033, they must take two of the following courses to fulfill the Computer Programming Electives: CTS2420C, CTS2434C, CTS2437C, CTS2438C, CTS2441C, CTS2442C, CTS2445C, CTS2446C, CTS2451C, CTS2464C, COP2360C, COP2800C, COP2222C, COP 2658C, or COP2660C.

Computer literacy requirement: The computer literacy requirement will be met through completion of CIS1000C.

**Students are strongly encouraged to meet with an advisor to create an educational plan.**
Associate of Science in Internet Services Technology
Program Code 2196

Program Description: The Associate of Science degree in Internet Services Technology is designed to prepare students for the dynamic world of web design and development. Students will use current technology to learn client-side scripting, server-side scripting, and website animation and e-commerce tools. The program will culminate with a capstone course in which students will work on a hands-on group project that can be used in their portfolios.

Career Pathway: Science, Technology, Engineering & Math (STEM)

Program Entrance Requirements: High school diploma or GED

Additional Program Information: Please contact Program Manager.

Related Industry Certifications: Upon completing this program, graduates will be eligible to sit for the following industry certifications/licenses:
- CIW Foundations, CIW JavaScript, Linux+

Location(s): General Education courses can be taken at any college location. Core requirements are available at Central campus. Please consult the course schedule for specific semester locations.

Contact information: Program contact information can be found at http://www.broward.edu/academics/programs/computer/Pages/default.aspx.

Related Programs:
Web Development Specialist Technical Certificate (6285)

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<thead>
<tr>
<th>General Education Credit Hours</th>
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<td>ENC1101 Composition</td>
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<td>Social/Behavioral Science</td>
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<td>CTS1212C Adobe Photoshop</td>
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<td>CTS1851C Cert. Internet Webmaster Foundations</td>
<td>3</td>
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<tr>
<td>CIS1000C Intro to Comp Science</td>
<td>3</td>
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<tr>
<td>COP1334C Intro to C++ Programming</td>
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| COP2071C Database Design & SQL Programming | 3 |
| CTS2852C Client-Side Scripting | 3 |
| CTS2857C Server-Side Scripting | 3 |
| CTS 1806C Advanced Website Design and Development | 3 |
| CTS 1808C Website Animation | 3 |
| CIS1513C Project Management | 3 |
| CTS1111C Linux+ | 3 |
| CIS 2028 Information Systems | 3 |
| CTS 2858C CIW E-Commerce | 3 |
| Computer Science Elective* | 3 |
| Computer Science Elective* | 3 |

Total program Credit Hours 63
### Associate of Science in Internet Services Technology
**Program Code 2196**

#### Recommended Course Sequencing

##### First Year Term I
- **ENC1101**  Composition I  3
- **CTS1851C**  CIW Foundations  3
- **CIS1000C**  Intro to Computer Science  3
- **COP1334C**  Intro to C++  3

**Total Term Credits Hours**  12

##### First Year Term II
- **MAC1105**  College Algebra  3
- **COP2071C**  Database Design & SQL Programming  3
- **CTS2852C**  Client-Side Scripting  3
- **CTS1806C**  Advanced Website Design and Development  3

**Total Term Credits Hours**  12

##### First Year Term III
- **CTS1212C**  Adobe Photoshop  3
- **Humanities**  3
- **Speech Communications**  3

**Total Term Credits Hours**  9

##### Second Year Term I
- **Social/Behavioral Science**  3
- **CTS2857C**  Server-Side Scripting  3
- **CTS1808C**  Website Animation  3
- **CIS2028**  Information Systems  3

**Total Term Credits Hours**  12

##### Second Year Term II
- **Biological/Physical Science**  3
- **CIS1513C**  Project Management  3
- **CTS1111C**  Linux+  3
- **CS Elective**  3

**Total Term Credits Hours**  12

##### Second Year Term III
- **CTS2858C**  CIW E-Commerce  3
- **CS Elective**  3

**Total Term Credits Hours**  6

**Total Program Credit Credits**  63

**Notes:** Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

*Program electives – Student may have to take MAT1033 based on placement score. If the student does not need MAT1033, the student must take one of these Computer Science Electives - COP2335C, COP2360C, COP2800C, COP2361C, COP2222C, CGS1060C

**Students are strongly encouraged to meet with an advisor to create an educational plan.**
Associate of Science in Network Systems Technology
Program Code 2503

Program Description: The Network Systems Technology Associate in Science degree, offered at the A. Hugh Adams Central Campus, prepares students for employment opportunities as network administrators. It is designed for students seeking the skills set needed to be successful in their careers as Microsoft Network Administrators or Cisco Certified Networking Professionals.

Career Pathway: Science, Technology, Engineering and Math (STEM)

Program Entrance Requirements: HS Diploma or GED

Additional Program Information: N/A

Related Industry Certifications: Graduates may be eligible to sit for the following industry certifications/licenses: A+, Network+, Security+, CCNA Routing and Switching, CCNA Security, CCNP Routing and Switching, MCSA, MCSE Server Infrastructure, and MCSE Desktop Infrastructure.

Location(s): The General Education courses can be completed at any BC location, the specific program courses are only offered at the A. Hugh Adams Central Campus. Please consult the course schedule for specific semester locations.

Contact information: Program contact information can be found at http://www.broward.edu/academics/programs/computer/Pages/default.aspx.

Related Programs at Broward College:
Network Server Administration Technical Certificate (6335)
Network Enterprise Administration Technical Certificate (6336)
Network Infrastructure Technical Certificate (6329)
Advanced Network Infrastructure Technical Certificate (6330)

General Education Credit Hours 18
ENC1101 Composition I 3
MAC1105 College Algebra 3
SPC1608 Introduction to Public Speaking 3 or
SPC1024 Introduction to Speech Communications 3
Humanities 3
Social/Behavioral Science 3
Biological/Physical Science 3

Core Requirement Credit Hours 21
CIS1000C Introduction to Computer Science 3
CTS1133C A+ Essentials 3
CTS2131C A+ Practical 3
CTS1134C Network 3
CIS1513C Project Management 3
CIS2028 Information Systems 3
Elective* Computer Science Elective 3

Microsoft MCSE Specialization Credit Hours 24
CTS2120C Security 3
CTS1390C Installing & Configuring Windows Server 3

Broward College

College Catalog 2015-2016
## Associate of Science in Network Systems Technology
### Program Code 2503

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>CTS1391C</td>
<td>Administering Windows Server</td>
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</tr>
<tr>
<td>CTS1392C</td>
<td>Configuring Advanced Windows Server</td>
<td>3</td>
</tr>
<tr>
<td>CTS2393C</td>
<td>Designing &amp; Implementing Server Infrastructure</td>
<td>3</td>
</tr>
<tr>
<td>CTS2394C</td>
<td>Implementing Advanced Server Infrastructure</td>
<td>3</td>
</tr>
<tr>
<td>CTS2395C</td>
<td>Implementing a Desktop Infrastructure</td>
<td>3</td>
</tr>
<tr>
<td>CTS2396C</td>
<td>Implementing Desktop App Environments</td>
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**OR**

### Cisco CCNP Specialization  Credit Hours 24

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<td>Cisco Networking I</td>
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<tr>
<td>CET1610C</td>
<td>Cisco Networking II</td>
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<tr>
<td>CET1615C</td>
<td>Cisco Networking III</td>
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<td>CET1620C</td>
<td>Cisco Networking IV</td>
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<td>CET2660C</td>
<td>Cisco CCNA Security</td>
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<td>CET2625C</td>
<td>Cisco CCNP I – Routing</td>
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<tr>
<td>CET2627C</td>
<td>Cisco CCNP II – Switching</td>
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<tr>
<td>CET2628C</td>
<td>Cisco CCNP III – Troubleshoot</td>
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</tbody>
</table>

**Total Program Credit Hours 63**

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**Notes:** Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

*Elective - Student may have to take MAT1033 based on placement score. If the student does not need MAT1033, the student must take one of the following courses – COP1000C, COP1334C, CTS1851C, CTS2120C, CTS1111C, CTS1390C, CET1600C or CGS1060C.

**Students are strongly encouraged to meet with an advisor to create an educational plan.**
Associate of Science in Computer and Network Security  
Program Code 2506

Program Description: The Computer and Network Security Associate in Science degree prepares students for employment opportunities as security professionals. It is designed for students seeking the skills set needed to be successful in their careers as Certified Security Professionals.

Career Pathway: Science, Technology, Math, and Engineering (STEM)

Program Entrance Requirements: HS Diploma or GED.

Additional Program Information: Students who already hold the following industry certifications may be eligible to receive credit through prior learning assessment. Students are strongly encourage to see an advisor for more information.
  - Cisco Certified Network Associate (CCNA)
  - Cisco Certified Network Associate Security (CCNA Security)
  - CompTIA Security+
  - CompTIA A+
  - CompTIA Network+

Related Industry Certifications: Upon completing this program, graduates will be eligible to sit for the following industry certifications/licenses:
  - CompTIA A+
  - CompTIA Network+
  - CompTIA Security+
  - Cisco CCNA
  - EC-Council Certified Ethical Hacker

Location(s): The majority of the courses are offered at all BC locations, including online. However, some courses may only be offered at the A. Hugh Adams Central Campus, the North Campus, and online. Please consult the course schedule for specific semester locations.

Contact information: Program contact information can be found at [http://www.broward.edu/academics/programs/computer/Pages/default.aspx](http://www.broward.edu/academics/programs/computer/Pages/default.aspx)

Related Programs at Broward College:
Cybersecurity Technical Certificate (6341)

General Education Credit Hours 18
ENC1101  Composition I 3
MAC1105  College Algebra 3
SPC1024  Introduction to Speech Communications or
SPC1608  Introduction to Public Speaking 3
Humanities 3
Social/Behavioral Science 3
Biological/Physical Science 3
## Associate of Science in Computer and Network Security

**Program Code 2506**

### Core Requirement Credit Hours

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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<tr>
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<td>CTS2131C</td>
<td>A+ Practical</td>
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<td>CET2486C</td>
<td>Networking Technology</td>
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<td>CGS1540C</td>
<td>Database Management</td>
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<tr>
<td>CGS1557C</td>
<td>Internet Site Design</td>
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<tr>
<td>CIS1513C</td>
<td>Project Management</td>
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<td><strong>Total</strong></td>
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### Cybersecurity Specialization Credit Hours

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<th>Course Title</th>
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<td>CTS2120C</td>
<td>Security+</td>
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<tr>
<td>CTS2383C</td>
<td>Managing a Server Network OS</td>
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<tr>
<td>CTS2651C</td>
<td>Router Technology</td>
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<td>CTS2652C</td>
<td>Advanced Router Technology</td>
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<tr>
<td>CTS2314C</td>
<td>Network Defense and Countermeasures</td>
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<td>CIS2352C</td>
<td>Ethical Hacking I</td>
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<tr>
<td>CIS2359C</td>
<td>Ethical Hacking II: Capstone</td>
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</table>

### Total Program Credit Hours

**63**

**Notes:**
- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.
- *Student may have to take MAT1033 based on placement score. Student may need to take CGS1060C if they are unable to successfully pass the computer competency test. If the student does not need to take MAT1033 or CGS1060C, the student must take a Computer Science elective - any 1000 or 2000-level course with a CIS, COP, CET, CGS, or CTS prefix*
- **Students transferring in CTS1134C, may take a Computer Science Elective (see above) in place of CET2742C. Students are strongly encouraged to meet with an advisor to create an educational plan.**
Associate of Science in Technology Project Management
Program Code 2507

Program Description: The Technology Project Management Associate in Science degree prepares students for employment opportunities as entry level project management professionals. It is designed for students seeking the skill set needed to be successful in their careers as supervisors, managers, and project leaders especially in the field of Information Technology.

Career Pathway: Science, Technology, Engineering and Math (STEM)

Program Entrance Requirements: HS Diploma or GED.

Additional Program Information: Students who already hold the following industry certifications may be eligible to receive credit through prior learning assessment. Students are strongly encourage to see an advisor for more information.
- Microsoft Certified Professional (MCP) – Microsoft Project
- Project Management Institute’s Project Management Professional (PMP)
- Certified Associate in Project Management (CAPM)
- CompTIA Project+
- CompTIA A+
- CompTIA Network+

Related Industry Certifications: Upon completing this program, graduates will be eligible to sit for the following industry certifications/licenses:
- CompTIA A+
- CompTIA Project+
- Microsoft Certified Professional (MCP): Managing Projects with Microsoft Project 2013
- Project Management Institute (PMI): Project Management Professional (PMP) or Certified Associate in Project Management (CAPM) depending on documented work experience in leading and directing projects.

Location(s): The majority of the courses are offered at all BC locations, including online. However, some courses may only be offered at the A. Hugh Adams Central Campus, the North Campus, and online. Please consult the course schedule for specific semester locations.

Contact information: Program contact information can be found at http://www.broward.edu/academics/programs/computer/Pages/default.aspx

Related Programs at Broward College: Business Operations Technical Certificate (6320)

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**Associate of Science in Technology Project Management**  
*Program Code 2507*

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<th>Core Requirement Credit Hours</th>
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<td>CTS1133C A+ Essentials</td>
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<td>CTS2131C A+ Practical</td>
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<td>MAN2021 Introduction to Management</td>
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<td>MNA1161 Introduction to Customer Service</td>
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<td>ACG2001 Principles of Accounting I</td>
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<td>MNA2345 Principles of Supervision</td>
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<td>CIS2028 Information Systems</td>
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<td>CIS2321C Systems Analysis &amp; Design</td>
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<td>CTS1214C Microsoft Project</td>
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<td>CTS2148C Project+</td>
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<td>ISM2311C IT Project Management: Capstone</td>
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</table>

| Elective Credit Hours                  | 6  |
| Computer Science Elective*             | 3  |
| Business or Computer Science Elective* | 3  |

| Total Program Credit Hours             | 63 |

**Notes:** Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

*Student may have to take MAT1033 based on placement score. Student may also need to take CGS1060C if they are unable to successfully pass the computer competency test. If the student does not need to take MAT1033 or CGS1060C, the student must take a Computer Science elective - any 1000 or 2000-level course with a CIS, COP, CET, CGS, CTS or ISM prefix and either another Computer Science (see above) elective or a Business elective - any 1000 or 2000-level course with an ACG, BUL, CIS, COP, CET, CGS, CTS, GEB, FIN, ISM, MAN, MAR, MNA or MKA prefix.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Bachelor of Applied Science in Technology Management  
Program Code T200

Program Description: The Bachelor of Applied Science Degree in Technology Management provides individuals who hold an Associate of Science (AS) or an Associate in Applied Science (AAS) degree the opportunity to further their education. Students completing this program will have the skills and knowledge required to become successful Technology Managers and Leaders within public, private, and non-profit organizations. The curriculum offers a learner-centered and practical approach to understanding Technology Management.

Career Pathway: Science, Technology, Engineering & Math (STEM)

Program Entrance Requirements: Minimum AA, AS or AAS degree or 60 completed semester credit hours (from a Regionally Accredited Institution) and 2.0 out of 4.0 GPA in all previous post-secondary work. Students with an Associate in Arts degree or 60 credit hours but not holding a degree may be admitted to the program if the AS General Education requirements have been satisfied and other criteria are met upon the recommendation of the Dean.

Special Admissions Requirement for BAS Program: A supplemental application will need to be completed and can be found here www.broward.edu/admissions/Pages/BachelorProgram.aspx

Related Industry Certifications: N/A

Foreign Language Requirement: Students must successfully complete the foreign language requirement as prescribed in college policy and the college catalog.

Location(s): General Education courses can be taken at any college location. Some program specific courses may only be available at the North Campus. Please consult the course schedule semester locations.

Contact information: Program contact information can be found at www.broward.edu/academics/programs/Pages/science-technology-math-engineering-STEM.aspx

<table>
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<th>General Education Credit Hours</th>
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<td>MAN4900</td>
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# Bachelor of Applied Science Technology Management Program

**Program Code T200**

## Recommended Course Sequencing

### First Year Term I
- **MAN3240** Applied Organizational Behavior 3
- **MAN3303** Management and Leadership 3
- **ISM3013** Introduction to Information Systems 3
- **STA2023** Statistics 3
- **GE Course** Communications 3

**Total Term Credit Hours** 15

### First Year Term II
- **MAN3310** Human Resource Management 3
- **BUL3130** Business Law and Ethics 3
- **ISM3432** Applied Quality Assurance Methodology 3
- **GE Course** Biological/Physical Science 3
- **GE Course** Biological/Physical Science Lab 1

**Total Term Credit Hours** 13

### First Year Term III
- **ISM3320** Information Systems Control 3
- **GE Course** General Education Wellness 2

**Total Term Credit Hours** 5

### Second Year Term I
- **CIS4253** Social and Professional Issues in IT 3
- **MAN4570** Procurement Management 3
- **ISM4314** Applied Project Management* 3
- **GE Course** Humanities 3

**Total Term Credit Hours** 12

### Second Year Term II
- **MAN4504** Operations Management 3
- **ISM4382** Global Information Systems 3
- **MAN4900** Capstone Project** 3
- **GE Course** General Education Social/Behavioral Science 3

**Total Term Credit Hours** 12

**Total General Education Requirements** 18
**Total Upper Division Credit Hours** 39

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**Notes:** Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

*It is strongly recommended that students take CIS1513C before ISM4314

**MAN4900 must be taken in the student’s final semester.**

*General Education Courses will vary based on a student’s transcript.*

Students are strongly encouraged to meet with a BAS advisor to create an educational plan.
Bachelor of Applied Science in Information Technology
Program Code T300

Program Description: The Bachelor of Applied Science Degree in Information Technology provides individuals who hold an Associate in Science (AS) of Associate in Applied Science (AAS) degree the opportunity to further their education. Students completing this program will have the skills and knowledge required to become successful Information Technologists and leaders in areas such as database, private, and non-profit organizations. The curriculum offers a learner-centered and practical approach to understanding and applying information Technology.

Career Pathway: Science, Technology, Engineering & Math (STEM)

Program Entrance Requirements: Minimum AA, AS or AAS degree or 60 completed semester credit hours (from a Regionally Accredited Institution) and 2.0 out of 4.0 GPA in all previous post-secondary work. Students with an Associate in Arts degree or 60 credit hours but not holding a degree may be admitted to the program if the AS General Education requirements have been satisfied and other criteria are met upon the recommendation of the Dean.

Special Admissions Requirement for BAS Program: A supplemental application will need to be completed and can be found here www.broward.edu/admissions/Pages/BachelorProgram.aspx

Related Industry Certifications: N/A

Foreign Language Requirement: Students must successfully complete the foreign language requirement as prescribed in college policy and the college catalog.

Location(s): General Education courses can be taken at any college location. Some program specific courses may only be available at the North Campus. Please consult the course schedule semester locations.

Contact information: Program contact information can be found at www.broward.edu/academics/programs/Pages/science-technology-math-engineering-STEM.aspx

| General Education Credit Hours | CNT3604 | System Administration and Maintenance | 3 |
| Communication | 3 |
| Humanities | COP 3703 | Database Concepts | 3 |
| Biological/Physical Science | CEN4341 | Platform Technologies | 3 |
| Biological/Physical Science Lab | CEN4722 | Human Computer Interaction | 3 |
| Social/Behavioral Science | CIS4361 | Information Assurance and Security | 3 |
| Wellness | COP4858 | Integrative Programming and Technologies | 3 |
| Mathematics | 2 |

| Upper Division Credit Hours | CIS4253 | Social and Professional Issues in IT | 3 |
| CNT3504 | Networking | 3 |
| CNT3702 | Infrastructure and Facilities Planning | 3 |
| COP3847 | Web Systems and Technologies | 3 |
| ISM4314 | Applied Project Management | 3 |
Bachelor of Applied Science Information Technology Program
Program Code T300

Recommended Course Sequencing

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First Year Term I

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| **Total General Education Requirements** | **18** |
| **Total Upper Division Credit Hours**   | **39** |

Notes: Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

*CIS4596* must be taken in the student’s final semester.

*General Education Courses will vary based on a student’s transcript.*

Students are strongly encouraged to meet with a BAS advisor to create an educational plan.
Bachelor of Science in Environmental Science
Biosecurity Program
Program Code S600

Program Description: The Bachelor of Science (BS) in environmental science is designed for students that wish to pursue a career as a laboratory/field technician and/or progress to a graduate degree program (MS or PhD). The curriculum will provide the students with a foundational understanding of science, critical thinking skills, experiential learning, ethics and specific technical knowledge and skills required to work in the laboratory or the field. The Biosecurity track focuses on ecology, entomology, plant science, genetics and other aspects of environmental science. An optional Advanced Technical Certificate in Geographic Information Systems (GIS) provides additional discipline skills and knowledge that will make them competitive for employment within the environmental and biological science workforce.

Career Pathway: Science, Technology, Engineering, and Math (STEM)

Program Entrance Requirements: Entry requires completion of an AA/AS degree or transfer of 60+ credits (including general education) from another accredited institution. Applicants must have:

- a cumulative grade point average of 2.5 on a 4.0 scale
- submit a letter of recommendation
- submit all transcripts from previous institutions
- be approved by the Environmental Science department.
- Completed the following courses with a C or higher:
  - BSC2010, Introduction to Biology I
  - BSC2010L, Introduction to Biology I Lab
  - Chemistry
    - CHM1045 (preferred) or CHM1032 or CHM1025
  - Chemistry lab
    - CHM1045L or CHM 1032L or CHM 1025L
  - 2000+ level biology with lab
    - BSC2011 or ZOO2010 or BOT2010 or MCB2010 or ORH2527
  - Statistics (STA2023) must be completed prior to entry or during the first year of baccalaureate study

Additional Program Information: This program collaborates with the University of Florida Ft. Lauderdale REC. Electives and certain courses will be taken as a transient student through UF. Completion of the degree requires BSC4911 (Independent Research in the Biological Sciences) or BSC4948 (Senior Internship).

Related Industry Certifications: N/A

Foreign Language Requirement: Students must successfully complete the foreign language requirement as prescribed in college policy and the college catalog.

Location(s): General Education courses can be taken at any college location. Some program specific courses may only be available at the a. Hugh Adams Central Campus. Please consult the course schedule for specific semester locations.

Contact information: Program contact information can be found at www.broward.edu/academics/programs/Pages/science-technology-math-engineering-STEM.aspx
Bachelor of Science in Environmental Science  
Biosecurity Program  
Program Code S600

Related Programs at Broward College:  
Environmental Science Technology Associate of Science (2182)  
Geographic Information Systems Advanced Technical Certificate (4277)

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Recommended Course Sequencing

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**Second Year Term I**

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Bachelor of Science in Environmental Science
Biosecurity Program
Program Code S600

Second Year Term II
BSC4911 Senior Research or
BSC4948 Senior Internship 3
Electives** 13

Total Term Credit Hours 16
Total Upper Division Credit Hours 60

Notes: Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

*GIS Course options – GIS1000, GIS1030, GIS1040C, GIS1042C, GIS1047C, GIS4301C


General Education Courses will vary based on a student’s transcript.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Bachelor of Science in Environmental Science
Physical Science Program
Program Code S700

Program Description: The Bachelor of Science (BS) in environmental science is designed for students that wish to pursue a career as a laboratory/field technician and/or progress to a graduate degree program (MS or PhD). The curriculum will provide the students with a foundational understanding of science, critical thinking skills, experiential learning, ethics and specific technical knowledge and skills required to work in the laboratory or the field. The Physical Science track focuses on geology, hydrogeology, oceanography, and other aspects of environmental science. An optional Advanced Technical Certificate in Geographic Information Systems (GIS) provides additional discipline skills and knowledge that will make them competitive for employment within the environmental and physical science workforce.

Career Pathway: Science, Technology, Engineering, and Math (STEM)

Program Entrance Requirements: Entry requires completion of an AA/AS degree or transfer of 60+ credits (including general education) from another accredited institution. Applicants must have:
- a cumulative grade point average of 2.5 on a 4.0 scale
- submit a letter of recommendation
- submit all transcripts from previous institutions
- be approved by the Environmental Science department.
- Completed the following courses with a C or higher:
  - BSC2010, Introduction to Biology I
  - BSC2010L, Introduction to Biology I Lab
  - Chemistry
    - CHM1045 (preferred) or CHM1032 or CHM1025
  - Chemistry lab
    - CHM1045L or CHM 1032L or CHM 1025L
  - GLY1010, Physical Geology
  - GLY1010L, Physical Geology Lab
  - Statistics (STA2023) must be completed prior to entry or during the first year of baccalaureate study

Additional Program Information: This program collaborates with the University of Florida Ft. Lauderdale REC. Electives and certain courses will be taken as a transient student through UF. Completion of the degree requires PSC4912 (Independent Research in the Physical Sciences) or PSC4948 (Senior Internship).

Related Industry Certifications: N/A

Foreign Language Requirement: Students must successfully complete the foreign language requirement as prescribed in college policy and the college catalog.

Location(s): General Education courses can be taken at any college location. Some program specific courses may only be available at the A. Hugh Adams Central Campus. Please consult the course schedule for specific semester locations.

Contact information: Program contact information can be found at www.broward.edu/academics/programs/Pages/science-technology-math-engineering-STEM.aspx
Bachelor of Science in Environmental Science
Physical Science Program
Program Code S700

Related Programs at Broward College:
Environmental Science Technology Associate of Science (2182)
Geographic Information Systems Advanced Technical Certificate (4277)

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Recommended Course Sequencing

First Year Term I
- GIS Course* 3
- GLY4825 Hydrogeology 3
- GLY4825L Hydrogeology Lab 1
- OCE3008 Advanced Oceanography 3
- SWS3022 Introduction to Soil Science 3

Total Term Credit Hours 16

First Year Term II
- BSC4846 Scientific Communication 3
- Electives** 11

Total Term Credit Hours 14

Second Year Term I
- GLY4746 Global Environmental Change 3
- GLY4203 Environmental Geology and Lithospheric Processes 3
- GLY4731 Coastal and Marine Science 3
- PCB4454C Biostatistics with Lab 4
- Elective** 3

Total Term Credit Hours 16

Second Year Term II
- PCB4043 Ecology 3
- PSC4911 Senior Research or
- PSC4948 Senior Internship 3
Bachelor of Science in Environmental Science  
Physical Science Program  
Program Code S700

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>MET4700</td>
<td>Atmospheric Processes</td>
<td>3</td>
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<td>Electives**</td>
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<td><strong>Total Term Credit Hours</strong></td>
<td></td>
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</tr>
</tbody>
</table>

| **Total Upper Division Credit Hours** | 60 |

**Notes:** Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

*GIS Course options – GIS1000, GIS1030, GIS1040C, GIS1042C, GIS1047C, GIS4301C


General Education Courses will vary based on a student’s transcript.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Network Infrastructure Technical Certificate
Program Code 6329

Program Description: The Network Infrastructure Technical Certificate prepares students for employment opportunities as network administrators. It is designed for students seeking the skills set necessary to be successful in their careers as Cisco Certified Network Associates.

Career Pathway: Science, Technology, Engineering & Math (STEM)

Program Entrance Requirements: HS Diploma or GED

Additional Program Information: N/A

Related Industry Certifications: Upon completing this program, graduates will be eligible to sit for the following industry certifications/licenses: A+, Network+, and CCNA Routing and Switching.

Location(s): The specific program courses are offered at the A. Hugh Adams Central Campus and the North Campus. Please consult the course schedule for specific semester locations.

Contact information: Program contact information can be found at www.broward.edu/academics/programs/computer/Pages/default.aspx.

Related Programs:
Advanced Network Infrastructure Technical Certificate (6330)
Network Systems Technology Associate of Science (2503)
Networking Systems Technology Associate of Science (2201)
Network Support Technician Technical Certificate (6282)

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTS1133C</td>
<td>A+ Essentials</td>
<td>3</td>
</tr>
<tr>
<td>CTS2131C</td>
<td>A+ Practical</td>
<td>3</td>
</tr>
<tr>
<td>CTS1134C</td>
<td>Network+</td>
<td>3</td>
</tr>
<tr>
<td>CET1600C</td>
<td>Cisco Networking I</td>
<td>3</td>
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<tr>
<td>CET1610C</td>
<td>Cisco Networking II</td>
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<tr>
<td>CET1615C</td>
<td>Cisco Networking III</td>
<td>3</td>
</tr>
<tr>
<td>CET1620C</td>
<td>Cisco Networking IV</td>
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</table>

Total Program Credit Hours 21

Notes: Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Advanced Network Infrastructure Technical Certificate
Program Code 6330

Program Description: The Advanced Network Infrastructure Technical Certificate, offered at the A. Hugh Adams Central Campus, prepares students for employment opportunities as network administrators. It is designed for students seeking the skills set necessary to be successful in their careers as Cisco Certified Network Professionals.

Career Pathway: Science, Technology, Engineering and Math (STEM)

Program Entrance Requirements: N/A

Additional Program Information: N/A

Related Industry Certifications: Upon completing this program, graduates may be eligible to sit for the following industry certifications/licenses: A+, Network+, CCNA Routing and Switching, CCNA Security, and CCNP Routing and Switching.

Location(s): Courses are offered at all BC locations, including online. However, some courses may only be offered at the A. Hugh Adams Central Campus. Please consult the course schedule for specific semester locations.

Contact Information: Program contact information can be found at www.broward.edu/academics/programs/computer/Pages/default.aspx

Related Programs at Broward College:
Network Infrastructure Technical Certificate (6329)
Network Systems Administration Associate of Science Degree (2503)

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTS1133C</td>
<td>A+ Essentials</td>
<td>3</td>
</tr>
<tr>
<td>CTS2131C</td>
<td>A+ Practical</td>
<td>3</td>
</tr>
<tr>
<td>CTS1134C</td>
<td>Network+</td>
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</tr>
<tr>
<td>CET1600C</td>
<td>Cisco Networking I</td>
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<tr>
<td>CET1610C</td>
<td>Cisco Networking II</td>
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<td>Cisco Networking III</td>
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<td>CET1620C</td>
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<td>CET2660C</td>
<td>Cisco CCNA Security</td>
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<td>CET2625C</td>
<td>Cisco CCNP I – Routing</td>
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<tr>
<td>CET2627C</td>
<td>Cisco CCNP II – Switching</td>
<td>3</td>
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<tr>
<td>CET2628C</td>
<td>Cisco CCNP III – Troubleshoot</td>
<td>3</td>
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<tr>
<td>Computer Science Elective*</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

Total Program Credit Hours 36

Notes: Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.
*MAT1033, COP1000C, COP1334C, CTS1851C, CTS2120C, CTS1111C, or CTS1390C
Students are strongly encouraged to meet with an advisor to create an educational plan.
Computer Programming Specialist Technical Certificate  
Program Code 6331

Program Description: The Computer Programming Specialist Technical Certificate is designed to prepare students for the dynamic world of application and web development. Students will use current technology to learn procedural and object-oriented programming as well as web design including client-side and server-side scripting.

Career Pathway: Science, Technology, Engineering & Math (STEM)

Program Entrance Requirements: HS Diploma or GED

Additional Program Information: N/A

Related Industry Certifications: Upon completing this program, graduates will be eligible to sit for the following industry certifications/licenses: CIW Foundations, CIW JavaScript

Location(s): The majority of the courses are offered at all BC locations, including online. However, some courses may only be offered at the A. Hugh Adams Central Campus. Please consult the course schedule for specific semester locations.

Contact Information: Program contact information can be found at www.broward.edu/academics/programs/computer/Pages/default.aspx

Related Programs at Broward College:
Computer Programmer Technical Certificate (6332)
Computer Programming and Analysis Associate of Science (2195)

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>CIS1000C</td>
<td>Introduction to Computer Science</td>
<td>3</td>
</tr>
<tr>
<td>COP1334C</td>
<td>Introduction to C++ Programming</td>
<td>3</td>
</tr>
<tr>
<td>CTS1851C</td>
<td>Certified Internet Webmaster Foundations</td>
<td>3</td>
</tr>
<tr>
<td>COP2071C</td>
<td>Database Design &amp; SQL Programming</td>
<td>3</td>
</tr>
<tr>
<td>Computer Programming Specialist Elective*</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Computer Programming Specialist Elective*</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

Total Program Credit Hours 18

Notes: Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

*Computer Programming Specialist Electives: CTS2852C or CTS2857C or MAT1033

Students are strongly encouraged to meet with an advisor to create an educational plan.
Computer Programmer Technical Certificate  
Program Code 6332

Program Description: The Computer Programming Specialist Technical Certificate is designed to prepare students for the dynamic world of application and web development. Students will use current technology to learn procedural and object-oriented programming as well as web design including client-side and server-side scripting.

Career Pathway: Science, Technology, Engineering & Math (STEM)

Program Entrance Requirements: HS Diploma or GED

Additional Program Information: N/A

Related Industry Certifications: Upon completing this program, graduates will be eligible to sit for the following industry certifications/licenses: CIW Foundations, CIW JavaScript

Location(s): The majority of the courses are offered at all BC locations, including online. However, some courses may only be offered at the A. Hugh Adams Central Campus. Please consult the course schedule for specific semester locations.

Contact Information: Program contact information can be found at www.broward.edu/academics/programs/computer/Pages/default.aspx

Related Programs at Broward College:
Computer Programming Specialist Technical Certificate (6331)
Computer Programming and Analysis Associate of Science (2195)

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS1000C Introduction to Computer Science</td>
<td>3</td>
</tr>
<tr>
<td>COP1334C Introduction to C++ Programming</td>
<td>3</td>
</tr>
<tr>
<td>CTS1851C Certified Internet Webmaster Foundations</td>
<td>3</td>
</tr>
<tr>
<td>COP2071C Database Design &amp; SQL Programming</td>
<td>3</td>
</tr>
<tr>
<td>CTS2852C Client-Side Scripting</td>
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</tr>
<tr>
<td>CTS2857C Server-Side Scripting</td>
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<tr>
<td>COP2361C Object Oriented Analysis and Design</td>
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<td>COP2335C Intermediate C++ Programming</td>
<td>3</td>
</tr>
<tr>
<td>CIS1513C Project Management</td>
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<tr>
<td>Object Oriented Programming Elective**</td>
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</table>

Total Program Credit Hours 33

Notes: Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

*Computer Programmer Electives: CTS1111C or MAT1033

**Object Oriented Programming Electives: COP2360C or COP2800C or COP 2222C

Students are strongly encouraged to meet with an advisor to create an educational plan.
Web Design Specialist Technical Certificate
Program Code 6333

Program Description: The Web Design Specialist Technical Certificate is designed to prepare students for the dynamic world of web design and development. Students will use current technology to learn client-side scripting, server-side scripting and website animation.

Career Pathway: Science, Technology, Engineering & Math (STEM)

Program Entrance Requirements: HS Diploma or GED

Additional Program Information: N/A

Related Industry Certifications: Upon completing this program, graduates will be eligible to sit for the following industry certifications/licenses: CIW Foundations, CIW JavaScript

Location(s): The majority of the courses are offered at all BC locations, including online. However, some courses may only be offered at the A. Hugh Adams Central Campus. Please consult the course schedule for specific semester locations.

Contact Information: Program contact information can be found at www.broward.edu/academics/programs/computer/Pages/default.aspx

Related Programs at Broward College:
Web Development Specialist Technical Certificate (6334)
Internet Services Technology Associate of Science (2196)

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>CTS1851C</td>
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<tr>
<td>CIS1000C</td>
<td>Introduction to Computer Science</td>
<td>3</td>
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<tr>
<td>COP1334C</td>
<td>Introduction to C++ Programming</td>
<td>3</td>
</tr>
<tr>
<td>CTS2852C</td>
<td>Client-Side Scripting</td>
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<tr>
<td>CTS1806C</td>
<td>Advanced Website Design and Development</td>
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<tr>
<td>CTS1808C</td>
<td>Website Animation</td>
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</tr>
</tbody>
</table>

Total Program Credit Hours 18

Notes: Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Web Development Specialist Technical Certificate
Program Code 6334

Program Description: The Web Design Specialist Technical Certificate is designed to prepare students for the dynamic world of web design and development. Students will use current technology to learn client-side scripting, server-side scripting, website animation and e-commerce tools.

Career Pathway: Science, Technology, Engineering and Math (STEM)

Program Entrance Requirements: High school diploma or GED

Additional Program Information: N/A

Related Industry Certifications: Upon completing this program, graduates will be eligible to sit for the following industry certifications/licenses: CIW Foundations, CIW JavaScript, Linux+

Location(s): The majority of the courses are offered at all BC locations, including online. However, some courses may only be offered at the A. Hugh Adams Central Campus. Please consult the course schedule for specific semester locations.

Contact Information: Program contact information can be found at www.broward.edu/academics/programs/computer/Pages/default.aspx

Related Programs at Broward College:
Web Design Specialist Technical Certificate (6333)
Internet Services Technology Associate of Science (2196)

Required Courses

<table>
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<td>Adobe Photoshop</td>
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<tr>
<td>CTS1851C</td>
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<tr>
<td>CIS1000C</td>
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<td>COP1334C</td>
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<td>CTS2857C</td>
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<td>Advanced Website Design and Development</td>
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<tr>
<td>COP2071C</td>
<td>Database Design &amp; SQL Programming</td>
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<tr>
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<td>Website Animation</td>
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<td>CIS1513C</td>
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<tr>
<td>CTS2858C</td>
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<td>Web Development Elective*</td>
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</table>

Total Program Credit Hours 36

Notes: Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

* CTS 1111C or MAT 1033

Students are strongly encouraged to meet with an advisor to create an educational plan.
Network Server Administration Technical Certificate  
Program Code 6335

Program Description: The Network Server Administration Technical Certificate, offered at the A. Hugh Adams Central Campus, prepares students for employment opportunities as network administrators. It is designed for students seeking the skills set necessary to be successful in their careers as Microsoft MCSA Server Administrators.

Career Pathway: Science, Technology, Engineering and Math (STEM)

Program Entrance Requirements: N/A

Additional Program Information: N/A

Related Industry Certifications: Upon completing this program, graduates will be eligible to sit for the following industry certifications/licenses: A+, Network+, Security+, and MCSA.

Location(s): The majority of the courses are offered at all BC locations, including online. However, some courses may only be offered at the A. Hugh Adams Central Campus. Please consult the course schedule for specific semester locations.

Contact Information: Program contact information can be found at www.broward.edu/academics/programs/computer/Pages/default.aspx

Related Programs at Broward College:
Network Enterprise Administration Technical Certificate (6336)  
Network Systems Administration Associate of Science (2503)

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>CTS1133C</td>
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<tr>
<td>CTS2131C</td>
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<td>CTS1134C</td>
<td>Network+</td>
<td>3</td>
</tr>
<tr>
<td>CTS2120C</td>
<td>Security+</td>
<td>3</td>
</tr>
<tr>
<td>CTS1390C</td>
<td>Installing &amp; Configuring Windows Server</td>
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</tr>
<tr>
<td>CTS1391C</td>
<td>Administering Windows Server</td>
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</tr>
<tr>
<td>CTS1392C</td>
<td>Configuring Advanced Windows Server</td>
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</table>

Total Program Credit Hours 24

Notes: Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

** MAT1033, COP1000C, COP1334C, CTS1851C, CTS2120C, CTS1111C, or CET1600C

Students are strongly encouraged to meet with an advisor to create an educational plan.
Network Enterprise Administration Technical Certificate
Program Code 6336

Program Description: The Network Enterprise Administration Technical Certificate, offered at the A. Hugh Adams Central Campus, prepares students for employment opportunities as network administrators. It is designed for students seeking the skills set necessary to be successful in their careers as Microsoft MCSE Enterprise Administrators.

Career Pathway: Science, Technology, Engineering and Math (STEM)

Program Entrance Requirements: N/A

Additional Program Information: N/A

Related Industry Certifications: Upon completing this program, graduates will be eligible to sit for the following industry certifications/licenses: A+, Network+, Security+, and MCSA.

Location(s): The majority of the courses are offered at all BC locations, including online. However, some courses may only be offered at the A. Hugh Adams Central Campus. Please consult the course schedule for specific semester locations.

Contact Information: Program contact information can be found at www.broward.edu/academics/programs/computer/Pages/default.aspx

Related Programs at Broward College:
Network Server Administration Technical Certificate (6335)
Network Systems Administration Associate of Science (2503)

Required Courses
CTS1133C A+ Essentials 3
CTS2131C A+ Practical 3
CTS1134C Network+ 3
CTS2120C Security+ 3
CTS1390C Installing & Configuring Windows Server 3
CTS1391C Administering Windows Server 3
CTS1392C Configuring Advanced Windows Server 3
CTS2393C Designing & Implementing Server Infrastructure 3
CTS2394C Implementing Advanced Server Infrastructure 3
Computer Science Elective* 3

Total Program Credit Hours 30

Notes: Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.
*MAT1033, COP1000C, COP1334C, CTS1851C, CTS2120C, CTS1111C, or CET1600C
Students are strongly encouraged to meet with an advisor to create an educational plan.
**Program Description:** The Information Technology Support Specialist exposes students for networking and systems administration. It is designed for students seeking the skills set needed to be successful in their careers in the field of information technology.

**Career Pathway:** Science, Technology, Engineering and Math (STEM)

**Program Entrance Requirements:** HS Diploma or GED

**Additional Program Information:** N/A

**Related Industry Certifications:** Upon completing this program, graduates may be eligible to sit for the following industry certifications/licenses: A+, Network+, Security+, Linux+, and CIW Foundations.

**Location(s):** The majority of the courses are offered at all BC locations, including online. However, some courses may only be offered at the A. Hugh Adams Central Campus. Please consult the course schedule for specific semester locations.

**Contact Information:** Program contact information can be found at [www.broward.edu/academics/programs/computer/Pages/default.aspx](http://www.broward.edu/academics/programs/computer/Pages/default.aspx)

**Related Programs at Broward College:**
Computer Information Technology Associate of Science (2149)
Information Technology Analyst Technical Certificate (6338)

### Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGS2100C</td>
<td>Computer Applications</td>
<td>3</td>
</tr>
<tr>
<td>CTS1133C</td>
<td>A+ Essentials</td>
<td>3</td>
</tr>
<tr>
<td>CTS2131C</td>
<td>A+ Practical</td>
<td>3</td>
</tr>
<tr>
<td>CTS1134C</td>
<td>Network+</td>
<td>3</td>
</tr>
<tr>
<td>CTS1390C</td>
<td>Installing &amp; Configuring Windows Server</td>
<td>3</td>
</tr>
<tr>
<td>CTS1391C</td>
<td>Administering Windows Server</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Program Credit Hours** 18

**Notes:** Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

**Students are strongly encouraged to meet with an advisor to create an educational plan.**
Information Technology Analyst (Option 1) Technical Certificate
Program Code 6338

Program Description: The Information Technology Support Specialist exposes students to networking, information security, project management and systems administration. It is designed for students seeking the skills set needed to be successful in their careers in the field of information technology.

Career Pathway: Science, Technology, Engineering and Math (STEM)

Program Entrance Requirements: HS Diploma or GED

Additional Program Information: N/A

Related Industry Certifications: Upon completing this program, graduates may be eligible to sit for the following industry certifications/licenses: A+, Network+, Security+, Linux+, and CIW Foundations.

Location(s): The majority of the courses are offered at all BC locations, including online. However, some courses may only be offered at the A. Hugh Adams Central Campus. Please consult the course schedule for specific semester locations.

Contact Information: Program contact information can be found at www.broward.edu/academics/programs/computer/Pages/default.aspx

Related Programs at Broward College:
Computer Information Technology Associate of Science (2149)
Information Technology Support Specialist (6337)

Required Courses
CIS1000C Introduction to Computer Science 3
CGS2100C Computer Applications 3
CTS1133C A+ Essentials 3
CTS2131C A+ Practical 3
CTS1134C Network+ 3
CTS1390C Installing & Configuring Windows Server 3
CTS1391C Administering Windows Server 3
CTS2120C Security+ 3
CIS1513C Project Management 3

Total Program Credit Hours 27

Notes: Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Information Technology Support Specialist (Option 2) Technical Certificate
Program Code 6339

Program Description: The Information Technology Support Specialist exposes students for networking and systems administration. It is designed for students seeking the skills set needed to be successful in their careers in the field of information technology.

Career Pathway: Science, Technology, Engineering and Math (STEM)

Program Entrance Requirements: HS Diploma or GED

Additional Program Information: N/A

Related Industry Certifications: Upon completing this program, graduates may be eligible to sit for the following industry certifications/licenses: A+ and Network+.

Location(s): The majority of the courses are offered at all BC locations, including online. However, some courses may only be offered at the A. Hugh Adams Central Campus. Please consult the course schedule for specific semester locations.

Contact Information: Program contact information can be found at www.broward.edu/academics/programs/computer/Pages/default.aspx

Related Programs at Broward College:
Computer Information Technology Associate of Science (2149)
Information Technology Analyst Technical Certificate (6340)

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Required Courses
CGS2100C  Computer Applications  3
CTS1133C  A+ Essentials  3
CTS2131C  A+ Practical  3
CET2486C  Networking Technology  3
CET2742C  Advanced Networking Technology  3
CTS2383C  Managing a Server Network  3

Total Program Credit Hours 18

Notes: Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Information Technology Analyst (Option 2) Technical Certificate
Program Code 6340

Program Description: The Information Technology Support Specialist exposes students for networking, information security, project management and systems administration. It is designed for students seeking the skills set needed to be successful in their careers in the field of information technology.

Career Pathway: Science, Technology, Engineering and Math (STEM)

Program Entrance Requirements: HS Diploma or GED

Additional Program Information: N/A

Related Industry Certifications: Upon completing this program, graduates may be eligible to sit for the following industry certifications/licenses: A+, Network+, and Security+.

Location(s): The majority of the courses are offered at all BC locations, including online. However, some courses may only be offered at the A. Hugh Adams Central Campus. Please consult the course schedule for specific semester locations.

Contact Information: Program contact information can be found at www.broward.edu/academics/programs/computer/Pages/default.aspx

Related Programs at Broward College:
Computer Information Technology Associate of Science (2149)
Information Technology Support Specialist Technical Certificate (6339)

Required Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGS2100C</td>
<td>Computer Applications</td>
<td>3</td>
</tr>
<tr>
<td>CTS1133C</td>
<td>A+ Essentials</td>
<td>3</td>
</tr>
<tr>
<td>CTS2131C</td>
<td>A+ Practical</td>
<td>3</td>
</tr>
<tr>
<td>MAT1033</td>
<td>Intermediate Algebra</td>
<td>3</td>
</tr>
<tr>
<td>CET2486C</td>
<td>Networking Technology</td>
<td>3</td>
</tr>
<tr>
<td>CET2742C</td>
<td>Advanced Networking Technology</td>
<td>3</td>
</tr>
<tr>
<td>CTS2383C</td>
<td>Managing a Server Network</td>
<td>3</td>
</tr>
<tr>
<td>CTS2120C</td>
<td>Security+</td>
<td>3</td>
</tr>
<tr>
<td>CIS1513C</td>
<td>Project Management</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Program Credit Hours 27

Notes: Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Cybersecurity Technical Certificate
Program Code 6341

Program Description: The Cybersecurity Technical Certificate prepares students for employment opportunities as network or security professionals. It is designed for students seeking the skills set needed to be successful in their careers Certified Security Professionals.

Career Pathway: Science, Technology, Engineering, & Math (STEM)

Program Entrance Requirements: HS Diploma or GED

Additional Program Information: Students who already hold the following industry certifications may be eligible to receive credit through prior learning assessment. Students are strongly encouraged to see an advisor for more information.
- Cisco Certified Network Associate (CCNA)
- Cisco Certified Network Associate Security (CCNA Security)
- CompTIA Security+
- CompTIA A+
- CompTIA Network+

Related Industry Certifications: Upon completing this program, students will be eligible to sit for the following industry certifications/licenses:
- CompTIA Network+
- CompTIA Security+
- Cisco CCNA

Location(s): The majority of the courses are offered at all BC locations, including online. However, some courses may only be offered at the A. Hugh Adams Central Campus, the North Campus, and online. Please consult the course schedule for specific semester locations.

Contact information: Program contact information can be found at http://www.broward.edu/academics/programs/computer/Pages/default.aspx

Related Programs:
Computer and Network Security Associate of Science (2506)

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGS1060C Computer and Internet Literacy*</td>
<td>3</td>
</tr>
<tr>
<td>CET2486C Networking Technology</td>
<td>3</td>
</tr>
<tr>
<td>CET2742C Advanced Networking Technology**</td>
<td>3</td>
</tr>
<tr>
<td>CTS2120C Security+</td>
<td>3</td>
</tr>
<tr>
<td>CGS1540C Database Management</td>
<td>3</td>
</tr>
<tr>
<td>CGS1557C Internet Site Design</td>
<td>3</td>
</tr>
<tr>
<td>CTS2651C Router Technology</td>
<td>3</td>
</tr>
<tr>
<td>CTS2652C Advanced Router Technology</td>
<td>3</td>
</tr>
<tr>
<td>CTS2314C Network Defense and Countermeasures</td>
<td>3</td>
</tr>
<tr>
<td>CIS2352C Ethical Hacking I</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Program Credit Hours 30

Notes: Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.
*Student may have to take CGS1060C if they are unable to successfully pass the computer competency test. If the student does not need to take CGS1060C, the student must take a Computer Science elective - any 1000 or 2000-level course with a CIS, COP, CET, CGS, or CTS prefix
**Students transferring in CTS1134C, may take a Computer Science Elective (see above) in place of CET2742C.
Students are strongly encouraged to meet with an advisor to create an educational plan.
Florida Education and Training Placement Information Program (FETPIP) Data

Science, Technology, Engineering and Mathematics (STEM)

<table>
<thead>
<tr>
<th>Program Title</th>
<th>Award Type</th>
<th>Program Code</th>
<th>CIP Code</th>
<th>2009-10 FETPIP Current Placement Rate</th>
<th>2010-11 FETPIP Current Placement Rate</th>
<th>2011-12 FETPIP Current Placement Rate</th>
<th>2012-13 FETPIP Current Placement Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Science Technology</td>
<td>AS</td>
<td>2182</td>
<td>1703010401</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Computer Programming &amp; Analysis</td>
<td>AS</td>
<td>2195</td>
<td>1511020100</td>
<td>80%</td>
<td>80%</td>
<td>100%</td>
<td>82%</td>
</tr>
<tr>
<td>Help Desk Specialist</td>
<td>TC</td>
<td>62822</td>
<td>0511010311</td>
<td>100%</td>
<td>67%</td>
<td>**</td>
<td>**</td>
</tr>
</tbody>
</table>
Social Behavioral Sciences & Human Services

Are you interested in making an impact on your community? Do you enjoy fitness, sports, recreation and interaction with those around you? Do you like working with people? Learn how Broward College can take your passion to impact people’s live to the next level through the programs we offer. Sign up for classes today and get on track to achieve your goals.

Articulation Agreements
Broward College has numerous articulation agreements with our local high schools and Technical Colleges. Students may be able to earn college credit for select programs completed at the secondary and postsecondary level. The programs listed below with an asterisk (*) have a current articulation agreement. For more information about articulation agreements, please contact the Career and Technical Education office at 954-201-7830. You can also find information online at www.broward.edu/careerpath

<table>
<thead>
<tr>
<th>Program Code</th>
<th>Program Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>1010</td>
<td>Associate of Arts</td>
</tr>
<tr>
<td>2191</td>
<td>Sports, Fitness and Recreation Management</td>
</tr>
</tbody>
</table>

Median Earnings (for Broward County)

- Marriage and Family Therapist - $23.67/hr
- Mental Health Counselor - $17.52/hr
- Social Worker - $21.08/hr
Associate of Arts
Program Code 1010

Program Description: The Associate of Arts (AA) degree is the traditional transfer degree. Students who earn the AA are able to remain at Broward College, transfer to another state college, or a state university in order to continue their education and pursue a baccalaureate degree.

Career Pathway: Social Behavioral Science & Human Services

Program Entrance Requirements: HS Diploma or GED

Additional Program Information: The Associate of Arts degree includes 36 credit hours of General Education and an additional 24 credit hours of electives. The elective credit hours should be selected based on the student’s transfer major. Students are encouraged to review the state’s Common Course Prerequisite Manual (www.flvc.org/partner-portal/common-prerequisite-manual) for additional guidance.

Location(s): Courses are offered at all college locations, including online. Please consult the course schedule for specific semester locations.

Bachelor Degree Majors Include:

<table>
<thead>
<tr>
<th>at Broward College</th>
<th>at a Transfer Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exceptional Student Education</td>
<td>African American Studies</td>
</tr>
<tr>
<td>Middle Grades General Science Education</td>
<td>Anthropology</td>
</tr>
<tr>
<td>Secondary Biology Education</td>
<td>Geography</td>
</tr>
<tr>
<td>Middle Grades Mathematics Education</td>
<td>History</td>
</tr>
<tr>
<td>Secondary Mathematics Education</td>
<td>International Relations</td>
</tr>
<tr>
<td>Environmental Science - Biosecurity</td>
<td>Latin American Studies</td>
</tr>
<tr>
<td>Environmental Science - Physical Science</td>
<td>Political Science</td>
</tr>
<tr>
<td>Supervision &amp; Management</td>
<td>Psychology</td>
</tr>
<tr>
<td>Technology Management</td>
<td>Social Work</td>
</tr>
<tr>
<td>Information Technology</td>
<td>Sociology</td>
</tr>
<tr>
<td>Supply Chain Management</td>
<td>Women’s Studies</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Recommended First Semester Courses

<table>
<thead>
<tr>
<th>Exempt Students</th>
<th>Non-Exempt Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC1101 Composition I</td>
<td>ENC XXXX*</td>
</tr>
<tr>
<td>STA XXXX*</td>
<td>STA XXXX*</td>
</tr>
<tr>
<td>SPC1608 Introduction to Public Speaking or SPC1024 Introduction to Speech</td>
<td>SPC1608 Introduction to Public Speaking or SPC1024 Introduction to Speech</td>
</tr>
<tr>
<td>SPC1608 Introduction to Public Speaking or SPC1024 Introduction to Speech</td>
<td>Communications or Communications</td>
</tr>
<tr>
<td>SPC1608 Introduction to Public Speaking or SPC1024 Introduction to Speech</td>
<td>SPC1024 Introduction to Speech</td>
</tr>
<tr>
<td>SPC1608 Introduction to Public Speaking or SPC1024 Introduction to Speech</td>
<td>SPC1608 Introduction to Public Speaking or SPC1024 Introduction to Speech</td>
</tr>
<tr>
<td>PSY2012 General Psychology</td>
<td>PSY2012 General Psychology</td>
</tr>
<tr>
<td>ARH2000 Art Appreciation or ARH2000 Art Appreciation or ARH2000 Art Appreciation</td>
<td>ARH2000 Art Appreciation or ARH2000 Art Appreciation</td>
</tr>
<tr>
<td>DAN2100 Dance Appreciation or DAN2100 Dance Appreciation or DAN2100 Dance Appreciation</td>
<td>DAN2100 Dance Appreciation or DAN2100 Dance Appreciation</td>
</tr>
<tr>
<td>MUL2010 Music Appreciation or MUL2010 Music Appreciation or MUL2010 Music Appreciation</td>
<td>MUL2010 Music Appreciation or MUL2010 Music Appreciation</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*The specific English and Math course will depend on the student’s test score.
- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

If the student attends part-time (less than 12 credits), it is highly recommended that the student complete English and Math in the first term.
Students are strongly encouraged to meet with an advisor to create an educational plan.
Associate of Science in Sports, Fitness and Recreation Management  
Program Code 2191

**Program Description:** The Associate of Science degree in Sports, Fitness and Recreation Management Program is designed for individuals seeking employment or advancements in the recreation field.

**Career Pathway:** Social Behavioral Science and Human Services

**Program Entrance Requirements:** HS Diploma or GED

**Additional Program Information:** N/A

**Location(s):** General Education courses can be taken at any college location. The program is based and fully taught at Central Campus. Please consult the course schedule for specific semester offerings.

**Contact information:** Program contact information can be found at [http://www.broward.edu/academics/programs/Pages/business.aspx](http://www.broward.edu/academics/programs/Pages/business.aspx)

**Related Programs to Broward College:**
Business Management Technical Certificate (62671)

<table>
<thead>
<tr>
<th>General Education Credit Hours</th>
<th>18</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC1101 Composition I</td>
<td>3</td>
</tr>
<tr>
<td>EVR1001 Environmental Science</td>
<td>3</td>
</tr>
<tr>
<td>SYG2000 Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>Humanities</td>
<td>3</td>
</tr>
<tr>
<td>Speech Communications</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Core Requirements Credit Hours</th>
<th>42</th>
</tr>
</thead>
<tbody>
<tr>
<td>LEI1000 Introduction to Recreation</td>
<td>3</td>
</tr>
<tr>
<td>HSC100 First Aid</td>
<td>3</td>
</tr>
<tr>
<td>PET1303 Foundations of Exercise Science</td>
<td>3</td>
</tr>
<tr>
<td>HSC2100 Personal and Community Health</td>
<td>3</td>
</tr>
<tr>
<td>HLP1081 Total Wellness</td>
<td>2</td>
</tr>
<tr>
<td>LEI1700 Recreation for Special Groups</td>
<td>3</td>
</tr>
<tr>
<td>PET2622 Care/Prevention/Athletic Injuries</td>
<td>2</td>
</tr>
<tr>
<td>MNA2345 Principles of Supervision</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Courses</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LEI2401 Sports, Fitness and Recreation Management</td>
<td>3</td>
</tr>
<tr>
<td>LEI1260 Introduction to Fitness and Outdoor Recreation</td>
<td>3</td>
</tr>
<tr>
<td>LEI2731C Sports, Fitness and Recreation Therapy</td>
<td>2</td>
</tr>
<tr>
<td>HFT1050 Introduction to Tourism Industries</td>
<td>3</td>
</tr>
<tr>
<td>LEI2861 Sports, Fitness, Recreation/Technology and Equipment</td>
<td>3</td>
</tr>
<tr>
<td>HLP2949 Co-op Work Experience in a Sport Management field</td>
<td>3</td>
</tr>
<tr>
<td>HFT2600* Hospitality Law</td>
<td>3</td>
</tr>
<tr>
<td>MAT1033* Intermediate Algebra OR</td>
<td>3</td>
</tr>
<tr>
<td>STA1001* Pathway to Statistics</td>
<td>3</td>
</tr>
</tbody>
</table>

| Total Program Credit Hours | 60 |

Broward College  442  College Catalog 2015-2016
### Recommended Course Sequencing

#### First Year Term I

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC1101</td>
<td>Composition I*</td>
<td>3</td>
</tr>
<tr>
<td>HFT2600*</td>
<td>Hospitality Law OR</td>
<td></td>
</tr>
<tr>
<td>MAT1033*</td>
<td>Intermediate Algebra OR</td>
<td></td>
</tr>
<tr>
<td>STA1001*</td>
<td>Pathway to Statistics</td>
<td>3</td>
</tr>
<tr>
<td>LEI1000</td>
<td>Introduction to Recreation</td>
<td>3</td>
</tr>
<tr>
<td>HSC2400</td>
<td>First Aid</td>
<td>3</td>
</tr>
<tr>
<td>PET1303</td>
<td>Foundations of Exercise Science</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Term Credit Hours** 15

#### First Year Term II

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SYG2000</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>HSC2100</td>
<td>Personal and Community Health</td>
<td>3</td>
</tr>
<tr>
<td>HLP1081</td>
<td>Total Wellness</td>
<td>2</td>
</tr>
<tr>
<td>LEI1700</td>
<td>Recreation for Special Groups</td>
<td>3</td>
</tr>
<tr>
<td>PET2622</td>
<td>Care/Prevention/Athletic Injuries</td>
<td>2</td>
</tr>
</tbody>
</table>

**Total Term Credit Hours** 13

#### First Year Term III

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EVR1001</td>
<td>Environmental Science</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Term Credit Hours** 3

#### Second Year Term I

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPC1024</td>
<td>Intro to Speech Communications or</td>
<td></td>
</tr>
<tr>
<td>SPC1608</td>
<td>Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>MNA2345</td>
<td>Principles of Supervision</td>
<td>3</td>
</tr>
<tr>
<td>LEI2401</td>
<td>Sports, Fitness and Recreation Management</td>
<td>3</td>
</tr>
<tr>
<td>LEI1260</td>
<td>Introduction to Fitness and Outdoor Recreation</td>
<td>3</td>
</tr>
<tr>
<td>LEI2731C</td>
<td>Sports, Fitness and Recreation Therapy</td>
<td>2</td>
</tr>
</tbody>
</table>

**Total Term Credit Hours** 14

#### Second Year Term II

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE Course</td>
<td>General Education Humanities</td>
<td>3</td>
</tr>
<tr>
<td>HFT1050</td>
<td>Introduction to Tourism Industries</td>
<td>3</td>
</tr>
<tr>
<td>LEI2861</td>
<td>Sports, Fitness, Recreation/Technology and Equipment</td>
<td>3</td>
</tr>
<tr>
<td>HLP2949</td>
<td>Co-op Work Experience in a Sport Management field</td>
<td>3</td>
</tr>
<tr>
<td>GE Course</td>
<td>General Education Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>(MGF1106, MGF1107 or STA2023)</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Term Credit Hours** 15

**Total Program Credit Hours** 60

---

**Notes:**

*Student may have to take MAT1033 or STA1001 based on placement score. If the student does not need MAT1033 or STA1001, the student must take HFT2600.

- Many courses have specific pre-requisite and co-requisite requirements that must be followed. Students are encouraged to consult the Course Information Table for a detailed list of all requisite requirements.

Students are strongly encouraged to meet with an advisor to create an educational plan.
Courses in this catalog are identified by prefixes and numbers that were assigned by Florida’s Statewide Course Numbering System (SCNS). This numbering system is used by all public postsecondary institutions in Florida and by participating nonpublic institutions. The major purpose of this system is to facilitate the transfer of courses between participating institutions. Students and administrators can use the online SCNS to obtain course descriptions and specific information about course transfer between participating Florida institutions. This information is at the SCNS website at http://scns.fldoe.org.

Each participating institution controls the title, credit, and content of its own courses and recommends the first digit of the course number to indicate the level at which students normally take the course. Course prefixes and the last three digits of the course numbers are assigned by members of faculty discipline committees appointed for that purpose by the Florida Department of Education in Tallahassee. Individuals nominated to serve on these committees are selected to maintain a representative balance as to type of institution and discipline field or specialization.

The course prefix and each digit in the course number have a meaning in the SCNS. The listing of prefixes and associated courses is referred to as the “SCNS taxonomy.” Descriptions of the content of courses are referred to as “statewide course profiles.”

**Example of Course Identifier**

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Level Code</th>
<th>Century Digit</th>
<th>Decade Digit</th>
<th>Unit Digit</th>
<th>Lab Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENC</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>No laboratory component in this course</td>
</tr>
<tr>
<td>English Composition</td>
<td>Lower (Freshman) Level at this institution</td>
<td>Freshman Composition</td>
<td>Freshman Composition Skills</td>
<td>Freshman Composition Skills I</td>
<td></td>
</tr>
</tbody>
</table>

**General Rule for Course Equivalencies**

Equivalent courses at different institutions are identified by the same prefixes and same last three digits of the course number and are guaranteed to be transferable between participating institutions that offer the course, with a few exceptions, as listed below in *Exceptions to the General Rule for Equivalency*.

For example, a freshman composition skills course is offered by 84 different public and nonpublic postsecondary institutions. Each institution uses “ENC_101” to identify its freshman composition skills course. The level code is the first digit and represents the year in which students normally take the course at a specific institution. In the SCNS taxonomy, “ENC” means “English Composition,” the century digit “1” represents “Freshman Composition,” the decade digit “0” represents “Freshman Composition Skills,” and the unit digit “1” represents “Freshman Composition Skills I.”
In the sciences and certain other areas, a “C” or “L” after the course number is known as a lab indicator. The “C” represents a combined lecture and laboratory course that meets in the same place at the same time. The “L” represents a laboratory course or the laboratory part of a course that has the same prefix and course number but meets at a different time or place.

Transfer of any successfully completed course from one participating institution to another is guaranteed in cases where the course to be transferred is equivalent to one offered by the receiving institution. Equivalencies are established by the same prefix and last three digits and comparable faculty credentials at both institutions. For example, ENC 1101 is offered at a community college. The same course is offered at a state university as ENC 2101. A student who has successfully completed ENC 1101 at a Florida College System institution is guaranteed to receive transfer credit for ENC 2101 at the state university if the student transfers. The student cannot be required to take ENC 2101 again since ENC 1101 is equivalent to ENC 2101.

Transfer credit must be awarded for successfully completed equivalent courses and used by the receiving institution to determine satisfaction of requirements by transfer students on the same basis as credit awarded to the native students. It is the prerogative of the receiving institution, however, to offer transfer credit for courses successfully completed that have not been designated as equivalent. NOTE: Credit generated at institutions on the quarter-term system may not transfer the equivalent number of credits to institutions on the semester-term system. For example, 4.0 quarter hours often transfers as 2.67 semester hours.

**The Course Prefix**

The course prefix is a three-letter designator for a major division of an academic discipline, subject matter area, or subcategory of knowledge. The prefix is not intended to identify the department in which a course is offered. Rather, the content of a course determines the assigned prefix to identify the course.

**Authority for Acceptance of Equivalent Courses**

Section 1007.24(7), Florida Statutes, states:

Any student who transfers among postsecondary institutions that are fully accredited by a regional or national accrediting agency recognized by the United States Department of Education and that participate in the statewide course numbering system shall be awarded credit by the receiving institution for courses satisfactorily completed by the student at the previous institutions. Credit shall be awarded if the courses are judged by the appropriate statewide course numbering system faculty committees representing school districts, public postsecondary educational institutions, and participating nonpublic postsecondary educational institutions to be academically equivalent to courses offered at the receiving institution, including equivalency of faculty credentials, regardless of the public or nonpublic control of the previous institution. The Department of Education shall ensure that credits to be accepted by a receiving institution are generated in courses for which the faculty possess credentials that are comparable to those required by the accrediting association of the receiving institution. The award of credit may be
limited to courses that are entered in the statewide course numbering system. Credits awarded pursuant to this subsection shall satisfy institutional requirements on the same basis as credits awarded to native students.

Exceptions to the General Rule for Equivalency

Since the initial implementation of the SCNS, specific disciplines or types of courses have been excepted from the guarantee of transfer for equivalent courses. These include courses that must be evaluated individually or courses in which the student must be evaluated for mastery of skill and technique. The following courses are exceptions to the general rule for course equivalencies and may not transfer. Transferability is at the discretion of the receiving institution.

A. Courses not offered by the receiving institution.
B. For courses at non-regionally accredited institutions, courses offered prior to the established transfer date of the course in question.
C. Courses in the _900-999 series are not automatically transferable, and must be evaluated individually. These include such courses as Special Topics, Internships, Apprenticeships, Practica, Study Abroad, Theses, and Dissertations.
D. Applied academics for adult education courses.
E. Graduate courses.
F. Internships, apprenticeships, practica, clinical experiences, and study abroad courses with numbers other than those ranging from 900-999.
G. Applied courses in the performing arts (Art, Dance, Interior Design, Music, and Theatre) and skills courses in Criminal Justice (academy certificate courses) are not guaranteed as transferable. These courses need evidence of achievement (e.g., portfolio, audition, interview, etc.).

Courses at Nonregionally Accredited Institutions

The SCNS makes available on its home page (http://scns.fldoe.org) a report entitled “Courses at Nonregionally Accredited Institutions” that contains a comprehensive listing of all nonpublic institution courses in the SCNS inventory, as well as each course’s transfer level and transfer effective date. This report is updated monthly.

Questions about the SCNS and appeals regarding course credit transfer decisions should be directed to Broward College’s Office of Curriculum Services at 954-201-7519 or to the Florida Department of Education, Office of Articulation, 1401 Turlington Building, Tallahassee, Florida 32399-0400. Special reports and technical information may be requested by calling the SCNS office at (850) 245-0427 or at http://scns.fldoe.org.
ACG1003 Accounting Survey
Credit Hours: 3
Instruction in standard bookkeeping procedures for small professional, service, and retail sole proprietorships. Attention is given to journalizing, posting, preparing the trial balance and financial statements. Procedures for handling petty cash, bank deposits and withdrawals, payroll business tax reports, and special journals are included. This course is primarily for the non-accounting major.

ACG2001 Principles of Accounting I
Credit Hours: 3
This course provides an introductory study of the fundamental principles of recording, summarizing and reporting the financial activities of proprietorships.

ACG2011 Principles of Accounting II
Credit Hours: 3
As the second course of the financial accounting series, this course concludes the study of financial accounting. Topics covered include plant assets, current liabilities, payroll, corporations, partnerships, and cash flow statements.

ACG2071 Managerial Accounting
Credit Hours: 3
As the last course of the series, this course concludes the study of manufacturing accounting and managerial accounting. Topics covered include financial statement analysis, job order costing, the process cost system, cost behavior, cost-volume-profit analysis, budgeting, profit analysis, responsibility accounting, differential analysis, capital investment analysis and decision-making under uncertainty.

ACG2100 Intermediate Accounting I
Credit Hours: 3
This course provides a systematic and in-depth study of the financial statements and underlying records. Special attention is given to the elements composing working capital, investments, and plants assets.

ACG2110 Intermediate Accounting II
Credit Hours: 3
As the second course of the series, this course continues an in-depth study of financial statements and underlying records. The elements that comprise the equity side of the balance sheet are emphasized with additional attention given to special problems in income determination and financial reporting.

ACG2450C Computerized Accounting Applications
Credit Hours: 3
This course is designed to teach the students how to accomplish common accounting functions with basic accounting software in order to set up, maintain, and establish defaults for chart of accounts, vendors, customers, inventory items, jobs, and employees.

AER1070C Dealer Policy & Procedures
Credit Hours: 2
Course designed to expose the student to back office operations, policy, procedures, and protocol.

AER1081C Introduction to Automotive Technology
Credit Hours: 4
A course designed to introduce the field of Automotive Service. Topics include auto service careers, shop safety, fuels, lubricants, fasteners, tools and equipment. An introduction to the major automobile systems and instruction in minor service procedures are provided.

AER1082C Intro to GM Automotive Technology
Credit Hours: 4
This course is designed to introduce the student to the various gm systems of the automobile. It will include instruction in shop practices, safety, service manuals, pay structures, tools, warranties, and personal relationships necessary to succeed in the GM dealership. The student will learn minor repair procedures including lubrication, wheel and tire, exhaust system service and new car pre-delivery service.

AER1197C GM Automotive Engine Repair
Credit Hours: 4
This course is a study of the principles of operation and problem diagnoses of the internal combustion engine. The theory of operation of the various engines is presented. Engines will be properly disassembled, parts identified, inspected, measured, and reassembled. Proper testing and break-in procedures along with approved diagnostic troubleshooting procedures will be emphasized.

AER1198C Automotive Engine Repair
Credit Hours: 4
A course designed to teach the principles and procedures necessary to completely rebuild an automotive engine and to provide the practical experience in the engine diagnosis, removal, disassembly, rebuilding, and dynamic check out. Topics include engine diagnosis; engine removal; engine disassembly; engine rebuilding; piston, pin
and rod service; engine assembly; engine installation; valve adjustment; tune ups; and road test procedures. Special emphasis will be given to safety procedures and the specific tools, fasteners, and equipment to be used.

AER1396C GM Manual Drive Train & Axles
Credit Hours: 4
A course designed to teach the principles and operations of manual transmissions and transaxles, clutches, overdrive units, pressure plates, propeller shafts, differentials, and drive axles and to provide practical experience in diagnosing, removing, maintaining, and repairing transmissions and drive systems. Topics include manual transmissions, overdrive systems, drive lines, differentials, and axles. Applications include front wheel drive, rear wheel drive, 4-wheel drive and all-wheel drive. Special emphasis will be given to safety procedures, and the specific tools and instruments to be used.

AER1496C GM Steering & Suspension Systems
Credit Hours: 4
The student will develop the knowledge and skills related to the operation and function of GM steering and suspension systems alignment, testing, diagnosis and repair of modern GM vehicle systems will be emphasized. GM courses related to steering and suspension systems will be included in the curriculum. These are subject to change as new courses replace outdated and obsolete courses. Special emphasis will be given to safety procedures and the specific tools and instruments to be used.

AER1594C GM Brake Systems & Chassis Repair
Credit Hours: 4
This course is a study of the theory and operation of GM brake systems. Students will learn all aspects of the diagnosis, repair and testing of GM brake systems including drum and disc brakes and power brake operation and repair. GM courses related to brake systems will be included in the curriculum. These are subject to change as new courses replace outdated and obsolete courses. Special emphasis will be given to safety procedures, and specific tools, and equipment to be used.

AER1690C GM Electrical Systems
Credit Hours: 4
A course designed to teach the principles and operations of the basic electrical systems found in automotive equipment and to provide practical experience in the service and repair of or adjustment to these systems. Topics include batteries, starters, alternators, regulators, ignition systems, chassis electrical circuits, and electrical accessory circuits. Special emphasis will be given to safety procedures and the specific tools and equipment to be used.

AER1694C GM Electronics
Credit Hours: 4
This course will continue the study of automotive electricity and electronics. Beginning with a review of semiconductor diodes and transistors, and continuing on through digital devices and microprocessors as applied to automotive systems. Emphasis will be placed on theory of operation, testing, and troubleshooting of microprocessor controls and systems.

AER1695C Electronics
Credit Hours: 4
A course designed to teach the fundamental principles of electronics and to introduce the application of electronics in the modern automobile.

AER1698C Electrical Systems
Credit Hours: 4
A course designed to teach the principles and operations of the basic electrical systems found in automotive equipment and to provide practical experience in the service and repair of or adjustment to these systems. Topics include batteries, starters, alternators, regulators, ignition systems, chassis electrical circuits, and electrical accessory circuits. Special emphasis will be given to safety procedures and the specific tools and equipment to be used.

AER2070C Automotive Service Consultant
Credit Hours: 3
This course will study the principles and procedures involved in operation of an automotive service facility as a service consultant. Communication both in terms of customer relations and internal relations with service facility is discussed. In addition, computerized databases, written communication with respect to estimates, repair orders, and invoices is covered as well as communication with customers by telephone. Service/Maintenance intervals, warranty, service contracts, service bulletins, and campaign recalls relative to the vehicle identified is explained. Sales skills relative to service needs and shop operations relative to efficient workflow and industry procedures are presented. This course is intended for individuals
that have either completed an Automotive Program at an accredited college or are working as a technician in a dealership. Approval by the Associate Dean of Automotive Technology is required.

AER2291C GM Automatic Transmissions & Transaxles
Credit Hours: 4
A course designed to teach the principles and operations of automatic transmissions and transaxles, and to provide practical experience in diagnosing, removing, maintaining, and repairing automatic transmissions and transaxles. Applications include front wheel drive, rear wheel drive, 4-wheel drive and all-wheel drive. Special emphasis will be given to safety procedures, and the specific tools and instruments to be used.

AER2298C Automatic Transmissions & Transaxles
Credit Hours: 4
A course designed to teach the principles, operations, diagnosis and repair of automatic transmissions and transaxles. Special emphasis will be given to safety procedures and the specific tools and instruments used.

AER2398C Manual Drive Train & Axles
Credit Hours: 4
A course designed to teach the principles, operations, diagnosis and repair of manual transmissions and transaxles, drive shafts, axles, clutches and four-wheel drive systems. Special emphasis will be given to safety and the specific tools and instruments to be used.

AER2498C Steering & Suspension Systems
Credit Hours: 4
A course designed to teach the principles of steering systems, suspension systems, and wheel alignment and to provide practical experience in repairing automobile suspension and steering systems, aligning front ends and balancing tires. Topics include wheel balancing, suspension systems, suspension angle and lines, wheel alignment, standard steering gears, power steering systems and frames. Special emphasis will be given to safety procedures, and the specific tools and instruments to be used.

AER2598C Brake Systems & Chassis Repair
Credit Hours: 4
A course to teach the principles and operations of brake systems including disc systems, split systems, hydraulic cylinders, valving systems, traction control systems, and to provide practical experience in the repair of these systems. Topics include basic brake theory, drum brake systems, split systems, disc brake systems, hydraulic cylinders, machining and measuring techniques, power boosters, and road tests procedures. Special emphasis will be given to safety procedures and specific tools and equipment to be used.

AER2758C Heating & Air Conditioning Theory
Credit Hours: 4
A course designed to teach the principles and operations of automotive heating systems, air conditioning systems and accessories, to provide practical experience in testing, analyzing, installing and repairing heating systems, air conditioning systems, air conditioning tools and equipment, lines, fittings, and valves, operational checks and adjustment, minor repairs, and the special tools and instruments to be used.

AER2798C GM Heating & Air Conditioning Theory
Credit Hours: 4
A course designed to teach the principles and operations of automotive heating systems, air conditioning systems and accessories, to provide practical experience in testing, analyzing, installing and repairing heating systems, air conditioning systems, air conditioning tools and equipment, lines, fittings, and valves, operational checks and adjustment, minor repairs, and the special tools and instruments to be used.

AER2895C Advanced Engine Performance
Credit Hours: 4
A course designed to teach the latest in computer engine controls, electronic fuel injection systems, emission controls and electronic instrumentation systems. This course includes theory of operation and construction, troubleshooting and repair.

AER2896C GM Engine Performance
Credit Hours: 4
This course is designed to teach entry level skills in intake and exhaust systems, fuel systems, carburetors, and emission control systems. In addition, GM specific instruction based on GM-STG course number 16009.10 fuel injection diagnoses, and GM-STG course number 16030.02 on board diagnostics generation II will be covered.

AER2898C Engine Performance
Credit Hours: 4
A course designed to teach the principles and procedures of engine tune up and repair, and emission control systems.
AER2899C GM Advanced Engine Performance
Credit Hours: 4
This course is designed to teach job entry skills in the
diagnosis and repair of drivability problems. Topics
covered include engine performance and electrical and
computer system operations. Emphasis is placed on
manufacturer's diagnostic charts and diagnostic
equipment. Use of scanners on both carburetor and fuel
injected vehicles will be addressed. In addition, GM-
ASEP students will receive GM specific instruction
based on GM-STG course number 16003.01 engine
performance.

AER2949 Co Op Work Experience
Credit Hours: 3
On the job training at an automobile dealership. Each
of the eight week apprentice work experiences will
cover one term and includes a work week from 32 to 40
hours in a supervised program at the dealership.

AER2951 GM Internship I
Credit Hours: 3
This course is a companion to electrical systems I, and
air conditioning and heating. In order to meet the state
of Florida, N.A.T.E.F. and general motors ASEP
standards, interns must complete 100 hours on-the-job
learning experience in electrical systems and 100 hours
on-the-job learning experience in heating and a/c related
repair. While working under the mentorship of an
experienced technician, students must document the
required hours and master the student performance
standards.

AER2952 GM Internship II
Credit Hours: 3
This course is a companion to steering and suspension
and brake systems. In order to meet the state of Florida,
N.A.T.E.F., and general motors ASEP standards, interns must complete 100 hours on-the-job learning experience in steering and suspension repairs, and 100 hours on-the-job learning experience in brake systems related repair. While working under the mentorship of an experienced technician, students must document the required hours and master the student performance standards.

AER2953 GM Internship III
Credit Hours: 3
This course is a companion to automotive electrical and
electronics and advanced engine performance. In order
to meet the state of Florida, N.A.T.E.F., and general
motors ASEP standards interns must complete 100 hours on-the-job learning experience in electrical repairs, number 14.0-14.47 and 100 hours on-the-job learning experience in advanced engine performance related repair, task number 16.00-16.43. While working under the mentorship of an experienced technician, students must document the required hours and master the students' performance standards.

AER2954 GM Internship IV
Credit Hours: 3
This course is a companion to engines transmissions in
order to meet the state of Florida, N.A.T.E.F., and
general motors ASEP standard interns must complete
100 hours on-the-job learning experience in engine
repairs, number 09.0-09.61 and 100 hours on-the-job
learning experience transmissions related repairs. While
working under the mentorship of an experienced
technician, students must document the required hours and master student performance standards.

AFR1101 First Year Air Force ROTC. (A)
Credit Hours: 1
This is a survey course designed to introduce students to
the U.S. Air Force Reserve Officer Training Corps. Featured topics include: officership and
professionalism, military customs and courtesies, Air
Force officer opportunities and an introduction to
communication skills. A leadership laboratory includes
and provides cadets with leader/follower experiences.
Instruction is at the University of Miami campus
(PH:305-284-2870)

AFR1111 First Year Air Force ROTC (B)
Credit Hours: 1
Continuation of the AFR1101
survey course designed to introduce students to the U.S.
Air Force Reserve Officer Training Corps. Featured
topics include: Origins of the Air Force, The Air Force
Installation and Sister Services. A leadership laboratory
is included and provides cadets with leader/follower
experiences. Instruction is at the University of Miami
campus (PH:305-284-2870).

AFR2130 Second Year Air Force ROTC (A)
Credit Hours: 1
This course examines general historical aspects of air
and space power. The course covers the time period
from the first balloons and dirigibles to the space age. Examples are provided to demonstrate the historical
events leading to the modern day Air Force. An
additional focus will be on Air Force core values. Past Air Force operations and the acts of historical Air Force leaders will be points of discussion. A leadership laboratory is included and provides cadets with leader/follower experiences. Instruction is at the University of Miami campus (PH:305-284-2870).

AFR2131 Second Year Air Force ROTC (B)  
Credit Hours: 1  
This course continues the historical review of air and space power provided in MIS 2362. The course covers the Vietnam era to the conflicts of today. Historical examples are provided to demonstrate the development of Air Force capabilities and missions. This course provides the student with an understanding of the employment of air and space power. In addition, students will study how to become a more effective communicator. A leadership laboratory is included and provides cadets with leader/follower experiences. Instruction is at the University of Miami campus (PH:305-284-2870).

ALS4161 Consequences of Biological Invasion  
Credit Hours: 3  
Study of U.S. policies and programs affecting agricultural biosecurity, attention is devoted to current agricultural and extension and regulatory programs. Emphasis is on policies and procedures in detecting and reporting non-indigenous species. Students will develop the analytical capabilities to assess the consequences of agricultural biosecurity threats.

ALS4163 Challenges in Plant Resource Protection  
Credit Hours: 3  
This course will provide students with applied training in the regulatory aspects of plant protection, using real-world case studies, scenarios and issues.

AMH2010 History of the United States to 1877  
Credit Hours: 3  
This course is a survey of American history from pre-Columbus to 1877 that provides a general history of the political, economic, cultural, and social development of American society. Special emphasis is placed upon the colonial period, the American Revolution, the rise of American Nationalism, the antebellum U.S., the U.S. Civil War, and the Reconstruction period. Students will also study the introductory concepts of history reading, writing, and methods.

AMH2020 History of the United States Since 1877  
Credit Hours: 3  
This survey course of American history since 1877 provides students with a general history of the political, economic, cultural, and social development of American society. Special emphasis is placed upon U.S. expansion, progressivism, foreign relations, social movements, and political developments at the turn of the twentieth century and beyond. Students will also study the introductory concepts of history reading, writing, and methods.

AMH2035 United States History: 1945 to the Present  
Credit Hours: 3  
This survey course of the United States since 1945 provides students with a general history of the political, economic, cultural, social, military, and diplomatic development of American society. Special emphasis is placed upon the end of World War II, the politics of the Cold War at home and abroad, the social movements of the postwar era, the changing U.S. economy since 1945, and the post-Cold War domestic and international challenges faced by the nation. Students will also study the introductory concepts of history reading, writing, and methods.

AMH2091 Survey of African American History  
Credit Hours: 3  
This a survey course of African American History including the history of ancient and medieval Africa, the emergence and evolution of the Atlantic Slave Trade, and the African American experience in the Western Hemisphere from the sixteenth century to the twenty-first century. Emphasis will be placed on the African American's economic, political, and cultural development and their contributions to American society.

AML2010 American Literature: Colonial to 1900  
Credit Hours: 3  
Students will be introduced to works which represent the diverse literature emerging from America up till 1900. Works may be selected from authors such as Anne Bradstreet, James Fenimore Cooper, Kate Chopin, Emily Dickinson, Frederick Douglass, Ralph Waldo Emerson, Nathaniel Hawthorne, Harriet Jacobs, Thomas Jefferson, Sarah Orne Jewett, Herman Melville, Edgar Allan Poe, Mary Rowlandson, Nat Turner, Mark Twain, and Walt Whitman.

AML2020 American Literature  
Credit Hours: 3  
Students will be introduced to works which represent the diverse literature emerging from America since
1900. Texts may be selected from major authors such as Hemingway, Faulkner, Frost, Hughes, Millay, Plath, Ellison, Baldwin, Oates, Angelou, and Roth. Upon successful completion of the course students will understand the significant concepts, contexts, movements, figures, and works of American literature in the 20th and 21st century.

AML2600 African American Literature
Credit Hours: 3
Students will be introduced to works that represent diverse African American literature since 1746. Texts may be selected from major authors such as Angelou, Douglass, Hughes, Hurston, King, and Truth. Upon successful completion of the course, students will understand the significant concepts, contexts, movements, figures, and works of African American literature since 1746.

AML2631 US Hispanic/Latino Literature
Credit Hours: 3
A broad survey of US Hispanic/Latino Literature covering works from the New World Encounter to present era. Students will analyze texts that may be selected from authors such as Alvar Nunez Cabeza De Vaca, Hernando De Soto, Jose Marti, William Carlos Williams, Santiago Baca, Tato Laviera, Sandra Cisneros, Rudolfo Anaya, Gloria Anzaldua, Reinaldo Arenas, Junot Diaz, Jennine Capo Crucet, among others.

AMT0010C Aircraft Drawings
Clock Hours: 21.00
This course covers aircraft drawings, care and use of blueprints, isometrics, orthographic and auxiliary projection lines and section, dimensions, limits, tolerances and allowances, geometric, construction, practical layout work and identification of standard parts and material, use of instruments, drawing and interpretation of free hand sketches of repairs and alterations, and use of various types of charts and graphs.

AMT0020C Weight & Balance
Clock Hours: 32.50
Familiarizes the student with the importance of weight and balance control, the procedures for weighing an aircraft, the computations necessary to arrive at current and balance data, and the disposition of weight and balance forms and records. The use of loading graphs and charts relating to the aircraft's center of gravity envelope is taught. Student fee charged.

AMT0030C Fluid Lines & Fittings
Clock Hours: 26.25
Prepares the student to fabricate and install rigid and flexible lines and fittings with regard to bends, tools, and lubricants. Provides training in the area of identification of materials, fittings and routing of fluid lines.

AMT0040C Materials & Processes
Clock Hours: 84.00
Familiarizes students with the methods used to identify and select aircraft materials and with various heat treating processes. Provides experience in the use of non-destructive methods of inspection and evaluation. Provides instruction in correct shop practices and procedures and the use of special tools. Areas covered are torque values and torquing methods, safety wiring, use of precision measuring equipment, shop safety, and technicians' ethics and legal responsibilities.

AMT0050C Ground Operations & Servicing
Clock Hours: 31.50
Familiarizes the student with the proper methods of starting ground operating, servicing and securing aircraft.

AMT0060C Cleaning & Corrosion Control
Clock Hours: 26.25
Provides experience in detecting, identifying, removal, and treatment of the various types of corrosion found on ferrous and non-ferrous metals. The course deals with the types of cleaners and methods of cleaning aircraft and aircraft components.

AMT0070C Applied Mathematics
Clock Hours: 21.00
Reviews principles of mathematical functions and studies their application to aircraft and powerplant maintenance operations.

AMT0081C FAR’S, Forms & Privileges
Clock Hours: 42.00
Familiarizes the student with FAA regulations, advisory circulars, and other government and industry publications, proper terminology and procedures for the execution of log books and major repair and alteration forms, and privileges and limitations as they apply to the certified mechanic.

AMT0090C Basic Physics
Clock Hours: 26.25
Provides an understanding of energy and matter and how their relationships apply to aircraft maintenance.

AMT0091C Basic Electricity  
Clock Hours: 89.25  
The study of laws and theory of electricity and its application to aircraft systems, components, and circuits, to include practical knowledge of the different types of complex circuitry found in modern aircraft.

AMT0110C Aircraft Wood Structures  
Clock Hours: 11.00  
Aircraft wood structures are covered in this section and familiarizes the student with the different types of wood used in aircraft structures as well as methods of repair to wood structures.

AMT0115C Aircraft Coverings  
Clock Hours: 12.00  
Student will gain knowledge and skills to inspect, test, and repair fabric-covering materials. The student will be able to select and apply all types of fabric covering, including the synthetics types, and use of proper materials to finish the material.

AMT0120C Aircraft Finishes  
Clock Hours: 30.00  
Student will acquire the ability to properly use a paint spray gun to apply various types of finishes on a variety of surfaces. The student will be able to apply trim lines and aircraft identification number, touch up paint defects, and identify and select aircraft finishing materials.

AMT0130C Sheet Metal Structures  
Clock Hours: 157.00  
Student is provided with knowledge and skills needed to inspect, maintain, and repair sheet metal structures and components. The course provides the student an introduction to fiberglass, composite and other type non-metallic structural materials and methods of construction using these materials.

AMT0140C Aircraft Welding  
Clock Hours: 40.00  
A theory and practice of welding methods used in aircraft construction and repair is thoroughly covered with emphasis on gas welding and advanced work in heli arc welding.

AMT0155C Assembly & Rigging  
Clock Hours: 65.00  
Student will explain and compare aircraft design features in subsonic, transonic, and supersonic aircraft. They will be able to assemble and rig various aircraft control systems, analyzing and correcting faulty flight characteristics.

AMT0160C Airframe Inspection  
Clock Hours: 20.00  
Students will acquire the knowledge and skills needed to perform a 100 hour inspection of an aircraft. The student will demonstrate knowledge of FARs by checking appropriate A.D.’s classifying repairs, and pinpointing specific service problems. The student will complete the required maintenance forms, records, and inspection reports required by Federal Air Regulations.

AMT0200C Landing Gear Systems  
Clock Hours: 85.00  
Student will receive training in the proper methods of inspection, servicing and repair of landing gear retraction systems, shock struts, brakes, wheels, tires and steering systems. Rigging of various types retractable landing gear systems will be covered in detail.

AMT0210C Hydraulic & Pneumatics Systems  
Clock Hours: 75.00  
The student will study the theory of operation, maintenance requirements, and adjustments of various hydraulic components and systems. The course will provide the student with the knowledge of pneumatics as used in aircraft operation. The course covers fluid flow, identifies the various actuating units, type of seals, pumps, and differences between hydraulics and pneumatics.

AMT0220C Cabin Atmosphere Control Systems  
Clock Hours: 50.00  
This unit covers the various systems used to condition air and cabin pressurization as well as practical experience in inspecting, checking, troubleshooting, and servicing the oxygen system.

AMT0230C Aircraft Instruments Systems  
Clock Hours: 25.00  
A basic familiarization of aircraft instruments and their function to include removal, installation, and the installed testing of such instruments.

AMT0240C Communications & Navigation Systems  
Clock Hours: 30.00
This course introduces the student with basic auto pilot operation and familiarizes him/her with the installation requirements and use of the various communication and navigation systems.

AMT0250C Aircraft Fuel Systems  
Clock Hours: 40.00  
The student is provided with the knowledge and skills needed to maintain fuel systems and fuel system components. He/she will be able to inspect, check, maintain, and repair aircraft fuel system components, fuel dump systems, fuel management and transfer systems, and perform refueling operations.

AMT0260C Aircraft Electrical Systems  
Clock Hours: 100.00  
The types and characteristics of aircraft electrical circuits and components are compared and evaluated. Advanced electrical systems as used in corporate and airline aircraft are studied. The course includes troubleshooting and repairs of AC and DC electrical systems and equipment.

AMT0270C Position & Warning Systems  
Clock Hours: 30.00  
This course presents the student with the inspection, servicing and maintaining of position and warning systems. Included in this area are navigation lights, beacons, and lights indicating the position of various aircraft components.

AMT0285C Ice, Rain, & Fire Protection  
Clock Hours: 30.00  
Introduces the student to the basics of ice and rain control as it relates to aircraft surfaces, propellers, windshields, and other components. Methods of ice prevention and ice elimination are taught, providing the student with the knowledge and skills needed in the operation, inspection, checking, troubleshooting, and repair of airframe fire detecting and extinguishing systems.

AMT0300C Reciprocating Engines  
Clock Hours: 152.25  
The course covers theory and fundamental requirements for aircraft engines, basic parts of internal combustion engines, 2 stroke and 4 stroke cycle, power measurements and calculations, conversion of heat energy into mechanical energy, horsepower, piston displacement, compression ratio, types of horsepower, crankcase assembly, reduction gearing, crankshafts, and rod assemblies, cylinder and piston assemblies, and bearings used in reciprocating engines.

AMT0312C Turbine Engines & Turbine Engines Troubleshooting  
Clock Hours: 147.00  
A thorough study of the theory of operation of turbine engines and the function of the related engine components such as compressors, fuel controls, fuel pumps, governors, turbines, etc. Course encounters disassembly, inspection, minimal repairs reassembly test run, and final adjustment.

AMT0320C Engine Inspection  
Clock Hours: 32.50  
A course of study which details the correct methods of engine removal and installation, inspection and run up testing, including the final adjustments according to FAA regulations and manufacturer's recommendations.

AMT0400C Engine Instrument Systems  
Clock Hours: 31.50  
Students will have a knowledge of operation, installation, marking and interpretation of powerplant instruments powered by or actuated by non-electrical means. They will be able to install, adjust, and calibrate instruments in accordance with FAA and manufacture's recommendations. This course will provide experience in inspection, checking, servicing, troubleshooting, and repair of engine instrument systems that are electrical in nature.

AMT0410C Engine fire Protection Systems  
Clock Hours: 15.75  
To provide the student with the knowledge and skills needed in the operation, inspection, checking, troubleshooting, and repair of engine fire detecting and extinguishing systems.

AMT0420C Engine Electrical Systems & APU'S  
Clock Hours: 69.25  
This course provides knowledge and skills necessary to perform electrical repairs, installations, adjustments, and service. The subject area includes alternators, generators, voltage regulation, and paralleling of generators. The student will be introduced to the operational principles of auxiliary power units.

AMT0435C Lubrication Systems  
Clock Hours: 42.00  
Provides a comprehensive knowledge of the purpose and function of lubricants and lubrication system for powerplants. Gives experience in identifying and
selecting lubricants, as well as, inspecting, checking, servicing and troubleshooting repair of the system and components.

AMT0440C Ignition Systems  
Clock Hours: 84.00  
Students will have knowledge of the operation, repair, inspection, and service of reciprocating and jet power plant ignition systems. They will be able to overhaul and troubleshoot the various components of each system.

AMT0450C Engine Fuel Systems  
Clock Hours: 21.00  
Student is provided with knowledge and skills needed to maintain fuel system components. Student will be able to inspect, maintain, check, and repair engine fuel system components.

AMT0451C Fuel Metering Systems  
Clock Hours: 63.00  
Provides the student with the necessary information and practice necessary to inspect, check, service, troubleshoot, and repair reciprocating and turbine fuel metering system. The theory and practical application of carburetion, fuel injection systems, and water injection systems are also learned. Fuel pumps, filters, and strainers are discussed and practical experience is gained in these areas.

AMT0460C Induction Systems  
Clock Hours: 26.25  
Gives student the knowledge and experience needed to service and maintain induction systems, superchargers, and exhaust systems. Material covered includes controls, indicators, theory of operation and inspection criteria.

AMT0475C Engine Cooling & Exhaust Systems  
Clock Hours: 26.25  
This course provides the student with an understanding of the need for the various types of engine cooling systems. Gives experience in the inspection, checking, servicing, troubleshooting and repairing of engine cooling system. This course will also enable the student to comprehend the function of exhaust systems including turbo charging and thrust reversers. The student will gain experience in inspection, checking, troubleshooting, and repairing various types of exhaust systems.

AMT0490C Propellers & Unducted Fans  
Clock Hours: 89.25  
This unit of instruction is designed to cover aircraft engine and turbo prop installations. Areas dealt with are: propeller fundamentals and terminology, synchronizing and ice control systems, identification and selection of propeller lubricants, balancing of propellers, propeller control systems, propeller governing systems, and installation, troubleshooting and removal of propellers. The theory of unducted fans is presented.

AMT1001 Basic Electricity  
Credit Hours: 2.00  
This course is for Inter Institutional Articulation purposes only for Major codes A005 A.A.S. Aviation Maintenance Management and/or Major code 2204 A.S. Aviation Maintenance Management. Articulation of credits for PSAV FAA Aircraft Airframe courses Major Code 5272 and FAA Aircraft Powerplant courses Major Code 5273 (and/or) a valid FAA Aircraft Airframe and Powerplant certification by evaluation of prior learning experience. Basic electricity. The study laws and theory of electricity and its application to aircraft systems, components, and circuits, to include practical knowledge of the different types of complex circuitry found in modern aircraft.

AMT1010 Aircraft Drawings  
Credit Hours: 1  
This course is for Inter-Institutional Articulation purposes only for Major codes A005 A.A.S. Aviation Maintenance Management and/or Major code 2204 A.S. Aviation Maintenance Management. Articulation of credits for PSAV FAA Aircraft Airframe courses Major Code 5272 and FAA Aircraft Powerplant courses Major Code 5273 (and/or) a valid FAA Aircraft Airframe and Powerplant certification by evaluation of prior learning experience. This course covers aircraft drawings, care and use of blueprints, isometrics, orthographic and auxiliary projection lines and sections, dimensions, limits, tolerances and allowances, geometric, construction, practical layout work and identification of standard parts and materials, use of instruments, drawing and interpretation of free hand sketches of repairs and alterations, and use of various types of charts and graphs.

AMT1020 Weight & Balance  
Credit Hours: 1  
This course is for Inter-Institutional Articulation purposes only for Major codes A005 A.A.S. Aviation Maintenance Management and/or Major code 2204 A.S. Aviation Maintenance Management. Articulation of...
credits for PSAV FAA Aircraft Airframe courses Major Code 5272 and FAA Aircraft Powerplant courses Major Code 5273 (and/or) a valid FAA Aircraft Airframe and Powerplant certification by evaluation of prior learning experience. Familiarizes the student with the importance of weight and balance control, the procedures for weighting an aircraft, the computations necessary to arrive at current and balance data, and the disposition of weight and balance forms and records. The use of loading graphs and charts relating to the aircraft's center gravity envelope is taught.

AMT1030 Fluid Lines & Fittings
Credit Hours: 1
This course is for Inter-Institutional Articulation purposes only for Major codes A005 A.A.S. Aviation Maintenance Management and/or Major code 2204 A.S. Aviation Maintenance Management. Articulation of credits for PSAV FAA Aircraft Airframe courses Major Code 5272 and FAA Aircraft Powerplant courses Major Code 5273 and/or a valid FAA Aircraft Airframe and Powerplant certification by evaluation of prior learning experience. Prepares the student to fabricate and install rigid and flexible lines and fittings with regard to bends, tools, and lubricants. Provides training in the area of identification of materials, fittings and routing of fluid lines.

AMT1040 Materials & Processes
Credit Hours: 2
This course is for Inter-Institutional Articulation purposes only for Major codes A005 A.A.S. Aviation Maintenance Management and/or Major code 2204 A.S. Aviation Maintenance Management. Articulation of credits for PSAV FAA Aircraft Airframe courses Major Code 5272 and FAA Aircraft Powerplant courses Major Code 5273 and/or a valid FAA Aircraft Airframe and Powerplant certification by evaluation of prior learning experience. Familiarizes students with the methods of inspection and evaluation. Provides instruction in correct shop practices and procedures and the use of special tools. Areas covered are torque values and torquing methods, safety wiring, use of precision measuring equipment, shop safety, and technician's ethics and legal responsibilities.

AMT1050 Ground Operations & Servicing
Credit Hours: 1
This course is for Inter-Institutional Articulation purposes only for Major codes A005 A.A.S. Aviation Maintenance Management and/or Major code 2204 A.S. Aviation Maintenance Management. Articulation of credits for PSAV FAA Aircraft Airframe courses Major Code 5272 and FAA Aircraft Powerplant courses Major Code 5273 and/or a valid FAA Aircraft Airframe and Powerplant certification by evaluation of prior learning experience. Familiarizes the student with FAA regulations, advisory circulars, and other government and industry publications, proper terminology and procedures for the execution of log books and major...
repair and alteration forms, and privileges and limitations as they apply to the certified mechanic.

AMT1090 Basic Physics
Credit Hours: 1
This course is for Inter-Institutional Articulation purposes only for Major codes A005 A.A.S. Aviation Maintenance Management and/or Major code 2204 A.S. Aviation Maintenance Management. Articulation of credits for PSAV FAA Aircraft Airframe courses Major Code 5272 and FAA Aircraft Powerplant courses Major Code 5273 and/or a valid FAA Aircraft Airframe and Powerplant certification by evaluation of prior learning experience. Provides an understanding of energy and matter and how their relationships apply to aircraft maintenance.

AMT1115 Aircraft Coverings
Credit Hours: 1
This course is for Inter-Institutional Articulation purposes only for Major codes A005 A.A.S. Aviation Maintenance Management and/or Major code 2204 A.S. Aviation Maintenance Management. Articulation of credits for PSAV FAA Aircraft Airframe courses Major Code 5272 and/or a valid FAA Aircraft Airframe certification by evaluation of prior learning experience. Students will gain knowledge and skills to inspect, test, and repair fabric covering materials. The student will be able to select and apply all types of fabric covering, including the synthetics types, and use of proper materials to finish the material.

AMT1120 Aircraft Finishes
Credit Hours: 1
This course is for Inter-Institutional Articulation purposes only for Major codes A005 A.A.S. Aviation Maintenance Management and/or Major code 2204 A.S. Aviation Maintenance Management. Articulation of credits for PSAV FAA Aircraft Airframe courses Major Code 5272 and/or a valid FAA Aircraft Airframe certification by evaluation of prior learning experience. Students will acquire the ability to properly use a paint spray gun to apply various types of finishes on a variety of surfaces. The student will be able to apply trim lines and aircraft identification number, touch up paint defects, and identify and select aircraft finishing materials.

AMT1130 Sheet Metal Structures
Credit Hours: 4
This course is for Inter-Institutional Articulation purposes only for Major codes A005 A.A.S. Aviation Maintenance Management and/or Major code 2204 A.S. Aviation Maintenance Management. Articulation of credits for PSAV FAA Aircraft Airframe courses Major Code 5272 and/or a valid FAA Aircraft Airframe certification by evaluation of prior learning experience. The student is provided with knowledge and skills needed to inspect, maintain, and repair sheet metal structures and components. The course provides the student an introduction to fiberglass, composite and other type non-metallic structural material and methods of construction using these materials.

AMT1140 Aircraft Welding
Credit Hours: 1
This course is for Inter-Institutional Articulation purposes only for Major codes A005 A.A.S. Aviation Maintenance Management and/or Major code 2204 A.S. Aviation Maintenance Management. Articulation of credits for PSAV FAA Aircraft Airframe courses Major Code 5272 and/or valid FAA Aircraft Airframe certification by evaluation of prior learning experience. A theory and practice of welding methods used in aircraft construction and repair is thoroughly covered with emphasis on gas welding and advanced work in heli arc welding. Lab fee is required.

AMT1155 Assembly & Rigging
Credit Hours: 2
This course is for Inter-Institutional Articulation purposes only for Major codes A005 A.A.S. Aviation Maintenance Management and/or Major code 2204 A.S. Aviation Maintenance Management. Articulation of credits for PSAV FAA Aircraft Airframe courses Major Code 5272 and/or a valid FAA Aircraft Airframe certification by evaluation of prior learning experience. Students will explain and compare aircraft design features in subsonic, transonic, and supersonic aircraft. They will be able to assemble and rig various aircraft control systems, analyzing and correcting faulty flight characteristics.

AMT1160 Airframe Inspection
Credit Hours: 1
This course is for Inter-Institutional Articulation purposes only for Major codes A005 A.A.S. Aviation Maintenance Management and/or Major code 2204 A.S. Aviation Maintenance Management. Articulation of credits for PSAV FAA Aircraft Airframe courses Major Code 5272 and/or a valid FAA Aircraft Airframe certification by evaluation of prior learning experience. Students will acquire the knowledge and skills needed to perform a 100 hour inspection of an aircraft. The student will demonstrate knowledge of FARs by
checking appropriate A.D.'s classifying repairs, and pinpointing specific service problems. The student will complete the required maintenance forms, records, and inspection reports required by Federal Air Regulations.

AMT1200 Landing Gear Systems
Credit Hours: 2
This course is for Inter-Institutional Articulation purposes only for Major codes A005 A.A.S. Aviation Maintenance Management and/or Major code 2204 A.S. Aviation Maintenance Management. Articulation of credits for PSAV FAA Aircraft Airframe courses Major Code 5272 and/or a valid FAA Aircraft Airframe certification by evaluation of prior learning experience. Students will receive training in the proper methods of inspection, servicing and repair of landing gear retraction systems, shock struts, brakes, wheels, tires and steering systems. Rigging of various types of retractable landing gear systems will be covered in detail.

AMT1210 Hydraulic & Pneumatics Systems
Credit Hours: 2
This course is for Inter-Institutional Articulation purposes only for Major codes A005 A.A.S. Aviation Maintenance Management and/or Major code 2204 A.S. Aviation Maintenance Management. Articulation of credits for PSAV FAA Aircraft Airframe courses Major Code 5272 and/or a valid FAA Aircraft Airframe certification by evaluation of prior learning experience. The student will study the theory of operation, maintenance requirements, and adjustments of various hydraulic components and systems. The course will provide the student with the knowledge of pneumatics as used in aircraft operation. The course covers fluid flow, identifies the various actuating units, types of seals, pumps, and differences between hydraulics and pneumatics.

AMT1220 Cabin Atmosphere Control Systems
Credit Hours: 1
This course is for Inter-Institutional Articulation purposes only for Major codes A005 A.A.S. Aviation Maintenance Management and/or Major code 2204 A.S. Aviation Maintenance Management. Articulation of credits for PSAV FAA Aircraft Airframe courses Major Code 5272 and/or a valid FAA Aircraft Airframe certification by evaluation of prior learning experience. This unit covers the various systems used to condition air and cabin pressurization as well as practical experience in inspecting, checking, troubleshooting, and servicing the oxygen system. Student fee charged.

AMT1230 Aircraft Instruments Systems
Credit Hours: 1
This course is for Inter-Institutional Articulation purposes only for Major codes A005 A.A.S. Aviation Maintenance Management and/or Major code 2204 A.S. Aviation Maintenance Management. Articulation of credits for PSAV FAA Aircraft Airframe courses Major Code 5272 and/or a valid FAA Aircraft Airframe certification by evaluation of prior learning experience. A basic familiarization of aircraft instruments and their function to include removal, installation, and the installed testing of such instruments.

AMT1240 Communications & Navigation Systems
Credit Hours: 1
This course is for Inter-Institutional Articulation purposes only for Major codes A005 A.A.S. Aviation Maintenance Management and/or Major code 2204 A.S. Aviation Maintenance Management. Articulation of credits for PSAV FAA Aircraft Airframe courses Major Code 5272 and/or a valid FAA Aircraft Airframe certification by evaluation of prior learning experience. This course introduces the student with basic auto pilot operation and familiarizes him with the installation requirements and use of the various communication and navigation systems.

AMT1250 Aircraft Fuel Systems
Credit Hours: 1
This course is for Inter-Institutional Articulation purposes only for Major codes A005 A.A.S. Aviation Maintenance Management and/or Major code 2204 A.S. Aviation Maintenance Management. Articulation of credits for PSAV FAA Aircraft Airframe courses Major Code 5272 (and/or) a valid FAA Aircraft Airframe certification by evaluation of prior learning experience. The student is provided with the knowledge and skills needed to maintain fuel systems and fuel system components. He/she will be able to inspect, check, maintain, and repair aircraft fuel system and repair aircraft fuel system components, fuel dump systems, fuel management and transfer systems, and perform refueling operations.

AMT1260 Aircraft Electrical Systems
Credit Hours: 3
This course is for Inter-Institutional Articulation purposes only for Major codes A005 A.A.S. Aviation Maintenance Management and/or Major code 2204 A.S. Aviation Maintenance Management. Articulation of credits for PSAV FAA Aircraft Airframe courses Major Code 5272 (and/or) a valid FAA Aircraft Airframe
certification by evaluation of prior learning experience. The types and characteristics of aircraft electrical and components are compared and evaluated. Advanced electrical systems as used in corporate and airline aircraft are studied. The course includes troubleshooting and repairs of AC and DC electrical systems and equipment.

AMT1270 Position & Warning Systems
Credit Hours: 1
This course is for Inter-Institutional Articulation purposes only for Major codes A005 A.A.S. Aviation Maintenance Management and/or Major code 2204 A.S. Aviation Maintenance Management. Articulation of credits for PSAV FAA Aircraft Airframe courses Major Code 5272 (and/or) a valid FAA Aircraft Airframe certification by evaluation of prior learning experience. This course presents the student with the inspection, servicing and maintaining of position and warning systems. Included in this area are navigation lights, beacons, and lights indicating the position of various aircraft components.

AMT1285 Ice, Rain, & Fire Protection
Credit Hours: 1
This course is for Inter-Institutional Articulation purposes only for Major codes A005 A.A.S. Aviation Maintenance Management and/or Major code 2204 A.S. Aviation Maintenance Management. Articulation of credits for PSAV FAA Aircraft Airframe courses Major Code 5272 (and/or) a valid FAA Aircraft Airframe certification by evaluation of prior learning experience. Introduces the student to the basics of ice and rain control as it relates to aircraft surfaces, propellers, windshields, and other components. Methods of ice prevention and ice elimination are taught, provides the student with the knowledge and skills needed in the operation, inspection, checking, troubleshooting, and repair of airframe fire detecting and extinguishing systems.

AMT2300 Reciprocating Engines
Credit Hours: 5
This course is for Inter-Institutional Articulation purposes only for Major codes A005 A.A.S. Aviation Maintenance Management and/or Major code 2204 A.S. Aviation Maintenance Management. Articulation of credits for PSAV FAA Aircraft Powerplant courses Major Code 5273 and/or a valid FAA Aircraft Powerplant certification by evaluation of prior learning experience. The course covers theory and fundamental requirements aircraft engines; basic parts of internal combustion engines, 2 stroke and 4 stroke cycle, power measurements and calculations conversion of heat energy into mechanical energy, horsepower, piston displacement, compression ratio, types of horsepower, crankcase assembly reduction gearing, crankshafts and rod assemblies, cylinder and piston assemblies, and bearings used in reciprocating engines.

AMT2312 Turbine Engines
Credit Hours: 4
A thorough study of the theory of operation of turbine engines and the function of the related engine components such as compressors, fuel controls, fuel pumps, governors, turbines, etc. Course encounters disassembly, inspection, minimal repairs reassembly test run, and final adjustment.

AMT2320 Engine Inspection
Credit Hours: 1
This course is for Inter-Institutional Articulation purposes only for Major codes A005 A.A.S. Aviation Maintenance Management and/or Major code 2204 A.S. Aviation Maintenance Management. Articulation of credits for PSAV FAA Aircraft Powerplant courses Major Code 5273 (and/or) a valid FAA Aircraft Powerplant certification by evaluation of prior learning experience. A course study which details the correct methods of engine removal and installation, inspection and run up testing, including the final adjustments according to FAA regulations and manufacturer's recommendations.

AMT2400 Engine Instrument Systems
Credit Hours: 1
This course is for Inter-Institutional Articulation purposes only for Major codes A005 A.A.S. Aviation Maintenance Management and/or Major code 2204 A.S. Aviation Maintenance Management. Articulation of credits for PSAV FAA Aircraft Powerplant courses Major Code 5273 (and/or) a valid FAA Aircraft Powerplant certification by evaluation of prior learning experience. Students will have a knowledge of operation, installation, making and interpretation of powerplant instruments powered by or actuated by non-electrical means. They will be able to install, adjust, and calibrate these instruments in accordance with FAA and manufacturer's recommendations. This course will provide experience in inspection checking, servicing, troubleshooting, and repair of engine instrument systems that are electrical in nature.
AMT2410 Engine Fire Protection Systems
Credit Hours: 1
This course is for Inter-Institutional Articulation purposes only for Major codes A005 A.A.S. Aviation Maintenance Management and/or Major code 2204 A.S. Aviation Maintenance Management. Articulation of credits for PSAV FAA Aircraft Powerplant courses Major Code 5273 (and/or) a valid FAA Aircraft Powerplant certification by evaluation of prior learning experience. To provide the student with the knowledge and skills needed in the operation, inspection, checking, troubleshooting, and repair of engine fire detecting and extinguishing systems.

AMT2420 Engine Electrical Systems & APU'S
Credit Hours: 2
This course is for Inter-Institutional Articulation purposes only for Major codes A005 A.A.S. Aviation Maintenance Management and/or Major code 2204 A.S. Aviation Maintenance Management. Articulation of credits for PSAV FAA Aircraft Powerplant courses Major Code 5273 (and/or) a valid FAA Aircraft Powerplant certification by evaluation of prior learning experience. This course provides knowledge and skills necessary to perform electrical repairs, installations, adjustments, and service. The subject area includes alternators, generators, voltage regulation, and paralleling of generators. The student will be introduced to the operational principles of auxiliary power units.

AMT2435 Lubrication Systems
Credit Hours: 1
This course is for Inter-Institutional Articulation purposes only for Major codes A005 A.A.S. Aviation Maintenance Management and/or Major code 2204 A.S. Aviation Maintenance Management. Articulation of credits for PSAV FAA Aircraft Powerplant courses Major Code 5273 (and/or) a valid FAA Aircraft Powerplant certification by evaluation of prior learning experience. Provides a comprehensive knowledge of the purpose and function of lubricants and lubrication systems for powerplants. Gives experience in identifying and selecting lubricants, as well as, inspecting, checking, servicing and troubleshooting repair of the system and components.

AMT2440 Ignition Systems
Credit Hours: 2
This course is for Inter-Institutional Articulation purposes only for Major codes A005 A.A.S. Aviation Maintenance Management and/or Major code 2204 A.S. Aviation Maintenance Management. Articulation of credits for PSAV FAA Aircraft Powerplant courses Major Code 5273 (and/or) a valid FAA Aircraft Powerplant certification by evaluation of prior learning experience. Students will have knowledge of the operation, repair, inspection, and service reciprocating and jet power plant ignition systems. They will be able to overhaul and troubleshoot the various components of each system.

AMT2450 Engine Fuel Systems
Credit Hours: 1
This course is for Inter-Institutional Articulation purposes only for Major codes A005 A.A.S. Aviation Maintenance Management and/or Major code 2204 A.S. Aviation Maintenance Management. Articulation of credits for PSAV FAA Aircraft Powerplant courses Major Code 5273 (and/or) a valid FAA Aircraft Powerplant certification by evaluation of prior learning experience. Student is provided with knowledge and skills needed to maintain fuel system components. Student will be able to inspect, maintain check, and repair engine fuel system components.

AMT2451 Fuel Metering Systems
Credit Hours: 2
This course is for Inter-Institutional Articulation purposes only for Major codes A005 A.A.S. Aviation Maintenance Management and/or Major code 2204 A.S. Aviation Maintenance Management. Articulation of credits for PSAV FAA Aircraft Powerplant courses Major Code 5273 (and/or) a valid FAA Aircraft Powerplant certification by evaluation of prior learning experience. Provides the student with the necessary information and practice necessary to inspect, check, service, troubleshoot, and repair reciprocating and turbine fuel metering systems. The theory and practical application of carburetion, fuel injection systems, and water injection systems are also learned. Fuel pumps, fitters strainers are discussed and practical experience is gained in these areas.

AMT2460 Induction Systems
Credit Hours: 1
This course is for Inter-Institutional Articulation purposes only for Major codes A005 A.A.S. Aviation Maintenance Management and/or Major code 2204 A.S. Aviation Maintenance Management. Articulation of credits for PSAV FAA Aircraft Powerplant courses Major Code 5273 (and/or) a valid FAA Aircraft Powerplant certification by evaluation of prior learning experience. Provides the student with the necessary information and practice necessary to inspect, check, service, troubleshoot, and repair reciprocating and turbine fuel metering systems. The theory and practical application of carburetion, fuel injection systems, and water injection systems are also learned. Fuel pumps, fitters strainers are discussed and practical experience is gained in these areas.
experience. Gives student the knowledge and experience needed to service and maintain induction systems, superchargers, and exhaust systems. Material covered includes controls, indicators, theory of operation and inspection criteria.

AMT2475 Engine Cooling & Exhaust Systems
Credit Hours: 1
This course is for Inter-Institutional Articulation purposes only for Major codes A005 A.A.S. Aviation Maintenance Management and/or Major code 2204 A.S. Aviation Maintenance Management. Articulation of credits for PSAV FAA Aircraft Powerplant courses Major Code 5273 (and/or) a valid FAA Aircraft Powerplant certification by evaluation of prior learning experience. This course provides the student with an understanding of the need for the various types of engine cooling systems. Gives experience in the inspection, checking, servicing, troubleshooting and repairing of engine cooling systems. This course will also enable the student to comprehend the function of exhaust systems including turbo charging and thrust reversers. The student will gain experience in inspection, checking, troubleshooting, and repairing various types of exhaust systems. Student fee charged.

AMT2490 Propellers & Unducted Fans
Credit Hours: 2
This course is for Inter-Institutional Articulation purposes only for Major codes A005 A.A.S. Aviation Maintenance Management and/or Major code 2204 A.S. Aviation Maintenance Management. Articulation of credits for PSAV FAA Aircraft Powerplant courses Major Code 5273 (and/or) a valid FAA Aircraft Powerplant certification by evaluation of prior learning experience. This unit of instruction is designed to cover aircraft engine and turbo prop installations. Areas dealt with are: propeller fundamentals and terminology, synchronizing and ice control systems, identification and selection of propeller lubricants, balancing of propellers, propeller control systems, propeller governing systems, and installation, troubleshooting and removal of propellers. The theory of unducted fans is presented.

ANT2140 Intro to Archaeology
Credit Hours: 3
The study of past cultures and the ongoing record of human history. This course reviews the major techniques and theories used to interpret culture change through time.

ANT2211 Introduction to World Ethnology Peoples of the World
Credit Hours: 3
A survey of cultures on differing levels of development, focusing upon subsistence, social organization, religion, art, and culture change.

ANT2381 Culture & Society of Spain
Credit Hours: 3
Spanish culture and society includes a study of Spanish life and character as it manifests itself in history, regional personality, celebrations, music, legendary figures, art and architecture. Special emphasis will be given to the southern part of Spain, Andalusia, which conserves the diverse cultural heritage of Europe, Africa, and the Orient (Near East).

ANT2825 Anthropology Field School
Credit Hours: 3
This lab course is designed to supplement various topics relative to physical and cultural Anthropology as well as Archaeology. Study is limited to field projects.

ANT2905 Independent Study Anthropology
Credit Hours: 3
A directed study course available to both majors and non-majors who wish to investigate a particular problem related to the field of Anthropology. The student will apply for the course to the Head of the Behavioral Sciences Department via an Instructor with whom the student wants to work.

ARC1056C Digital Media
Credit Hours: 2
Course provides working knowledge of current computer aided design software related to architecture and building construction. Lab work concentrates on learning to use a B.I.M. (Building Information Modeling) computer application applicable to the design process. Students will learn to apply virtual building technology to design, production and information analysis of a project.
ARC1126C Architectural Drawing
Credit Hours: 4
An introduction to principles, methods and applications of architectural drawing. Basic drafting tools will be used to learn orthographic projection to draw multi-view drawings including architectural design floor plans, elevations and sections, single-view drawings including paraline axonometric drawings and perspective drawings including one- and two-point.

ARC1301C Architectural Design I
Credit Hours: 4
This course covers basic two and three-dimensional design fundamentals, architectonic principles and architectural design skills. Techniques of model making, are learned through explorations in defining and analyzing architectural space.

ARC1302C Architectural Design II
Credit Hours: 4
This course furthers the study of three-dimensional design fundamentals, architectural space and architectonic principles through the application of more advanced model making techniques, orthographic drawing and one and two point perspectives. The architectural design process is studied through the analysis and resolution of basic building programs and basic natural and man-made environmental factors.

ARC1701 Survey of Architectural History
Credit Hours: 3
A general survey of social, political, and cultural factors which have generated architecture from prehistoric times through the Fifteenth Century.

ARC2201 Theory of Architecture
Credit Hours: 3
This course provides an understanding of architectonic elements, principles and aesthetics in architecture. It analyzes their application in contemporary and historical architecture and relates their application to architecture design studio solutions. The course also covers the work and philosophies of contemporary architects.

ARC2303C Architectural Design III
Credit Hours: 4
This course emphasizes the analysis and resolution of the natural and man-made environmental context as a generator of architectural design ideas. The analysis of architectural building programs and architectonic principles are applied to further define the organization, form, circulation and function of architectural space in buildings.

ARC2304C Architectural Design IV
Credit Hours: 4
This course covers the development of architectonic conceptual ideas from program requirements and contextual factors as generators of architectural design. Architectonic principles of enclosure, massing, articulation of form, proportions, geometry, scale and structures are applied in the development of imagery for building design. A portfolio is created from each student's best work for the purpose of transfer admission to a university program.

ARC2461 Materials & Methods of Construction
Credit Hours: 4
Introduction to materials and methods of construction covering the evaluation of construction materials, functional applications and code requirements in the use of wood, masonry, concrete, steel and other materials.

ARC2580 Structures
Credit Hours: 4
Basic study in the principles and evaluations of structures as applied to architecture. Major topics of study include statics, stress, and the characteristics of beam and column behavior. This course will enable the student to develop a structural sense in creating architectural solutions.

ARH2000 Art Appreciation
Credit Hours: 3
Art Appreciation is a course for non-art majors that introduces the foundations of art, including style, form, media, meaning, and history.

ARH2050 World Art: Prehistory to Gothic
Credit Hours: 3
Art History: Prehistory to Gothic is a chronological survey and analysis of art from prehistory to approximately 1400, placing major works in a historical and stylistic context and emphasizing world art.

ARH2051 World Art: Renaissance to Modern
Credit Hours: 3
Art History: Renaissance to Modern is a chronological survey and analysis of world art from Renaissance to Modern, placing major works in a historical and stylistic context and emphasizing European and Modern art.
ARH2351 Spanish Art History
Credit Hours: 3
Spanish Art History includes the study of outstanding examples of architecture, painting and sculpture, emphasizing the early Roman and Moorish contributions as well as the great Spanish painters of the Renaissance and the 19th and 20th Centuries. Included in this course are cultural trips to museums, galleries and monuments in Seville.

ARH2402 Modern Art
Credit Hours: 3
Chronological survey and analysis of modern art from mid-19th century to the present, placing major works in a social, historical and stylistic context.

ARH2660 Latin American Art
Credit Hours: 3
Chronological survey and analysis of Latin American art from mid-19th century to the present, placing major works in a social, historical and stylistic context.

ART1201C 2 D Design
Credit Hours: 3
Two-dimensional study of form, principles of organization, and the elements of design fundamental for creative work in 2-D visual arts.

ART1203C 3D Design
Credit Hours: 3

ART1300C Drawing I
Credit Hours: 3
Still life, landscape, and other compositions utilizing a variety of media emphasizing elements and materials of representational drawing from observation.

ART1301C Intermediate Drawing
Credit Hours: 3
An extension of the content of Drawing I with increased concentration upon analytical description, pictorial composition, and drawing as a means of visual communication of ideas.

ART1431C Beginning Silkscreen
Credit Hours: 3
Introduction to the basic techniques of Silkscreen Printmaking using water-based inks. Students will learn Stencil, Hand-Drawn, Rubylith and Photo Emulsion processes in the creation of multiple limited edition prints. Planning of individual design problems is stressed.

ART1600C Computer Art
Credit Hours: 3
A basic course in how the computer can be adapted and used in the visual arts. Creative uses of the computer and assorted hardware and software will introduce the student to fine art and applied art applications. A knowledge of programming is not required.

ART2205C Color Theory
Credit Hours: 3
A basic course in the exploration of color theories, color systems, and color relativity in regard to optical sensation, lighting variation and psychological impact.

ART2330C Life Drawing
Credit Hours: 3
Study of human anatomy for artists, utilizing techniques of visual representations from direct observation of clothed and unclothed models.

ART2400C Beginning Printmaking
Credit Hours: 3
A study of the processes and techniques in intaglio, polymer light-sensitive and relief printmaking.

ART2500C Painting I
Credit Hours: 3
An introduction to creative techniques and composition applied various media.

ART2501C Painting II
Credit Hours: 3
A creative exploration of oil, acrylic techniques and/or water media with an emphasis on composition.

ART2540C Watercolor
Credit Hours: 3
A creative exploration of watercolor techniques and media with an emphasis on composition.

ART2623C 3D Computer Modeling for Animation
Credit Hours: 3
This course is an introductory level course in 3D animation. Students create complex animations which are carefully planned through storyboarding techniques. Students will complete 3D animation projects and follow the 3D animation process, practicing and
applying various features of the 3D animation software package.

ART2701C Sculpture
Credit Hours: 3
A three-dimensional study of form and concept utilizing physical material to occupy real space either free standing or bas-relief. The principles of organization and the element of design fundamentals are carried over and expand from 3-D design.

ART2750C Ceramics I
Credit Hours: 3
Study of basic ceramic shaping techniques, glazing, decorating and firing.

ART2751C Ceramics II
Credit Hours: 3
A study of advanced techniques in ceramics synthesizing basic skills with more advanced concepts and techniques of forming clay, surface decoration, glazing and firing.

ART2752C Ceramics: Throwing on the Potters Wheel
Credit Hours: 3
A fine arts study of advanced techniques in ceramics emphasizing concepts and techniques of forming clay on the wheel, surface decoration, glazing and firing.

ART2754C Ceramics: Hand-Building
Credit Hours: 3
Fine arts ceramics course to develop hand-building through various projects which emphasize technique, creativity, and problem-solving. Includes advanced concepts and techniques of forming clay, surface decoration, glazing and firing.

ART2905 Independent Study
Credit Hours: 3
A course designed to establish a framework for future self-learning. Students will shape the course to fit their needs by planning activities with a faculty advisor.

ART2906 Independent Study: Ceramics
Credit Hours: 3
A directed, independent study course available to both majors and non-majors who wish to investigate a particular problem related to the ceramics process.

ART2907 Independent Study: Drawing
Credit Hours: 3
A directed, independent study course available to both majors and non-majors who wish to investigate a particular problem related to the drawing process.

ART2908 Independent Study: Sculpture
Credit Hours: 3
A directed, independent study course available to both majors and non-majors who wish to investigate a particular problem related to the sculpture process.

ART2909 Independent Study: Painting
Credit Hours: 3
A directed, independent study course available to both majors and non-majors who wish to investigate a particular problem related to the painting process.

ART2931C Art Special Topics: (Specify Medium)
Credit Hours: 3
A studio course centered on a specific medium of art and topics of current interest. Media, topics or focus may vary from semester to semester. Special Topics credit hours are not automatically transferable. Transfer credit is the prerogative of the receiving institution.

ART2932C Special Topic: Ceramics
Credit Hours: 3
A ceramics studio course centered around topics of current interest or special interest to students. Topics or focus may vary from semester to semester.

ART2950 Seminar in Art
Credit Hours: 3
A course designed for students who wish to combine the study of Art with travel in a foreign country. Variable content depends on areas visited.

ART2990C Portfolio Preparation & Exhibition
Credit Hours: 3
This course prepares Visual Art and Design students to transfer to an upper-division institution. It is intended for those pursuing an Associate of Arts Degree with a concentration in Visual Art or Design. Acting as a "capstone" to the students lower-division studies, this course helps students prepare a portfolio required for transfer. In addition, competencies in courses are validated, presentation issues are enhanced and applied and a "Statement of Intent" is prepared to accompany the portfolio.

ART2991C Portfolio Preparation & Exhibition
Credit Hours: 3
A directed, independent study course available to both majors and non-majors who wish to investigate a particular problem related to the painting process.

ASC1010 History of Aviation
Credit Hours: 3
A survey of aviation from its beginning with early myths, through gliders, balloon flights and powered flight to the present jet age. Includes effects of wars on the development of civil and military aircraft and discusses significant personnel flights and aircraft in tracing the advancement of general, commercial, and military aircraft. The major emphasis of the course will be directed towards the development of aviation in the United States.

ASC1100 Navigational Science I
Credit Hours: 3
This course, together with ATT1100, provides the basic aeronautical knowledge for the professional pilot and aviation operation programs. The two courses must be taken concurrently unless the student's major is Airport Operations Management or Aviation Maintenance Management, in which only ATT1100 is required. The areas of study include airport operations, airspace, flight information publications, basic air navigation including pertinent regulations, preflight planning, cross country navigation, and radio navigation.

ASC1210 Aviation Weather
Credit Hours: 3
A study of the basic concepts of meteorology, temperature pressure, moisture, stability, clouds, air masses, fronts, thunderstorms, icing, and fog analysis and use of weather data; interpretation of the National Weather Service maps, reports and forecasts.

ASC1550 Aerodynamics
Credit Hours: 3
An analysis of the physical laws and aerodynamic principles which govern flight, aircraft stability and control, weight and balance, and aircraft instruments affecting flight as well as operational considerations of controllable pitch propellers, retractable gear, weather, and precision maneuvers.

ASC1610 Aircraft Engines, Structures, & Systems
Credit Hours: 3
This course discusses aircraft engine types and theory of operation, materials and construction models of aircraft structures, operations of hydraulic, electrical, fuel, pressurization, anti-icing, and heating and instrument systems, including sources of power for their operation.

ASC2110 Navigation Science II
Credit Hours: 3
Methods and procedures for the solution of advanced pilotage and dead reckoning problems. Functioning, capabilities, and limitations of radio navigation systems.

ASC2230 Aviation Law & Regulations
Credit Hours: 3
An introduction and analysis of the regulations and laws governing airport and airline operations, incorporating aviation safety. Topics of discussion include the major regulations to include: Federal Aviation Regulations (FARS) 77, 108, 121, 129, 135, 139, 150, 191, and NTSB 830. These topics will include navigable airspace, airport noise and the applicable Advisory Circulars (A/C) that explain compliance. Additionally, these topics of discussion will include an overview of how the regulations are governed and administered, compliance with overview of how the regulations are governed and administered, compliance with regulations, non-compliance, and management of government regulations.

ASC2472 Human Factors in Flight & Air Traffic Control
Credit Hours: 3
This course discusses the human factors issues involved with flight and those affecting air traffic controllers. Students will learn significant aero-medical factors common to the aviation environment and the decision making process. Students will apply knowledge gained through the examination of NTSB accident reports outlining the causes and describing ways an accident could have been prevented.

ASC2870 Aviation Safety
Credit Hours: 3
The primary goal of this course is to provide aspiring aviation professionals with a comprehensive understanding and enhanced awareness of aviation safety. Class will participate in analyzing the probable cause of selected aviation accidents, review detailed analyses of accidents related to topics of human factors, runway incursions, weather, mid-air collisions and mechanical and maintenance issues. Federal agencies which regulate aviation with emphasis on those concerned with safety will also be studied.

ASC2949 CO OP Work Experience
Credit Hours: 3
A course designed to provide training in a student's field of study through work experience. Students are graded on the basis of documentation of learning acquired as reported by student and employer.
ASL1140 American Sign Language I
Credit Hours: 4
Students will acquire the fundamental linguistic principles of American Sign Language and vocabulary totaling approximately 500 concepts, both expressively and receptively. Cultural literacy will be enhanced related to deafness and Deaf culture through reading, writing, and the social environment of the Deaf Community. A variety of classroom literacy activities and exercises, supplemented by laboratory and/or multi-media presentations, will be utilized to develop communicative competence and an appreciation for cultural diversity.

ASL1150 American Sign Language II
Credit Hours: 4
Students will acquire intermediate linguistic principles of American Sign Language and vocabulary totaling approximately 500 new concepts, both expressively and receptively. Cultural literacy will be enhanced related to deafness and Deaf culture through reading, writing, and the social environment of the Deaf Community. A variety of classroom literacy activities and exercises, supplemented by laboratory and/or multi-media presentations, will be utilized to develop communicative competence and an appreciation for cultural diversity.

ASL2160 American Sign Language III
Credit Hours: 4
Upon completion of this course, students will have acquired American sign language vocabulary totaling approximately 500 concepts and intermediate to advanced level linguistic principles of ASL, including finger-spelling. Use of the signing space to set up person, objects, place and time will be stressed. Information on the cultural and communication aspects of ASL will also be covered. Content builds upon the foundation established in ASL1140 and ASL1150. After completing the three courses, students should have a receptive and expressive sign vocabulary of approximately 1500 concepts.

AST1002 Horizons in Astronomy
Credit Hours: 3
AST 1002 is an introductory course that outlines the origin, characteristics, and evolution of the solar system, stars, and galaxies and engages the historical milestones in astronomy from the ancient astronomers to the modern observatories. Students are expected to evaluate current and expected future trends in astronomical research and theories using written compositions and analysis in algebra.

AST1003 Astronomy of the Solar System
Credit Hours: 3
AST 1003 is an astronomy course outlining the knowledge gained from space probes of the Sun, the Moon, Earth, and the planets and evaluating the Solar System formation theories. The students will use writing compositions, observations, and mathematical analysis to analyze the data obtained by observing these bodies.

AST1004 Astronomy of Stars & Galaxies
Credit Hours: 3
AST 1004 is an astronomy course outlining the important astronomical entities (e.g., stars, gas, dust, galaxies, quasars) beyond the solar system and their evolution in terms of the quantum mechanical effects in the macro world. The students will use writing compositions, observations, and mathematical analysis to analyze these concepts.

AST1022L Astronomy Laboratory
Credit Hours: 1
Laboratory which allows students to able to collect and analyze data in a variety of experiments covering topics covered in its companion courses; AST 1002, AST 1003, or AST 1004. Students will create experiment reports and conduct telescopic observations.

AST1037 Scientific Search for Life in the Universe
Credit Hours: 3
This interdisciplinary course examines the nature and history of life on earth, possible life favoring environments within the solar system and in the detecting life in the universe at large. Topics of discussion include the evolution and biochemistry of terrestrial life, the formation of organic compounds in the solar system and other extraterrestrial environments, physical constraints, equipment, and strategies for detecting intelligent life in the universe.

ATF1100 Primary Flight
Credit Hours: 3
This course provides the flight training and experience required by the Federal Aviation Regulations (FAA) for a Private Pilot Certificate. Minimum course hours, exclusive of the final check ride, are 36.5 flight hours, with a total of 49.5 instructional hours to include flight briefs and stage exams.

ATF2204 Commercial Flight II
Credit Hours: 3
This course continues the training and experience of Commercial Flight I. Together with ATF2305 and ATF2205, it provides the aeronautical experience required to qualify for the FAA Commercial Pilot Certificate with instrument rating under Federal Aviation
Regulations part. During this course, the student begins commercial pilot training. The minimum flight hours for this segment of commercial training is 44 hours with a total of 32.5 instructional hours to include flight briefs and stage exams.

ATF2205 Commercial Flight III
Credit Hours: 3
This is the final in the series of courses designed to provide the aeronautical experience for the FAA Commercial Pilot Certificate with instrument/multi rating under Federal Aviation Regulations. During this course the student achieves qualification in a complex aircraft. The minimum flight and FTD hours, exclusive of the final check ride, represent 78.5 hours with a total of 41.5 instructional hours to include flight briefs and stage exams.

ATF2305 Commercial Flight I
Credit Hours: 3
This course continues the training and experience begun in primary flight with instrument rating coursework. Students must have a private pilot certificate prior to enrollment and beginning instrument training. Together with ATF2204 and ATF2205, the course provides the aeronautical experience required to qualify for the FAA Commercial Pilot Certificate with instrument rating under Federal Aviation Regulations. The minimum instrument and FTD flight hours, exclusive of the final check ride, are 50 hours, with a total of 71.5 instructional hours to include flight briefs and stage exams.

ATF2400 Multi Engine Transition
Credit Hours: 1
This course provides the flight training and experience required to obtain an FAA multi-engine rating. In order to receive credit for this course, the student must have earned an FAA multi-engine rating.

ATF2500 Flight Instructor Training
Credit Hours: 2
This course provides the flight and ground instruction to earn the FAA Certified Flight Instructor certification. Part 141 approved course work consists of 44 hours of ground instruction and 36.5 hours of flight hours including pre and post flight briefings. Course consists of the number of dual and solo flying hours and oral instruction required in to qualify the individual for the FAA Certified Flight Instructor oral and practical exam. FAA Part 61 training is available to some students. Please see department for eligibility. Student must earn the FAA Flight Instructor certificate to receive a grade.

ATF2600 Flight Simulator Training
Credit Hours: 1
This course provides a total of 15 hours of training in one of the Emil Buehler Flight Lab flight training devices at South Campus. This course may be taken as an elective in any of the aviation programs. Material covered will be tailored to the individual depending upon his/her piloting background. This course may be repeated for a maximum of 3 semester hours to meet a 3 semester hour elective requirement.

ATF2630 Basic Instrument Simulator
Credit Hours: 1
This course provides a total of 15 hours of training in one of the Buehler Flight Lab multi-engine flight training devices at South Campus. The course consists of 5 hours of lecture and 10 hours in the flight training device. This course may be taken as an elective in any of the aviation programs.

ATT1100 Aeronautical Science
Credit Hours: 3
An introduction to the theory of flight, this course is required for all aviation programs. It includes elementary aerodynamics, the major components of airplanes and their functions, the pertinent Federal Aviation Administration (FAA) regulations and basic airspace, aircraft performance and basic navigation, an introduction to meteorology and weather services and human factors. Successful completion of ATT1100 and ASC1100 will prepare students for the FAA Private Pilot (airplane) Computerized Knowledge Exam.

ATT2110 Commercial Flight Theory
Credit Hours: 3
Provides the aeronautical information needed to satisfactorily complete the FAA Commercial Pilot Knowledge Exam. Subject matter is tailored to the needs of the advanced pilot. It includes aerodynamics, airplane performance and systems, navigation, physiological factors, Federal Aviation Regulations and weather.

ATT2120 Instrument Flight Theory
Credit Hours: 3
Prepares student for FAA Instrument Rating (Airplane) Exam. Physiological factors involved with instrument flying, the functioning of basic flight instruments and their use in controlling aircraft under instrument conditions, electronic aids and their use, communications, the airways system, IFR charts, regulations and procedures as related to instrument flight.

ATT2820 Introduction to Air Traffic Control
Credit Hours: 3
This course covers fundamental topics such as history and an explanation of past decisions affecting current air traffic control systems, navigation, procedures and phraseology, separation of aircraft in the ATC system. The course will also provide an in-depth look at the future of air traffic control and employment opportunities for air traffic controllers.
ATT2821C ATC Radar Procedures with Lab
Credit Hours: 4
Topics such as radar rules and applications required by FAA Order J07110.65V. Chapters 4, 8, and 6 are covered in this course. This course will be adapted to mirror a radar position in operation at Academy TRACON. In doing so, this course will teach the student the basic requirements needed to work as a radar controller in a terminal facility. Topics taught will include radar systems, radar identification, radar separation, vectoring, phraseology, and issuing approach clearances. The lab portion will mirror the Academy TRACON RADAR position.

ATT2822C VFR Tower Operations with Lab
Credit Hours: 4
This course covers the J07110.65 Air Traffic Control manual Chapter 3. Chapter cover fundamental rules and procedures required in a VFR tower for the safe and orderly flow of aircraft operating in a VFR or IFR environment. This course teaches the requirements needed in a terminal facility that utilizes air/ground communications, visual signaling, and other devices to provide ATC services to aircraft operating in the vicinity of an airport or a movement area. The lab portion will mirror the Academy Airport. The student will be required to demonstrate practical application of the rules and procedures in use at the airport.

ATT2824C ATC Enroute Operations With Lab
Credit Hours: 4
This course covers the J07110.65 Air Traffic Control Manual Chapters 5, 6, 7, 8, 9, 10, 11, 12, and 13, J07350.7 Location Identifiers, IFR Enroute Low and High Altitude Charts. These orders cover the fundamental rules and procedures required in the Enroute environment commonly referred to as the CENTER. This course will teach the requirements needed to an enroute facility that utilizes air/ground communications and other devices to provide ATC services to aircraft operating along the Federal Airways and Jet Route Systems. The lab portion will mirror a sector in operation at Miami Center. The student will be required to demonstrate practical application of the rules and procedure in use at this center sector.

ATT2890 ATC Capstone Project
Credit Hours: 1
This course covers the practical application of JO7110.65 Air Traffic Control Manual. The course will evaluate what the student has learned and retained throughout the CTI program. The student will be required to successfully complete a 100 question exam covering the CTI prerequisite courses and demonstrate the practical applications in Center Radar Simulation, Terminal Radar Simulation, and Tower Simulation. Students successfully completing the exam and practical will take the Certified Tower Operator's Exam administered by an FAA examiner the last week of class.

AVM1440 Airport & Airline Security
Credit Hours: 3
An introduction and analysis of the regulations and laws governing airport and airline security, including an in-depth look at Federal Aviation Regulations 49 CFR 1544, FAR Part 121, 129, and 49 CFR 1520; Topics of discussion include: a historical perspective and events that have led to the evolution of aviation security; preventive measures, and current trends in security; an introduction to terrorist activities, motives, weapons of mass destruction, and countermeasures at threats to aviation.

AVM1940 Airport Operations Internship I
Credit Hours: 3
Practical application of acquired knowledge at a certificated airport. Student exposed to airside related environment including: airfield inspections; security inspections and enforcement; air traffic control system; navigational aids; airspace inspections & familiarizations; wildlife issues; environmental impacts; landside issues such as parking management, ground transportation systems; operational contract administration; revenue control systems; equipment monitoring; and bus operations; terminal building operations including, physical building inspections, passenger services, passenger flow characteristics; tenant and contractual lease requirements; safety and security of passenger terminals. The student is introduced to airport maintenance programs and systems as well as general aviation environment.

AVM2301 General Aviation Marketing & Management
Credit Hours: 3
This course is designed to provide an overview of the general aviation industry including its history and important role within the air transportation sector of the economy. The varied uses of general aviation aircraft and the management and marketing role of the fixed base operator are thoroughly explored. Included are the basic marketing concepts and procedures involved in the sale of general aviation aircraft and components.
to private industry and government. Particular emphasis will be placed on the management of corporate/business aircraft and commuter airlines.

AVM2410 Airport Management
Credit Hours: 3
Provides a comprehensive examination of the major functions of airport management and the concepts underlying airport planning and construction. The controlling factors in the development of an airport, such as size and forecasting volumes, design considerations; including runways configurations, site, location requirements, master planning and zoning laws will be examined. The socioeconomic effect of airports on the communities they serve will be explored.

AVM2450 Airport Planning & Design
Credit Hours: 3
Introduction to the initial design of airports and adaptations made as airports experience growth. Topics of discussion include: analysis of runway and taxiway design, terminal ramp areas, terminal facilities, airport parking and roadway systems based on airport capacity forecasts; intended use, funding, and community demographics. Discussions also include the modification and adaptation of existing airport facilities, airport master plans, air cargo facilities, airport access, and environmental impacts of airport planning and design.

AVM2510 Airline Management
Credit Hours: 3
An introduction to the administrative aspects of airline operation and management. Topics include the structure of the airline industry in the United States including first, second, third level carriers, the annual profit plan, uniform system of accounts and reports, organizational planning, demand analysis, scheduling, the theory of pricing, fleet planning, facilities planning and airline financing.

AVM2941 Airport Operations Internship II
Credit Hours: 3
Practical application of acquired knowledge at a certificated airport. The student will be exposed to the finance, business, legal, and public relations aspects of Airport Management. Intern will: gain experience in the collection of rents and allocation of monies in airport operation. Receive knowledge on how grant money is applied for and received as well as the business aspect of leasehold compliance; exposure to legal aspect of airport operation, including compliance with federal and state laws, liability claims and procedures. Exposure to Airport Planning, Airport Master Plan, construction and refurbishment of airport facilities, airport layout plan, and airspace studies. Work with airport public relations and marketing personnel on communicating with media and marking the airport as a business enterprise toward potential airlines and tenants.

AVS0090C Avionics Fundamentals
Clock Hours: 180.00
Content includes but is not limited to troubleshooting, repair and installation of airborne radio communications, radio navigation and radar equipment systems in accordance with regulatory and industry standards. Skills preparation for passing licensing/certification tests required by industry forms an integral part of the curriculum. The course content also includes training in communication, leadership, human relations and employability skills; and safe, efficient work practices.

AVS0091C Avionic Installer
Clock Hours: 180.00
Content includes but is not limited to troubleshooting, repair and installation of airborne radio communications, radio navigation and radar equipment systems in accordance with regulatory and industry standards. Also included is instruction in basics of AM and FM transmitters and receivers and avionics equipment. Skills preparation for passing licensing/certification tests required by industry forms an integral part of the curriculum.

AVS0092C Avionics Communication Systems
Clock Hours: 180.00
The purpose of this program is to prepare students for employment as radio mechanics (85514608) and as avionics technicians (823.281-010). The course content includes, but is not limited to, troubleshooting, repair and installation of air-borne radio communications, radio navigation, and radar equipment systems in accordance with regulatory and industry standards. Also included is instruction in basics of AM and FM transmitters and receivers and avionics equipment. Skills preparation for passing licensing/certification tests required by industry forms an integral part of the curriculum.
Clock Hours: 180.00
The purpose of this program is to prepare students for employment as radio mechanics (85514608) and as avionics technicians (823.281-010). The course content includes, but is not limited to, troubleshooting, repair and installation of air-borne radio communications, radio navigation, and radar equipment systems in accordance with regulatory and industry standards. Also included is instruction in basics of AM and FM transmitters and receivers and avionics equipment. Skills preparation for passing licensing/certification tests required by industry forms an integral part of the curriculum. The course content also includes training in communication, leadership, human relations and employability skills; and safe, efficient work practices.

BAS0001 BAS New Student Orientation
Clock Hours:
This orientation seminar will provide new bachelor of applied science students with the knowledge of policies, procedures, and strategies essential to success in the programs of supervision & management, technology management, and information technology.

BCH3023 Elementary Organic & Biological Chemistry
Credit Hours: 3
This course is designed to introduce elementary organic chemistry and biochemistry to students in the environmental science curriculum. This is a terminal course and is not part of the regular organic chemistry sequence.

BCH3033 Biochemistry I
Credit Hours: 3
The study of the structure and function of biomolecules within the cell (proteins, carbohydrates, lipids, and nucleic acids), and the monomeric units that make them. Biological transport in cell membranes, enzyme catalysis, DNA replication and transcription, and protein synthesis will also be studied.

BCN1251C Building Construction Drawing I
Credit Hours: 4
This is the first in a two-course sequence of construction drawing courses. The first half of the semester will include a review of basic drafting techniques. The second half will be devoted to an in-depth study of residential construction working drawings and how they are prepared. AutoCAD will be used extensively as one of the tools for preparing drawings.

BCN1272 Building Construction Plans Interpretation
Credit Hours: 2
This course is designed to provide an overview of construction documents and to develop the student's ability to quickly interpret working drawings. Emphasis is on architectural and structural details with limited coverage on mechanical and electrical aspects.

BCN2253C Building Construction Drawing II
Credit Hours: 4
This is the second in the sequence of the building construction drafting courses. The focus of this course will be on the development of advanced drafting techniques while gaining an understanding of more complex construction procedures for commercial buildings. Advanced AutoCAD techniques will be used extensively as one of the tools for preparing drawings.

BCN2560 Mechanical & Electrical Systems
Credit Hours: 3
Acquaints student with mechanical and electrical equipment commonly used in high rise and commercial buildings. Presents fundamentals of air conditioning, heating, lighting, communicating and wiring for electrical equipment. Includes a study of specialty equipment such as solar heating.

BCN2614C Construction Estimating II
Credit Hours: 3
A study of construction contracts, contractor responsibilities, job planning, scheduling, selection of equipment, methods of construction and safety standards. The student is required to make quantity takeoffs from a set of plans to do pricing of labor and materials.

BCN2721C Construction Planning & Cost Control
Credit Hours: 3
The student plots job progress, draw schedules; studies cash flow, billing, financing, job ledgers inventory, collection methods, payroll, overhead, financial statements, balance sheets, income statements, net worth, equipment and property purchases, credit and borrowing principles, term interest, points and closing cost, depreciation, and financial ratios. The student studies the effects on pricing of variation in delivery time, quantities, payment terms, purchase orders, sub-contracting, inventory and other aspects of cost control.

BCT1706 Construction Documents
Credit Hours: 2
This is designed to familiarize students with documents used in the construction industry, facets of the construction process, contractual relationships, the relationship of documents to each phase of construction and an overview of the Construction Specifications Institute's (CSI) 16 divisions. At the conclusion of the course, students will have gained the proficiency necessary to pass the Construction Documents Technologist (CDT) certification exam given by the CSI.

BCT1743 Building Construction Law
Credit Hours: 2
A study of the legal aspects of construction contracts and the responsibilities arising particularly from the field operations. Also includes relationship of general contractor to owner, architect, and subcontractor; mechanics lien law; bonds; labor law; and other statutes and ordinances regulating contractors.

BCT1767 OSHA Standards
Credit Hours: 2
This course is designed to give students an awareness of the hazards associated with the construction industry's working environment. Emphasis is on OSHA regulations and the knowledge to improve the overall safety on a job site. At the successful conclusion of the course, students will receive OSHA certification.

BCT1770 Construction Estimating I
Credit Hours: 2
An analysis and determination of building construction costs. Commences with the classification of materials, labor, and subcontracted work into the smallest manageable units. Development of a simple estimate for a residential structure.

BCT2040 MEP Plans Interpretation
Credit Hours: 2
This course is designed to develop the student's ability to quickly interpret working drawings. Emphasis is on the details and specifications of mechanical, electrical, and plumbing plans.

BCT2710 Infrastructure Coordination
Credit Hours: 2
This course provides the student with an overview of the various agencies related to the construction industry. Special emphasis is on the need for and the manner of coordinating with these agencies. Students will receive exposure to the variety of permits, learn to interface with the agencies in order to coordinate the permit process, and understand how this coordinates with the project.

BCT2720C Construction Scheduling
Credit Hours: 3
Orderly flow of steps from start to finish in a construction project. Basic concepts and techniques of the PERT AND CPM methods of network planning and scheduling will be covered. Course will develop skills necessary to successfully apply the Critical Path Method to the construction industry and answer the critical path problems found on the state certification exam.

BCT2760 Building Codes & Regulations
Credit Hours: 3
A rigorous review and study of the South Florida Building Code as it applies to structures and safety. For professionals employed as inspectors, architects, engineers and contractors.

BCT2787C Mechanical Electrical Plumbing Drawing
Credit Hours: 3
The focus of this course will be on the development of advanced drafting techniques while gaining an understanding of more complex construction procedures for commercial and institutional buildings as it relates to mechanical, electrical, and plumbing. Advanced ArchiCAD, AutoCAD &/or MicroStation techniques will be used extensively for preparing drawings.

BCT2941L Building Construction Field Experience
Credit Hours: 1
This course is designed to provide students with field experiences, including shadowing and job site visits which help the student understand the organizational structure of a variety of construction companies and how the companies function.

BOT2010 General Botany
Credit Hours: 3
Course designed to treat entire plant kingdom with emphasis on structure, function, and genetics of flowering plants. Fundamental cell and tissue structure of both vascular and non-vascular plants are studied. Associated physiological and chemical effects as related to function are emphasized.

BOT2010L General Botany Laboratory
Credit Hours: 1
Laboratory experiments and field trips to accompany BOT2010. Upon successful completion of this course, the students should be able to demonstrate knowledge of
the plant kingdom through prescribed activities that focus on morphology, taxonomy, anatomy and physiology of selected representative specimens. Dissection exercises included.

BOT2800 Plants & People
Credit Hours: 3
This course will emphasize the role of plants in the development of civilizations, and the influence of plants on world history, politics, economics and culture. Will survey important plants and plant products from different cultures around the world.

BSC1005 General Biology
Credit Hours: 3
Course designed to give students an understanding of principles of Biology, while focusing on the nature and activities of living organisms.

BSC1005L General Biology Laboratory
Credit Hours: 1
Two hours of laboratory weekly which provides hands on activities that develop basic laboratory skills while reinforcing basic concepts in biology. Dissection exercises may be a component of this course.

BSC2010 Introduction to Biology I
Credit Hours: 3
This course is the first of a two-course sequence introducing science majors to biological principles including cell structure, function, communication, reproduction, biochemistry and metabolism, classical and molecular genetics, and genetic engineering. Upon successful completion of this course, the students will be able to explain the methods of science, describe the characteristics of life, describe structure, function, and communication of cells, distinguish mitosis and meiosis, describe cell energetics, photosynthesis and respiration, solve genetics problems, and describe major advances in genetic engineering.

BSC2010L Introduction to Biology I Laboratory
Credit Hours: 1
This laboratory course is the first of a two-course sequence introducing science majors to biological principles including cell structure and function, cell reproduction, biochemistry and cell metabolism, classical and molecular genetics, and genetic engineering.

BSC2011 Introduction to Biology II
Credit Hours: 3
This course is the second of a two-course sequence introducing science majors to biological principles including a study of the diversity of organisms, evolution and population dynamics, and ecology. Dissection exercises included.

BSC2085 Human Anatomy & Physiology I
Credit Hours: 3
A survey of the structure, function, and chemistry of the human body considering the following topics: chemistry, body organization, the cell, tissues, membranes, glands, the integumentary system, the skeletal system, the muscular system, the nervous system, and the special senses.

BSC2085L Human Anatomy & Physiology I Laboratory
Credit Hours: 1
A survey of the structure, function, and chemistry of the human body considering the following topics: chemistry, body organization, the cell, tissues, membranes, glands, the integumentary system, the skeletal system, the muscular system, the nervous system, and the special senses.

BSC2086 Human Anatomy & Physiology II
Credit Hours: 3
A continuation of the Anatomy and Physiology sequence, including the following topics; the circulatory system, the respiratory system, the digestive System, the urinary system, fluid and electrolytes and the reproductive System.

BSC2086L Human Anatomy & Physiology II Laboratory
Credit Hours: 1
Laboratory experiments coordinated with BSC1086, including microscope observation, study of anatomical models and dissection. Dissection exercises included.

BSC2421 Introduction to Biotechnology
Credit Hours: 3
This lecture based course provides an introduction to concepts and principles associated with current accepted biotechnological practices in the areas of laboratory
safety cell culture techniques, laboratory skills (measurements and calculations, preparation of solutions, use of various instruments) and microscopy. In addition, methods of DNA extraction, amplification, gene cloning, nucleic acids and protein electrophoresis and fingerprinting will be covered.

BSC2421L Introduction to Biotechnology Laboratory Credit Hours: 1
This laboratory course provides hands-on experience in basic and common biotechnology laboratory techniques in the areas of laboratory safety, culture techniques, laboratory skills (measurements and calculations preparations of solutions, use of various laboratory instruments), and microscopy. In addition, methods in DNA extraction and amplification, gene cloning, nucleic acids, and protein electrophoresis and fingerprinting will be demonstrated.

BSC2910 Directed Independent Research
Variable Credit Course (1-3 Credit Hours)
Students (individually or in a group) will conduct research projects or certain aspects of research projects under the supervision of the instructor. This course is intended to help students acquire skills in applying research principles and obtaining practice in rigorous data collection and reporting. Hours may vary.

BSC2949 CO OP Work Experience
Credit Hours: 3
A course designed to provide training in a students field of study through work experience. Students are graded on the basis of documentation of learning acquired as reported by student and employer. Prerequisite: Co-Op Department approval. Students will be assigned specific course prefixes related to their academic major prior to registration.

BSC4846 Scientific Communication
Credit Hours: 3
Introduces students interested in scientific research to various techniques and software important for data processing and presentation of research data. Students learn to effectively present research to the general public and to the scientific community in written form, such as research proposals, conference presentations, seminars and publications.

BSC4911 Independent Research in the Biological Sciences
Credit Hours: 3
Students (individually or in a group) will conduct research projects or certain aspects of research projects. This course is intended to help students acquire skills in applying research principles and obtaining practice in rigorous data collection and reporting. Hours may vary. Instructor permission required. The instructor may incorporate any 5 or more objectives as appropriate to the given student project.

BSC4948 Senior Internship
Credit Hours: 3
A course designed to provide training in a student’s field of study through work experience. Students are graded on the basis of documentation of learning acquired as reported by student and employer.

BUL2241 Business Law I
Credit Hours: 3
This course covers basic principles of law and their application to business problems. Topics include a discussion of legal rights and social forces; the legal relationships of government, business and society; law of contracts; personal property, bailments, sales of goods, torts and business crimes.

BUL2242 Business Law II
Credit Hours: 3
This course provides a study of the legal principles covering negotiable instruments, creditors’ rights and secured transactions; agency, employer-employee relations; franchises, insurance, bankruptcy, partnerships, corporations, and real property.

BUL3130 Business Law & Ethics
Credit Hours: 3
This course explores the nature of legal, ethical and societal environments of business. Emphasis is placed on business’s social, legal, political and ethical responsibilities to both external and internal groups for business. Topics include corporate social responsibility, legal, political, and ethical aspects of business, state and federal laws, contracts, intellectual property, employment law, product liability, safety issues and environmental regulation.

BUL4264 International Business Law
Credit Hours: 3
Students will be exposed to the legal implications of transacting business across national borders. The focus will be on transactional international business law including, the legal and ethical environment of international business, international contracting,
importing-exporting, trade finance, and international intellectual property law and licensing. The student will gain an appreciation of the special risks of conducting business internationally and the legal pitfalls associated with those risks.

CCJ1020 Introduction to Criminal Justice
Credit Hours: 3
Introduction to the historical and philosophical background of the agencies of the Criminal Justice System. An examination of the relationships between the police, courts and correctional systems.

CCJ2191 Human Behavior in Criminal Justice
Credit Hours: 3
A consideration of human behavior and how it relates to the duties and responsibilities of the criminal justice practitioner.

CCJ2933 Corrections Practicum
Credit Hours: 3
This course offers practical experiences in corrections or related disciplines of criminal justice giving the student the opportunity to apply classroom knowledge.

CCJ2949 CO OP Work Experience
Credit Hours: 3
A course designed to provide training in a student's field of study through work experience. Students are graded on the basis of documentation of learning acquired as reported by student and employer. Prerequisite: Co-Op Department approval. Student will be assigned specific course prefixes related to their academic major prior to registration.

CDA4411 Systems Integration and Architecture
Credit Hours: 3
This course provides the student with a detailed understanding of computer hardware and system software. The material covered in this course is intended to establish a platform of technical knowledge for systems analysis, design, configuration, procurement, and management.

CEN4341 Platform Technologies
Credit Hours: 3
IT professionals will encounter a variety of platforms in their career. The role of the IT professional is to select, deploy, integrate and administer platforms or components to support the organizations IT infrastructure. This knowledge area includes the fundamentals of hardware and software and how they integrate to form essential components of IT systems.

CEN4722 Human Computer Interaction
Credit Hours: 3
This course will provide the student the necessary elements in understanding and accomplishing the Human Computer Interaction in the area of Information Technology. The student will learn user centered methodologies in the design, development, evaluation and employment of application and system software.

CET1114C Digital Techniques
Credit Hours: 3
The study and application of digital logic circuits. Topics include binary, octal and hexadecimal number systems, Boolean algebra, Karnaugh mapping, logic gates, flip flops, counters, and registers, applications in combinational and sequential logic systems. Extensive laboratory practice.

CET1117C Microprocessors I
Credit Hours: 3
Study of the organization and operation of a stored program digital computer with emphasis on CPU operation in response to assembly and machine language instructions. Methods of selecting and operating I/O devices under program control will also be studied. Course work includes sophisticated assembly language programming for the microprocessor.

CET1461C Technical Computer Applications
Credit Hours: 3
Technical computer applications, including the use of the Windows operating system, computer applications such as word processing, spreadsheets, presentation graphics, an introduction to CAD (Computer-Aided Design) and electronic simulation software is presented with emphasis on the solution of problems in the Engineering Technology fields. This course is geared towards the Engineering Technology student.

CET1600C CISCO Networking I
Credit Hours: 3
This course introduces the architecture, structure, functions, components, and models of the Internet and other computer networks. The principles and structure of IP addressing and the fundamentals of Ethernet concepts, media, and operations are introduced to provide a foundation for the curriculum. By the end of the course, students will be able to build simple LANs,
perform basic configurations for routers and switches, and implement IP addressing schemes.

CET1610C CISCO Networking II  
Credit Hours: 3  
This course describes the architecture, components, and operations of routers and switches in a small network. Students learn how to configure a router and a switch for basic for basic functionality. By the end of this course, students will be able to configure and troubleshoot routers and switches and resolve common issues with RIPv1, RIPng, single-area and multi-area OSPF, virtual LANs, and inter-VLAN routing in both IPv4 and IPv6 networks.

CET1615C CISCO Networking III  
Credit Hours: 3  
This course describes the architecture, components, and operations of routers and switches in larger and more complex networks. Students learn how to configure routers and switches for advanced functionality. By the end of this course, students will be able to configure and troubleshoot routers and switches and resolve common issues with OSPF, EIGRP, and STP in both IPv4 and IPv6 networks. Students will also develop the knowledge and skills needed to implement a WLAN in a small-to-medium network.

CET1620C CISCO Networking IV  
Credit Hours: 3  
This course discusses the WAN technologies and network services required by converged applications in a complex network. The course enables students to understand the selection criteria of network devices and WAN technologies to meet network requirements. Students learn how to configure and troubleshoot network devices and resolve common issues with data link protocols. Students will also develop the knowledge and skills needed to implement virtual private network (VPN) operations in a complex network.

CET1630C Network Cabling Technologies  
Credit Hours: 3  
This course is designed for students interested in the physical aspects of voice and data network cabling and installation. The course focuses on cabling issues related to data and voice connections and provides an understanding of the industry and its worldwide standards, types of media and cabling, physical and logical networks, as well as signal transmission.

Students will develop skills in cable termination with both jacks and punch blocks, reading network design documentation, pulling and mounting cable, cable management, cable labeling, setting up telecommunications rooms, and patch panel installation and termination, as well as basic cable testing and troubleshooting, and basic cabling calculations. This hands-on, lab-oriented course stresses documentation, design, and installation issues, as well as laboratory safety, on-the-job safety, and working effectively with others. The Panduit Network Infrastructure Essentials course will provide a good start in a career path leading to becoming a network technician, technical support specialist, maintenance technician, testing engineer, information systems planner, and systems integrator. This course will also assist in getting students ready to enter an electrical engineering degree program.

CET2123C Microprocessors II  
Credit Hours: 4  
Analysis of 8/16 bit microprocessors and microcomputers with emphasis on logic, timing and interfacing of the microprocessor. The student will design circuits and programs to interface memory and peripheral devices in a microprocessor based system. Extensive Laboratory practice is an integral part of this course. Students will design and develop a microprocessor project board as part of this course.

CET2486C Networking Technology  
Credit Hours: 3  
This course covers topics in networking technology including OSI communications, networking and services, as well as troubleshooting of networking devices and components. Networking optimization is also included.

CET2625C CISCO CCNP I  
Credit Hours: 3  
This course provides students with the knowledge and skills necessary to use advanced IP addressing and routing in implementing scalable and secure Cisco ISR routers connected to LANs and WANs. The skills developed by students completing this course will help prepare them for the Cisco Route Exam.

CET2627C CISCO CCNP II  
Credit Hours: 3  
This course provides students with knowledge and skills necessary to plan, configure and verify the implementation of complex enterprise switching solutions using Cisco's Campus Enterprise Architecture.
The skills developed by students completing this course will help prepare them for the Cisco Switch Exam.

CET2628C CISCO CCNP III
Credit Hours: 3
This course provides students with the knowledge and skills necessary to plan and perform regular maintenance on complex enterprise routed and switched networks and to use technology-based practices and a systematic ITIL-compliant approach to perform network troubleshooting. The skills developed by students completing this course will help prepare them for the Cisco Troubleshoot Exam.

CET2660C CISCO CCNA Security
Credit Hours: 3
CCNA Security equips students with the knowledge and skills needed to prepare for entry-level security specialist careers. It provides a hands-on introduction to network security.

CET2742C Advanced Networking
Credit Hours: 3
This course is for support professionals who are new to networking services and will be responsible for installing, configuring, managing, and supporting a network infrastructure that uses various networking services. It also provides students with the prerequisite knowledge and skills required for implementing and administering directory services such as Microsoft Active Directory.

CGS1060C Computer & Internet Literacy
Credit Hours: 3
This is an introductory course in basic computer and internet use. It covers computer hardware and software fundamentals (including the use of Windows), key productivity applications (including word processing, spreadsheets, and presentation systems), and living in an online world (including network fundamentals, e-mails, and the effective use of the Internet as a communication tool and information resource). Students will develop basic computer skills to aid them with college studies and workforce readiness. Hands-on use of a personal computer is required.

CGS1504C Database Management
Credit Hours: 3
This course is an introduction to database management. Using appropriate database software, students will learn to maintain and manipulate data in an organized, accessible and accurate manner. Emphasis is placed on the use of microcomputer database management software for common business applications.

CGS1557C Internet Site Design
Credit Hours: 3
This course is an entry-level course that provides students with baseline technical knowledge and skills of Internet, intranet, and extranet technologies. Other topics include validating your HTML and CSS code, employing search engine optimization (SEO), using style sheets to format Web page content, and implementing fundamental design concepts. Students will gain a basic knowledge and/or competency of Internet skills and tasks in 2 core content areas: Internet Business Foundations and Site Development Foundations.

CGS1510C Electronic Spreadsheet
Credit Hours: 3
This course provides hands-on applications with a spreadsheet software package. Through lecture and lab practices, students will develop skills that create, manipulate and utilize spreadsheets.

CGS1540C Database Management
Credit Hours: 3
This course is an introduction to database management. Using appropriate database software, students will learn to maintain and manipulate data in an organized, accessible and accurate manner. Emphasis is placed on the use of microcomputer database management software for common business applications.

CGS2100C Computer Applications
Credit Hours: 3
This is an intermediate-level course in computer applications software. Students will gain knowledge and experience in the use and capabilities of word-processing, spreadsheet, database, and presentation graphics applications. Through case studies, students will learn to develop comprehensive solutions to various types of problems. Integration between applications will be emphasized.

CGS2554C Web Development 3
Credit Hours: 3
This course teaches development of E-Commerce web sites for back-end server applications. It stresses development of database information and manipulation for web delivery. Students should have complete knowledge of HTML and database management, before taking this course. Students will conceptualize and develop E-Commerce web sites.

CHD1320C Curriculum Planning for Early Childhood
Credit Hours: 3
Content and methods of planning developmentally appropriate activities to enhance children's cognitive, social, emotional, physical and creative development. Lesson plan formats and daily scheduling will be covered.
CHD1331 Creativity for Young Children  
Credit Hours: 3  
This course offers an understanding of theory in children's art, music, and movement activities and their practical classroom application through process oriented and teacher activities.

CHD1334 Children's Literature & Language Arts  
Credit Hours: 3  
This historical perspective will guide a study of qualitative books, such as fairy tales, folk tales, poems, and nursery rhymes. The role of the teacher in the child's acquisition of communications skills will be investigated.

CHD1338 Math & Science for the Young Child  
Credit Hours: 3  
Designed to foster understanding of the development of mathematical thinking and the mental ability of the preschool child. The science portion will enable the pupil to become familiar with the concept and techniques of "sciencing."

CHD1940 Practicum 1: Observation & Evaluation  
Credit Hours: 3  
Offers an opportunity to observe children in child care settings, gain understanding of their behavior and evaluate their environments.

CHD2441 Practicum II  
Credit Hours: 3  
Facilitates practical experiences in techniques of early childhood education. Requires qualified supervision in a school or center for preschool education.

CHD2800 Admin & Mgmt in E C Education  
Credit Hours: 3  
This course will emphasize the design and operation of a childcare facility. Classroom exposure will emphasize and assess site selection, building design and supervisory functions, equipment selection, activity planning, scheduling, financing, budgeting, record-keeping, and marketing.

CHM1020 Introduction to Chemistry  
Credit Hours: 3  
Selected topics from general chemistry. Topics covered include chemical measurements, stoichiometry, atomic structure, periodic table, chemical bonding, inorganic compound nomenclature and formula writing, stoichiometry, gases, liquids, solids, solutions, acid-base chemistry, oxidation-reduction chemistry, energy, and nuclear chemistry.

CHM1020L Introduction to Chemistry Laboratory  
Credit Hours: 1  
Laboratory experiments to accompany CHM1020.

CHM1032 Chemistry for Health Sciences  
Credit Hours: 3  
Selected topics from general chemistry, organic chemistry and biochemistry. This course is designed specifically for Nursing and other Allied Health Technology students.

CHM1032L Chemistry for Health Sciences Lab  
Credit Hours: 1  
Laboratory exercises to accompany CHM1032.

CHM1040 General Chemistry A (Expanded Sequence)  
Credit Hours: 3  
This is the first course in a three semester sequence, CHM1040, CHM1041 and CHM1046. Topics covered include: measurements, stoichiometry, atomic structure, periodic table, chemical bonding, ionic and covalent compounds, nomenclature, and formula writing.

CHM1041 General Chemistry B (Expanded Sequence)  
Credit Hours: 3  
This is the second course in a three semester sequence which includes: CHM 1040, CHM 1041 and CHM 1046. Topics covered include: gases, liquids, solids, solutions acid-base chemistry and ionic reactions, thermodynamics and some descriptive chemistry of non-metals.

CHM1045 General Chemistry 1  
Credit Hours: 3  
This is the first course in a two semester sequence, CHM 1045 and CHM 1046. Topics covered include: chemical measurements, stoichiometry, atomic structure periodic table, chemical bonding, inorganic compounds, nomenclature, formula writing, gases, liquids, solids, solutions acid-base chemistry and ionic reactions and some descriptive chemistry of non-metals. To enroll, it is strongly recommended that students have had previous chemistry at the high school or college level.

CHM1045L General Chemistry I Lab  
Credit Hours: 1  
Laboratory experiments to accompany CHM1041 or CHM1045.

CHM1046 General Chemistry II  
Credit Hours: 3
This is the final course of the two-semester general chemistry sequence: CHM 1045 and CHM 1046; and the final course of the three-semester general chemistry sequence: CHM 1040, CHM 1041, and CHM 1046. Topics covered include thermodynamics, kinetics, equilibrium, electrochemistry, coordination chemistry, descriptive chemistry of metals, nuclear chemistry and an introduction to organic chemistry.

CHM1046L General Chemistry II Lab
Credit Hours: 1
Laboratory experiments to accompany CHM1046E or CHM-1046. Upon successful completion of this course, the students should be able to use appropriate laboratory equipment to safely perform laboratory experiments that relate to the topics covered in CHM-1046 or CHM-1046E, to collect data accurately and to use those data to calculate a reasonable answer or come to a logical conclusion.

CHM2210 ORGANIC CHEMISTRY I
Credit Hours: 3
First part of a two course sequence presenting the structure, preparation, reaction, and nomenclature of various classes of organic compounds and their derivatives. Reaction electronic mechanisms are interpreted and unified in the light of modern theory.

CHM2211 Organic Chemistry II
Credit Hours: 3
Second of the two-part organic chemistry course. A continuation of the study of the remaining classes of organic compounds including use of spectroscopic methods and an introduction to bio-organic molecules.

CHM2211L Organic Chemistry II Laboratory
Credit Hours: 1
Appropriate experiments and preparation to compliment CHM2211.

CHM3203 Organic & Biochemistry
Credit Hours: 3
This course introduces the pre-professional science educator to fundamental organic and biochemical concepts. This is a content course in the B.S. Degree in the BC Science Education Program. The course has been designed to enhance the understanding of organic and biochemical concepts essential for the K-12 classroom. This program has been designed to correlate chemistry concepts with the NSTA National Science Content Standards, the Florida Subject Matter Content Standards, and the Florida Sunshine State Science Standards.

CHM3203L Organic & Biochemistry Lab
Credit Hours: 1
This course accompanies the lectures in CHM3205 Survey of Organic Chemistry and Biochemistry. This is a content laboratory course in the B.S. Degree in the BC Science Education Program. The course has been designed to enhance the understanding of organic and biochemical concepts essential to the K-12 classroom. This program has been designed to correlate chemistry concepts with the NSTA National Science Content Standards, the Florida Subject Matter Content Standards, and the Florida Sunshine State Science Standards.

CIS1000C Introduction to Computer Science
Credit Hours: 3
This course is designed to provide students with a broad perspective of the field of Computer Science, from core issues and concepts inherent to the discipline of computing, to the various sub-disciplines of computer science. Topics include: Number Systems and Data Representation; Computer Components and Architecture including Gates and Circuits; Problem Solving and Systems Development Methodologies; Low-Level and High-Level Programming Languages; Abstract Data Representations and Algorithms; Operating Systems, File Systems and Directories; Information Systems; Artificial Intelligence; Simulation, Graphics, and Other Applications; Networks and The World Wide Web.

CIS1513C Project Management
Credit Hours: 3
This course examines the organization, planning, and controlling of projects and provides practical knowledge on managing project scope, schedule and resources. Topics include project life cycle, work breakdown structure and Gantt charts, network diagrams, scheduling techniques, and resource allocation decisions. Concepts are applied through team projects and tutorials using project management software.

CIS2028 Information Systems
Credit Hours: 3
This course is designed to provide students with a foundational understanding of Information Systems (IS) as they apply to the computer industry. Topics will include Information Systems fundamentals; IS infrastructure; Organizational and business strategies for Information Systems; Information Systems for commerce and collaboration business intelligence and Enterprise Information Systems; security, privacy and ethics for Information Systems; Change Management and ITIL.

CIS2321C Systems Analysis & Design
Credit Hours: 3
This course introduces the process and methodology for system analysis and design. Students will be able to learn the process of system development, the traditional structural approach for system analysis and design, use of modeling tools, adherence to methodological life cycle and project management standards system development strategy and new trends of system development. Through class discussion, hands-on assignments and a team project, students will learn how to translate business requirement into information systems.

CIS2352C Ethical Hacking I
Credit Hours: 3
This course provides an in-depth understanding of how to effectively protect computer networks. Students will learn about the tools and penetration testing methodologies used by ethical hackers to protect corporate and government data from cyber-attacks.

CIS2359C Ethical Hacking II: Capstone
Credit Hours: 3
This course is a continuation of Ethical Hacking I. It supports mastery of the nineteen Certified Ethical Hacking domains. It is a capstone course in which students are assessed based on the objectives of the CEH exam offered by the EC-Council.

CIS2910C Systems Development Capstone
Credit Hours: 3
This capstone course is designed for the student to demonstrate his/her knowledge and skills applicable to the Computer Programming and Analysis degree core competencies and outcomes. The course is designed as a project-based experience focusing on the major phases of the System Development Life Cycle. The project requirements will be designed in conjunction with the students area of curriculum emphasis.

CIS2949 CO OP Work Experience
Credit Hours: 3
A course designed to provide training in a student's field of study through work experience. Students are graded on the basis of documentation of learning acquired as reported by student and employer.

CIS4253 Social & Professional Issues in IT
Credit Hours: 3
In addition to technical skills, an IT professional must understand the social and professional context of IT and computing, and adhere to ethical codes of conduct. This knowledge area covers the historical, social, professional, ethical and legal aspects of computing. It identifies how teamwork is integrated throughout IT and how IT supports an organization. It also stresses professional oral and written communication skills.

CIS4361 Information Assurance & Security
Credit Hours: 3
The information technology (IT) professional must understand, apply, and manage information assurance and security (IAS) in computing, communication, and organizational systems. It is also important for the IT professional to provide users with a framework to be sufficiently security aware to be an asset to the organization rather than a liability. IAS includes operational issues, policies and procedures, attacks and defense mechanisms, risk analyses, recovery, and information security. It should also be noted that many of the essential educational activities in this knowledge area may be illegal if performed outside a controlled environment, or without proper authorization. It is the responsibility of each individual program to appropriately administer these activities.

CIS4596 IT Capstone Project
Credit Hours: 3
This course will give the IT student the ability to utilize what he/she has learned from the IT Program and adapt it to a work environment. This will be accomplished by providing the student a senior project that includes first: project proposal, feasibility studies, identification of intellectual property, and a teamwork environment for project creation, and second: project support which includes: budgets, schedule management, communications through reports and presentations project testing, implementation and final approval.

CJC2000 Introduction to Corrections
Credit Hours: 3
Introduction to the historical events and social issues that have shaped the corrections (prison/jail) system in the U.S., and an examination of contemporary corrections in terms of structure, clients, management, staff, programs and prisoners' rights.

CJC2162 Probation & Parole Procedures
Credit Hours: 3
Examines this important community-based treatment aspect of the corrections system, reviews philosophy and development, the pre-sentence investigation, and supervision methods. Juvenile practices are also included.

CJE1300 Intro to Criminal Justice Administration & Mgmt
Credit Hours: 3
Introduction to principles of administration and managerial concepts characteristic of criminal justice organizations.

CJE2170 Comparative World Police Agencies
Credit Hours: 3
A survey of contemporary foreign law enforcement and criminal justice systems. Includes the operational and philosophical differences emerging from various cultural and legal systems. This course will include case and group studies of selected countries.

CJE2400 Police Community Relations
Credit Hours: 3
A consideration of the significance of establishing good working relationships between the police and the public, including the complex factors that lead to successful police community relations.

CJE2580 Interviews & Interrogations
Credit Hours: 3
This course is designed to cover the techniques, methods, principles and issues of interviews and interrogations for criminal justice officers and investigators. Course offered through Deception Control, Inc., Ft. Lauderdale.

CJE2600 Criminal Investigation
Credit Hours: 3
The investigation activity of a police department is studied to evaluate its organization, function and relationship with other divisions and agencies. Emphasis is placed on the procedural aspects and methodology employed in the investigative process. The student will know the elements of preliminary and follow-up investigations, to include methods of crime scene search, collection and preservation of evidence, and chain of custody concepts.

CJE2640 Introduction to Criminalistics
Credit Hours: 3
An introduction to the scientific aspects of investigation known as criminalistics, with emphasis on crime scene techniques, the collection and preservation of evidence and the examination of evidence. Students will be familiarized with the capabilities and limitations of a police laboratory.

CJE2642 Criminalistics Practicum
Credit Hours: 3
The knowledge and skills developed in the prerequisites are coordinated in practical exercises which will develop expertise in the complete processing of crime scenes.

CJE2643 Advanced Forensic Investigation
Credit Hours: 3
This course explores the scientific and investigative methods used to solve serious crimes against persons. Topics include the advanced principles and theories in crime scene technology, such as specialized evidence collection, such as gun shot, blood splatter and bodies (distinguishing between causes of death, such as accidental, suicide or homicide; the use of autopsies; child and elderly abuse investigation.)

CJE2722 Polygraph Theory & Operations
Credit Hours: 3
Includes the history and development of the polygraph with further emphasis on mechanics of instrument operation, maintenance and calibration. Course offered through Deception Control, Inc. Ft. Lauderdale.

CJE2723 Test QUSTN Constr & Semantics/Personnel Screening
Credit Hours: 3
The construction of test questions appropriate to the personnel aspect of the polygraph is emphasized. Course offered through Deception Control, Inc., Ft. Lauderdale.

CJE2724 Test QUSTN Constr & Semantics/Criminal Cases
Credit Hours: 3
The construction of test questions appropriate to the criminal case aspect of the polygraph is emphasized. Course offered through Deception Control, Inc., Ft. Lauderdale.
CJE2725 Chart Analysis, Validity & Reliability  
Credit Hours: 4  
Validity and reliability of the polygraph is examined, along with an in-depth consideration of chart analysis. Course offered through Deception Control, Inc., Ft. Lauderdale.

CJE2726 Polygraph Operations Practicum  
Credit Hours: 3  
Types of polygraph techniques and examinations are considered with emphasis on conducting examinations in role playing situations in the laboratory. Course offered through Deception Control, Inc., Fort Lauderdale.

CJE2770 Forensic Photography & Visual Documentation  
Credit Hours: 3  
The student is taught specific skills necessary to visually document and photographically preserve crime scenes and evidence, from both technical and legal standpoints.

CJJ2001 Juvenile Justice  
Credit Hours: 3  
An analysis of the criminal justice system as it relates to juveniles. Major topics include: police practices (such as detention, searches and interrogation) when dealing with juveniles, court procedure in juvenile cases and different theories of juvenile rehabilitation.

CJK0001 Introduction to Law Enforcement  
Clock Hours: 10.00  
At the end of this course, students should be able to: understand the values and ethics required for criminal justice officers, understand the consequences of sexual harassment, describe the criminal justice system, describe the structure criminal justice agencies.

CJK0002 Legal  
Clock Hours: 62.00  
At the end of this course, students should understand the Fourth Amendment related to search and seizure, know what constitutes a lawful arrest, be able to articulate the legal justification for the use of force, understand the Fifth and Sixth Amendments related to interrogation of suspects, determine when a crime has been committed and the elements necessary to make an arrest for that crime, understand the legal rules and concepts of evidence, understand civil and criminal liability related to an officer's performance of duties understand an officer's duties and options in civil (noncriminal) incidents, be familiar with the legal considerations when dealing with juveniles.

CJK0013 Interactions in a Diverse Community  
Clock Hours: 40.00  
Communicate effectively and professionally when interacting with people in a variety of circumstances, interact with an individual with physical or developmental disabilities, recognize the signs and symptoms specific to the disability, and provide the most appropriate intervention, interact with veterans in crisis, recognize potential emotional triggers, and recommend available resources, interact with persons exhibiting signs of mental illness using communications skills appropriate for the condition of the individual, and understand how to use the Baker Act for an involuntary examination, interact with a person threatening suicide, assess the risk of suicide, and provide services and stabilize the situation, interact with juveniles, assess their behavioral characteristics, and provide the most appropriate response to a call involving a juvenile, interact with a person suspected of substance abuse, apply officer safety skills, and understand how to use the Marchman Act for an involuntary admission, interact with an elderly individual, understand age-related conditions, and make referrals for appropriate intervention interact with homeless individuals, understand the increasing occurrence of homelessness, and identify related crimes, identify a crisis situation, recognize an officer's duty to recognize, respond and intervene safely and professionally and understand the options available to the officer, and provide the most appropriate intervention, identify high risk by the groups characteristics and ideology and document criminal or suspected criminal activity.

CJK0004 Interviewing & Report Writing  
Clock Hours: 56.00  
At the end of this course, students will: prepare and conduct basic interview to gather information, take notes, identify signs of deception, obtain statements, identify types of reports, forms, and logs, including crime, incident, use of force, disciplinary, traffic crash, organize information chronologically, categorically write reports, apply appropriate grammar and mechanics, apply agency procedures, evaluate report prior to submission, draft probable cause affidavit.

CJK0020 Vehicle Operations  
Clock Hours: 48.00  
This course presents the dynamics of emergency vehicle operations and develops skills in operating a motor.
vehicle in the law enforcement environment. A demonstration of proficiency is required.

CJK0031 First Aid for Criminal Justice Officers
Clock Hours: 40.00
This course provides life-saving skills development in emergency medical situations appropriate for the law enforcement officer, including: CPR and communicable diseases.

CJK0040 Firearms
Clock Hours: 80.00
This course develops proficiency with the semi-auto pistol used by a law enforcement officer. Qualification is required at various lighting levels.

CJK0051 CMS Criminal Justice Defensive Tactics
Clock Hours: 80.00
This course is designed to provide the student defensive skills appropriate for the threat level, within Florida law. Demonstration of proficiency is required.

CJK0064 Fundamentals of Patrol
Clock Hours: 35.00
At the end of this course, students should be able to use radio equipment properly, identify the uses of mobile computer devices, and understand the uses of FCIC/NCIC/NLETS and other electronic database resources understand community-oriented policing and how it is implemented as a problem-solving model, and identify the SARA problem-solving model and its application in real life situations, understand officer safety issues, identify and avoid fatal errors, identify and manage stress, and maintain mental and physical fitness, prepare to patrol, know what a BOLO is and how to create and cancel a BOLO, respond to a call, approach a suspect, set up a perimeter, conduct a building search, make an arrest, transport a prisoner, and process the prisoner at a detention facility.

CJK0065 Calls for Service
Clock Hours: 36.00
At the end of this course, students should be able to respond to calls for service, including well-being and security checks, building alarms, environmental hazards, transportation requests, animal complaints, death notifications, and special event security, respond to disturbances, including crowd control, civil disturbances, civil standbys, and disorderly or irate people, respond to court orders, including arrests and civil processes, and assist with the execution of search warrants, respond to calls concerning vehicle fires, unattended, abandoned, or disabled vehicles, and roadway obstructions or damage, enforce parking violations, impound a vehicle, direct vehicle traffic, and direct pedestrian traffic, respond to people in crisis, including suicide incidents, threats from mental impairments, and situations involving alcohol or substance abuse.

CJK0077 Criminal Investigations
Clock Hours: 50.00
Conduct an initial investigation of crimes against persons, society, property, and economic crimes.

CJK0078 Crime Scene to Courtroom
Clock Hours: 35.00
At the end of this course, students should be able to: process a crime scene conduct a follow-up investigation provide testimony in different types of court proceedings.

CJK0084 DUI Traffic Stops
Clock Hours: 24.00
At the end of this course, students should be able to, understand the problem of and solutions for DUI, identify the DUI laws and related legal issues, identify the signs of alcohol or drug impairment, conduct a DUI traffic stop, follow the three-phase process of a DUI contact, demonstrate proficiency in conducting the Standardized Field Sobriety Tests, make an arrest decision based on specific clues, accurately complete the required documentation for a DUI arrest, provide clear and convincing evidence of DUI in court testimony.

CJK0087 Traffic Stops
Clock Hours: 30.00
At the end of this course, students should be able to: safely pull over a vehicle, identify and articulate the stop/violation, obtain necessary information from the driver/passenger, safely complete the stop, safely effect an arrest, accurately complete the required documentation for a traffic stop.

CJK0088 Traffic Crash Investigation Terms & Legal Considerations
Clock Hours: 32.00
Define and explain the terms and legal considerations associated with crash investigations Respond to a crash scene safely, Assess a crash scene properly, Secure a safe work environment at a crash scene, Provide emergency medical assistance to injured people at a crash scene, if necessary, Obtain pertinent information.
about a crash to determine how and why it occurred. Identify crimes revealed during a crash investigation, if any. Return a crash scene to normal as quickly as possible. Complete driver exchange of information properly. Take appropriate enforcement action. Document a crash correctly in appropriate crash report form.

CJK0092 Critical Incidents
Clock Hours: 44.00
At the end of this course, students should be able to do the following: complete and pass Unit 1, IS-100.LEb Introduction to the Incident Command System and Unit 2, IS-700.a National Incident Management (NIMS), An Introduction, understand local emergency response plans, law enforcement duty-to-act requirements, and the role of law enforcement officers as first responders, know how to respond to an active shooter incident, plan for response to a natural disaster, identify weapons of mass destruction (WMD) and properly respond to WMD incident, including IEDs and VBIEDs, be aware of hazardous material class, name or identification number, identify actions to take to isolate a hazmat incident and choose protective actions to take in accordance with the Emergency Response Guidebook (ERG), recognize the indicators of and paraphernalia used in the manufacture of methamphetamine, describe the indicators of chemical suicide, properly respond to a bomb threat, assess the scene, and search a building or suspected bomb site.

CJK0096 Criminal Justice Officer Phys Fit Training-LE
Clock Hours: 60.00
This course is designed to introduce the student to physical conditioning, aerobic capacity, and wellness conditioning and training.

CJK0221 Correctional X-Over to Law Enforce Intro & Legal
Clock Hours: 47.00
This course is designed to provide transitioning officers a variety of introductory and legal training topics required for the new discipline (and not previously completed by the officer). In addition, this course is mandated by the Florida Criminal Justice Standards and Training Commission for inclusion in the Crossover from Correctional Officer to Law Enforcement Officer training program effective April 1, 2008. This is a limited access course. It requires active certification and employment as a State of Florida correctional officer.

CJK0222 Correctional X-Over to Law Enforcement Comm.

Clock Hours: 56.00
This course is designed to provide transitioning officers specific communication skills required for the new discipline (and not previously completed by the officer).

CJK0223 Correctional X-Over to Law Enforcement Human
Clock Hours: 32.00
This course is designed to provide transitioning officers specific skills related to human issues required for the new discipline (and not previously completed by the officer). These issues include, but are not limited to, crisis intervention, disability awareness, and responding to juveniles.

CJK0240 Law Enforcement Auxiliary Introduction
Clock Hours: 27.00
Course covers requirements for completing the basic recruit training program, ethics, values, and professionalism in both personal and professional lives. Also covered in this course is the criminal justice system and its functions.

CJK0241 Law Enforcement Auxiliary Patrol & Traffic
Clock Hours: 19.00
This course covers officer survival, patrol techniques, contact, arrest, and transporting prisoners, crowd control, incident command and traffic direction, stops and crash investigations.

CJK0242 Law Enforcement Auxiliary Investigations
Clock Hours: 17.00
Course covers the patrol officer's responsibilities in crime scene investigations and criminal investigations to include all types of crimes against both persons and property.

CJK0293 Corr/Corr Prob to LE Overview of Law Enforcement
Clock Hours: 64.00
At the end of this course, students should be able to: understand the values and ethics required for criminal justice officers, understand the consequences of sexual harassment, describe the criminal justice system, describe the structure of criminal justice agencies, understand the Fourth Amendment related to search and seizure, know what constitutes a lawful arrest, understand the Fifth and Sixth Amendments related to the interrogation of suspects determine when a crime has been committed and the elements necessary to make an arrest for that crime, understand the legal rules and concepts of evidence, be able to articulate the legal justification for the use of force, understand an officers
duties and options in civil (noncriminal) incidents, be familiar with the legal considerations.

CJK0295 Crossover Correctional to Law Enforcement
Clock Hours: 35.00
The goal of this course is to prepare recruits physically to perform the duties of law enforcement, correctional or correctional probation officer. Students are required to participate in the total number of wellness hours associated with this cross-over training program.

CJK0296 Corr to LE Reporting Procedures
Clock Hours: 32.00
Prepare and conduct basic interview, gather information, take notes, identify signs of deception, obtain statements, identify types of reports, forms, and logs, including: crime, incident, use of force, disciplinary, traffic crash, organize information chronologically, categorically, write reports, apply appropriate grammar and mechanics, apply agency procedures, evaluate report prior to submission.

CJK0297 Corr to LE Interactions to Crisis Situations
Clock Hours: 10.00
At the end of this course, students should be able to: identify a crisis situation, recognize an officer's duty to recognize, respond and intervene safely and professionally and understand the options available to the officer, and provide the most appropriate intervention, interact with a person threatening suicide, assess the risk of suicide, and provide services and stabilize the situation, understand how to use the Baker Act for an involuntary examination, understand how to use the Marchman Act for an involuntary admission, interact with veterans in crisis, recognize potential emotional triggers, and recommend available resources, identify high risk groups by the group's characteristics and ideology and document criminal or suspected criminal activity.

CJK0300 Introduction to Corrections
Clock Hours: 32.00
At the end of this course, students should be able to: understand the values and ethics required of criminal justice officers; understand amendments to the U.S. constitution applicable to corrections; determine when a crime has been committed; understand the chain of custody and concepts of evidence; be able to articulate the legal justification for the use of force; understand civil and criminal liability as related to an officer's performance of duties; understand the Fourth Amendment.

CJK0305 Communications
Clock Hours: 40.00
At the end of this course, students should be able to: interact professionally with inmates, visitors, and staff in a correctional setting; identify the root causes of miscommunication; use, understand, and interpret nonverbal cues; communicate properly using telephone equipment; communicate properly using portable radio unit; prepare for and conduct an interview; take notes; obtain statements when appropriate; sort information by category; arrange information in chronological order; follow correct format and content when writing a report; identify types of correctional officer reports; use proper elements of report writing; proofread and edit reports; write reports; use a computer for report writing. Course Requirements: students are responsible for reading and reviewing reports.

CJK0310 Officer Safety
Clock Hours: 16.00
At the end of this course, students should be able to: interact professionally with inmates, visitors, and staff in a correctional setting; identify the root causes of miscommunication; use, understand, and interpret nonverbal cues; communicate properly using telephone equipment; communicate properly using portable radio unit; prepare for and conduct an interview; take notes; obtain statements when appropriate; sort information by category; arrange information in chronological order; follow correct format and content when writing a report; identify types of correctional officer reports; use proper elements of report writing; proofread and edit reports; write reports; and use a computer for report writing.

CJK0315 Facility & Equipment
Clock Hours: 8.00
At the end of this course, students should be able to complete the following tasks within a correctional facility: identify common equipment; identify hazardous equipment; interpret responsibilities for equipment accountability; describe equipment storage procedures; list common procedures for issuing, receiving and documenting inventoried equipment; differentiate among weapons; list types of security equipment; identify hazardous materials; identify sensitive supplies; describe the proper handling of sensitive supplies; identify standards for security and inspections; describe methods for entering, exiting and moving within a facility; list elements important to maintaining good sanitation and health.
CJK0320 Intake & Release
Clock Hours: 18.00
At the end of this course, students should be able to: understand the process for accepting a subject into a county detention facility; understand the process for accepting an inmate into a state detention facility; search an inmate and his or her property for contraband; inventory an inmate's property for storage; know types of personal items issued to inmates; understand the importance of taking clear fingerprints; fingerprint a subject; know the relationship between the Florida Crime Information Center and the National Crime Information Center (FCIC/NCIC); understand the importance of getting accurate personal information from an inmate; know the legal issues involving criminal history information; understand the classification process for placing inmates in appropriate housing areas; know inmate security levels; understand the process for releasing an inmate; explain how to check for any outstanding holds or detainers on an inmate.

CJK0325 Supervising in a Correctional Facility
Clock Hours: 40.00
At the end of this course, students should be able to: effectively supervise daily operations at a correctional facility; apply the disciplinary process when an inmate commits a rule or law violation; recognize an inmate's distress or need, assess and refer an inmate to the appropriate service provider; manage the safety and security concerns associated with visitations, work-groups, transports and hospital details; use observational skills to monitor the behavior and activities of inmates; apply count procedures to accurately report the number of inmates within a facility/location; effectively supervise and monitor the dining process within a correctional facility; process mail according to agency rules and regulation.

CJK0330 Supervising Special Populations
Clock Hours: 20.00
At the end of this course, students should be able to: observe, identify, and effectively supervise diverse special population inmates within a housing unit in a correctional setting; maintain officer safety and a high level of professionalism when supervising special population inmates in a correctional setting; maintain care, custody, and control of special population inmates within a housing unit in a correctional setting.

CJK0335 Responding to Incidents & Emergencies
Clock Hours: 16.00
At the end of this course, students should be able to: identify and interpret the response to an emergency; describe the elements of an emergency plan and level of response; identify standard procedures and equipment used when responding to the following emergencies: - inmate escapes - medical emergencies - riots - hostage incidents - facility assaults - fires - hazardous materials - bomb threats - man-made and natural disasters; select the standard procedures for crime scene control; describe how to manage victims, witnesses and suspects; explain investigation and reporting techniques; describe procedures for the chain of custody for evidence.

CJK0340 Officer Wellness & Physical Abilities
Clock Hours: 30.00
At the end of this course, students should be able to do the following: improve their score on the final fitness evaluation; improve understanding of various elements of wellness, e.g., nutrition, weight control, and stress management; adapt a foundation for lifelong fitness.

CJK0392 Crossover Handgun Transition Course
Clock Hours: 24.00
Course is based on the current curriculum as developed by the Florida Department of Law Enforcement, Criminal Justice Standards and Training Commission. This course is designed to familiarize the student with the safe weapon handling and identification of weapon nomenclature, parts and ammunition, handgun drawing and holstering, weapon loading and unloading, basic shooting principles, proficiency on the CJSTC Criminal Justice Firearms Courses of Fire with a handgun during daylight and nighttime, proficiency for weapon handling, proper intervention for weapon malfunctions.

CJK0393 Cross Over Program Updates
Clock Hours: 8.00
This course is designed for instructors to deliver expanded updated instruction on curriculum topics contained in this cross-over program. The eight hours do not have to be taught in one block but may be distributed as needed throughout the program with the approval of the Training Center Director. For example, additional time may be used to integrate updated techniques or instruction from the high liability textbook, apply relevant case law, or review topics from the curriculum textbook not specifically designated for classroom instruction in this cross-over program.
CJK0422 Dart-firing Stun-gun  
Clock Hours: 8.00  
This course will introduce the student to the basics of both the stun-gun and the dart-firing stun-gun, and give them some fundamental knowledge of this emerging tool in criminal justice.

CJK0441C Police Service Aide  
Clock hours: 110.00  
This course is designed to provide students the minimum skills necessary to perform the duties of a Police Service Aide (PSA) and is approved by the Criminal Justice Standards and Training Commission as prescribed by Florida State Statute 316.640.

CJK0442 Traffic Accident / Crash Investigator  
Clock Hours: 80.00  
This course is designed to provide students the minimum skills necessary to perform the duties of a Parking Enforcement Specialist (PES) and is approved by the Criminal Justice Standards and Training Commission as prescribed by Florida State Statute 316.640.

CJK0451 Parking Enforcement Specialist  
Clock Hours: 16.00  
This course is designed to provide students the minimum skills necessary to perform the duties of a Parking Enforcement Specialist (PES) and is approved by the Criminal Justice Standards and Training Commission as prescribed by Florida State Statute 316.640.

CJL1062 Constitutional Law  
Credit Hours: 3  
An examination of the U.S. Constitution, its amendments and its impact on present day criminal justice practitioners.

CJL1100 Criminal Law  
Credit Hours: 3  
Course will be concerned with the sources and elements of criminal law. Emphasis will be placed on criminal law as related to law enforcement officers with particular attention given to the rights and responsibilities of officers in enforcing various criminal laws.

CJL1130 Criminal Evidence & Court Procedures  
Credit Hours: 3  
An examination of the rules governing admissibility of evidence, specifically as they affect the law enforcement officer in the processes of arrest, use of force, search and seizure, presentation and custody of evidence, testimony and court procedure.

CJL1140 Correctional Law  
Credit Hours: 3  
A course in practical law for correctional personnel. Study includes law regulating use of force, civil rights of prisoners, constitutional law, legal service, disciplinary procedures, parole and current case law.

CJL2060 Civil Rights  
Credit Hours: 3  
A survey course of the Federal Rights legislation to include the 13th through 15th Amendments of the Reconstruction Era and the Civil Rights legislation of the 60’s. Special topics include consideration of the American Disabilities Act, Age Discrimination in Employment Act, Equal Employment Opportunities Act, Equal Pay Act, Affirmative Action, and Sexual Harassment.

CLB0001 Student Government  
Clock Hours:  
At Broward College, the student government (SG) is the voice of the students. Student government has many different functions including acting as the liaison between student organizations and the administration. SG is the bridge that students are always welcome to cross, which connects the faculty, staff and administration to the student body. SG researches student concerns and finds ways to resolve problems. The membership is open to any and all interested students. SG also offers various leadership opportunities in many different levels. Selected students become involved in campus, college wide, district, and state level events. The concept of teamwork is constantly practiced, and students learn conflict resolution.

CLB0002 Student Ambassadors  
Clock Hours:  
Student ambassadors promote bcc programs in the community. Broward community college's ambassadors represent bcc at area high schools, civic and professional meetings, GED centers, and locally sponsored career and college nights throughout Broward county. Student ambassadors are eager to spread the word about academic and community enrichment programs at bcc. Ambassadors range in age from 18 to over 50 and their friendships and contacts will endure long after they graduate.
CLB0003 Phi Theta Kappa
Clock Hours:
Phi theta kappa international is the acclaimed international honor society serving American two-year institutions which offer associate degree programs. To become a member of phi theta kappa, one must achieve a degree cumulative grade point average of 3.5 after completing 12 credit hours of college-level course work, and paying lifetime membership dues. Participation in on- and off-campus activities is encouraged. The privileges of membership include the phi theta kappa seal on diplomas, the designation 'phi theta kappa' on transcripts, access to society merchandise, and the distinction of wearing the society’s stole and tassel during commencement exercises.

CLP2140 Abnormal Psychology
Credit Hours: 3
This course concentrates on the explanation of psychological abnormality including symptomatic patterns, causation, and treatment approaches of psychological disorders. This course discusses several types of psychological disturbances and maladaptive behaviors as well as the various diagnostic categories and criteria, terminology, and therapeutic approaches associated with each.

CNT2001 Local Area Networking
Credit Hours: 3
This course is designed as a comprehensive study of microcomputer networking. Topics include the selection, installation, maintenance, and management of network software and hardware.

CNT3504 Networking
Credit Hours: 3
This course teaches the concepts necessary to design, deploy, integrate and administer a communications infrastructure. This course includes data communication concepts that cover telecommunications, the Internet and Internet working principles.

CNT3604 System Administration & Maintenance
Credit Hours: 3
This course will provide the IT professional with the knowledge and the management tools that are needed to design, select, apply, and deploy computer systems. The learned outcomes will allow the student an understanding in system administration concepts that will cover software, hardware, system types, databases, communications documentation, internet, and maintenance.

CNT3702 Infrastructure & Facilities Planning
Credit Hours: 3
Students integrate computer and networking hardware and software into a robust, secure, redundant and resilient infrastructure. Students will research and present findings related to enterprise projects in computer networking design. In addition to the technical requirements the student will learn the business principles of economies of scale, service level agreements, request for proposals, and outsourcing.

COP1000C Introduction to Computer Programming
Credit Hours: 3
This course provides the beginning programming student with the techniques necessary to write well-documented, structured computer programs. The course is intended to emphasize the planning process using examples involving sequence, selection, and iteration. The course is designed to promote good programming practices for further study of other programming languages.

COP1334C Introduction to C++
Credit Hours: 3
This course provides an introduction to computer program design and development using the C++ language. A structured, multi-phase, program development process featuring a series of steps involving problem definition, top-down design, and formal program specification is stressed. The course is intended to provide the novice programming student with the techniques needed to develop well-documented, structured computer programs.

COP2071C Database Design & Programming Using SQL
Credit Hours: 3
This course provides the student with a solid foundation in Relational Database Management Systems and RDBMS technology. It emphasizes an end-to-end solution, beginning with requirements and progressing through conceptual design, logical database design, physical database design, and implementation, using a RDBMS and the SQL language. It involves extensive database manipulation and querying using SQL. It also stresses transaction management concepts, data integrity constraints, and performance issues.
COP2171C Visual Basic Programming
Credit Hours: 3
This course teaches how to create Visual Basic based programs. Students write programs that access databases, use OLE to integrate applications, and act as an OLE Server and as an add-in. This class assumes a working knowledge of basic programming.

COP2222C Programming in Objective-C
Credit Hours: 3
This course introduces students to the Objective-C Programming Language. Upon successful completion of this course, the students should be able to create Objective-C programs that leverage the object-oriented features of the Objective-C language, such as encapsulation, inheritance and polymorphism; use data types, arrays and other data collections; implement error-handling techniques using exception handling, create a GUI, and work in the iOS Environment.

COP2335C Intermediate C++ Programming
Credit Hours: 3
This course continues the study of structured programming and the C++ language begun in COP1334C. Topics will include classes, polymorphism, inheritance, streams, templates, exception handling dynamic memory allocation, and memory management. An introduction to data abstraction and data structures is also included.

COP2360C C# Programming
Credit Hours: 3
This course teaches students how to create C# programs and gives the student a solid foundation on building applications using an object-oriented /event-driven language. Students will write programs using C# controls and their main properties, methods and events. Students will also write programs that access sequential access files and will learn basic programming structures and manipulation of arrays in C#. The class assumes a working knowledge of basic programming control structures.

COP2361C Object-oriented Analysis & Design
Credit Hours: 3
This course focuses on the object-oriented software development process, including object-oriented methodologies and workflows. Students will be able to determine the Use Cases and Domain Model of the problem domain. Create a system design supporting functional requirements. Create a system architecture supporting the nonfunctional requirements and development constraints.

COP2658C IPhone Application Development
Credit Hours: 3
In this course, students will learn how to create mobile applications that can be deployed to iPhone smartphones, tablets or simulators utilizing Cocoa and XCode for development. Emphasis will be placed on learning the underlying iPhone framework and components in order to create quality mobile applications.

COP2660C Android Application Development I
Credit Hours: 3
This course teaches the principles of Android application development. Students will learn how to create mobile applications for deployment to Android smartphones, tablets or simulators utilizing open source software (Java, Eclipse IDE, Android Plug-In and Android SDK) for deployment. Emphasis will be placed on the underlying Android Framework to create quality applications.

COP2800C Programming in JAVA
Credit Hours: 3
This course introduces students to the JAVA Programming Language. Upon successful completion of this course, the students should be able to create Java programs that leverage the object-oriented features of the Java language, such as encapsulation, inheritance and polymorphism; use data types, arrays and other data collections; implement error-handling techniques using exception handling, create an event-driven GUI using Swing components; and implement I/O functionality to read from and write to text files.

COP2801C JAVA Scripting
Credit Hours: 3
This course will teach students to write JavaScript that can be executed on any computer running compatible software. These programs will be created using this object-based scripting language and designed to interact over the Internet or any other similar network with an appropriate Web Browser. Students will learn Java-Script structure and syntax, how to interact with environment variables, use event handlers, perform form validation, create rollover effects and receive an overview of working with cookies. Students will conceptualize and develop interactive web sites using the full features of JavaScript.
COP2821C Visual Basic Development
Credit Hours: 3
This course focuses on how to create an active X control, how to create a component object model (COM), how to incorporate active X and COM components within a visual basic program, how to write visual programs that access a database, and how to incorporate Internet technologies into a visual application.

COP3703 DATABASE CONCEPTS
Credit Hours: 3
This course applies a relational model approach to logical and physical data structure and data concepts and modeling. It also applies a model based on conceptual database design and implementation using current software.

COP3847 Web Systems & Technologies
Credit Hours: 3
Information Technology (IT) applications are increasingly web based. Web technology has grown to include a variety of businesses, academic, organizational and social applications. Diverse multicultural and multilingual user communities now depend on web technology. This knowledge area covers the design, implementation and testing of web based applications including related software, databases, interfaces and digital media. It also covers social, ethical and security issues arising from the web and social software.

COP4858 Integrative Programming & Technologies
Credit Hours: 3
Organizations typically use many disparate technologies that need to communicate and work with each other. A key component to the discipline of information technology is the integration of applications and systems. This knowledge area examines the various types of programming languages and their appropriate use. It also addresses the use of scripting languages, architectures, application programming interfaces and programming practices to facilitate the management, integration and security of the systems that support an organization.

CPO2140 Government & Politics of Spain
Credit Hours: 3
An introduction to the understanding of Spain's governmental process, with emphasis on the structure of Spanish politics, the constitutional framework, the working of the bureaucracy, and the role of interest groups within the context of Spain's constitutional setting.

CRW1001 Creative Writing I
Credit Hours: 3
The course is structured toward producing literary fiction, poetry, dramatic forms, creative non-fiction and other original expression. Student writing will be the primary basis for critical discussion with emphasis on fundamental aspects of poetry, fiction, and/or drama, as illustrated in master writers' work and demonstrated in student work. Lectures, readings, craft analysis, discussions, exercises and workshops provide students with the opportunity to develop the craft of creative writing.

CRW1100 Fiction Writing
Credit Hours: 3
Lectures, readings, craft analysis, discussions, writing exercises, and workshops provide students with the opportunity to analyze fiction and practice the craft of writing fiction. The course is structured toward producing literary fiction. Student writing and master writers' works will be the primary basis for critical discussion, with an emphasis on the fundamental aspects of fiction.

CRW1300 Poetry Writing
Credit Hours: 3
The course is structured toward producing poetry. Student writing will be the primary basis for critical discussion with emphasis on fundamental aspects of poetry, as illustrated in master writers' work and demonstrated in student work. Lectures, readings, craft analysis, discussions, exercises and workshops provide students with the opportunity to develop the poetic creative writing craft.

CRW2002 Creative Writing Workshop II
Credit Hours: 3
A continuing development of creative writing ability.
CRW2003 Advanced Creative Writing Workshop
Credit Hours: 3
A continuing development of creative writing ability. Students may work on independent writing projects. Directed independent study. Instructor's Approval.

CRW2005 Advanced Creative Writing Workshop
Credit Hours: 1
A continuing development of creative writing ability. Students may work on independent writing projects. Directed independent study. Instructor's Approval.

CSL0001 Civic Engagement & Service-learning
Clock Hours:
This non-credit course provides the student with a unique opportunity to examine community service and citizenship in many different facets of our diverse community through both practice and critical reflection. Students who complete this course will be eligible to receive service-learning hours.

CTS1106C Unix
Credit Hours: 3
The UNIX Operating System Essentials course provides instruction in the key features and capabilities of the UNIX OS. Topics include file and directory management, controlling the user work environment, archiving files and using remote commands. In addition, this course explains fundamental command-line features of the UNIX OS, including file system navigation, the vi text editor, file permissions, access control lists (ACLs), command shells, file compression, basic network use, and reading shell scripts. This course prepares students to take the Sun Certified Solaris Associate (SCSAS) Exam.

CTS1111C Linux +
Credit Hours: 3
This course provides students with the knowledge and skills necessary to effectively administer Linux workstations and servers. Students will plan, install, maintain, and troubleshoot Linux operating system services. The skills developed by students completing this course will help prepare them for the CompTIA Linux+ certification exam.

CTS1133C A+ Essentials
Credit Hours: 3
This course provides students with the knowledge required to assemble components based on customer requirements, install, configure and maintain devices, PCs and software for end users, understand the basics of networking and security/forensics, properly and safely diagnose, resolve and document common hardware and software issues while applying troubleshooting skills. Successful candidates will also provide appropriate customer support; understand the basics of virtualization, desktop imaging, and deployment.

CTS1134C Network+
Credit Hours: 3
This course provides students with important knowledge and skills required to implement a defined network architecture with basic network security to configure, maintain, and troubleshoot network devices using appropriate network tools, to understand the features and purpose of network technologies, and to make basic solution recommendations, analyze network traffic, and be familiar with common protocols and media types.

CTS1212C Adobe Photoshop
Credit Hours: 3
This Adobe course teaches students how to fully utilize the latest Adobe Photoshop image editing tool to create and manipulate images. The course includes hands-on experiences with exercises and projects to provide students with a thorough working knowledge of Adobe Photoshop. In this course students learn to paint and retouch images, use layers, support video, work with vector tools, manage digital assets, work with RAW camera files, manage color, and prepare images for output to the web. The skills developed by students completing this course will help prepare them for the Adobe Certified Associate certification exam.

CTS1214C Microsoft Project
Credit Hours: 2
In this course, students will learn to manage project resources, task assignments and scheduling using Microsoft Project in support of workforce skills. They will also learn about the integration and tracking of multiple projects and programs.

CTS1390C Installing & Configuring Windows Server 2012
Credit Hours: 3
This course will give students the initial skills to implement and configure Windows Server 2012 core services, such as Active Directory and the networking services.
CTS1391C Administering Windows Server 2012  
Credit Hours: 3  
This course will give students the skills to maintain a Windows Server 2012 infrastructure, such as user and group management, network access and data security.

CTS1392C Configuring Advanced Windows Server 2012  
Credit Hours: 3  
This course will give students necessary skills to deploy, manage and maintain a Windows Server 2012 infrastructure, such as fault tolerance certificate services, and identity federation.

CTS1806C Advanced Website Design & Development  
Credit Hours: 3  
This course teaches students how to use the Adobe Dreamweaver Integrated Development Environment. Students learn Project requirements, website usability, using rich media content, content control tools, website building techniques, collaboration and Site testing, and how to manage and maintain websites. Students will also use advanced CSS techniques to create sites to the latest W3C standards.

CTS1808C Website Animation  
Credit Hours: 3  
This course teaches students how to produce vector-based animations for the Web using various tools like Adobe Flash (which is the industry-standard software for developing interactive experiences on the Web, desktops, mobile devices, and tablets), and the HTML5 canvas tag combined with CSS and JavaScript.

CTS1851C Certified Internet Webmaster Foundations  
Credit Hours: 3  
This course is an entry-level course that provides students with baseline technical knowledge and skills of Internet, intranet, and extranet technologies. Students will gain a basic knowledge and/or competency of Internet skills and tasks in 3 core content areas: Internet Business Foundations, Site Development Foundations, and Network Technology Foundations. The skills developed by students completing this course will prepare them for the CTW Foundations certification exam.

CTS2120C Security+  
Credit Hours: 3  
This course provides the student with an understanding of the computer, network, infrastructure, and information security issues faced by industry worldwide. Expertise necessary to combat and protect intellectual property from theft and destruction are also developed. The skills developed by students who complete this course will prepare them for the Security+ certification exam.

CTS2131C A+ Practical  
Credit Hours: 3  
This course provides students with the skills required to install, configure, upgrade, and maintain PC workstations, the Windows OS and SOHO networks, in addition the student will be able to utilize trouble-shooting techniques and tools to effectively and efficiently resolve PC, OS, and network connectivity issues and implement security practices.

CTS2148C Project+  
Credit Hours: 3  
This course reviews the entire project life cycle, and thoroughly prepares students for the Project+ certification exam offered by CompTIA.

CTS2156C Microsoft Enterprise Desktop Support  
Credit Hours: 4  
This Microsoft IT Academy course teaches students the skills to support end users who run Microsoft Windows and applications that are included with the operating system, such as productivity applications used in a corporate environment and Microsoft Office applications. It provides students with the knowledge and skills needed to isolate, document and resolve problems on a Windows desktop or laptop computer and a working knowledge of operating in an Active Directory domain environment. The course includes the skills needed to resolve operating system issues by telephone, email, connecting to an end user's system remotely, or by visiting an end user's desktop.

CTS2314C Network Defense & Countermeasures  
Credit Hours: 3  
Students will take an in depth look at network defense concepts and techniques. They will examine theoretical concepts that make the world of networking unique. Along with examining different network defense strategies, this course will explore the advancement of network implementation, as well as, timeless problem solving strategies. The course also covers developing and implementing a security policy.

CTS2383C Managing a Server Network Operating System  
Credit Hours: 3
This course provides students with the knowledge and skills necessary to install and configure a network server and perform post-installation and day-to-day administrative tasks. The course gives the student the background needed to provide technical support for network servers. This course is taught using a network operating dictated by industry conditions. When taught using the Windows 2008 platform this course will assist the student in preparing for the related Microsoft certification examination.

CTS2393C Designing & Implementing a Server Infrastructure  
Credit Hours: 3  
This course will give students the skills and knowledge necessary to design, implement and maintain a Windows Server 2012 Infrastructure in an enterprise scaled, highly virtualized environment.

CTS2394C Implementing Advanced Server 2012 Infrastructure  
Credit Hours: 3  
This course will give students the skills and knowledge necessary for planning, designing and deploying a Windows Server 2012 highly virtualized infrastructure including the Active Directory, storage, security and networking services.

CTS2395C Implementing a Desktop Infrastructure  
Credit Hours: 3  
This course will give students the skills and knowledge necessary to plan, configure, and implement of the Windows Server 2012 desktop services, such as desktop imaging and deployment application / desktop virtualization, and RDP access and infrastructure.

CTS2396C Implementing Desktop Application Environments  
Credit Hours: 3  
This course will give students the skills and knowledge necessary to plan, configure, and implement of the Windows Server 2012 desktop services, such as desktop imaging and deployment, application / desktop virtualization, and RDP access and infrastructure.

CTS2403C Access VBA Programming  
Credit Hours: 3  
This course provides students with the comprehensive knowledge and skills necessary to implement application programming concepts and procedures, and to apply these skills to design, develop, and implement solutions based on Access for Windows.

CTS2420C Microsoft: .NET Foundations  
Credit Hours: 3  
In this advanced course, students with previous Windows Forms development experience gain more advanced Windows Client design and development skills. WinForms and WPF programming models, as well as relative strengths and when to use each technology, are covered.

CTS2434C Microsoft SQL Server Developer I  
Credit Hours: 3  
This course teaches students how to implement a Reporting Services solution in an organization. The course discusses how to use the Reporting Services development tools to create reports, and how to use the Reporting Services management and administrative tools to manage a Reporting Services solution.

CTS2437C Microsoft SQL Server Database Administration I  
Credit Hours: 4  
This course provides students with the knowledge and skills to maintain a Microsoft SQL Server database. The course focuses on teaching individuals how to use SQL Server product features and tools related to maintaining a database.

CTS2438C Microsoft SQL Server Database Administration II  
Credit Hours: 4  
This course provides students with the knowledge and skills to design, optimize, and maintain a database administrative solution for Microsoft SQL Server.

CTS2441C Oracle Database Administration I  
Credit Hours: 4  
This course is your first step towards success as an Oracle professional, designed to give students a firm foundation in basic database administration. In this class, students will learn how to install and maintain an Oracle database. Students will gain a conceptual understanding of the Oracle database architecture and how its components work and interact with one another. Students will also learn how to create an operational database and properly manage the various structures in an effective and efficient manner including performance monitoring, database security, user management, and backup/recovery techniques. The lesson topics are reinforced with structured hands-on practices. This course is designed to prepare students for the corresponding Oracle Certified Administrator Associate exam.
CTS2442C Oracle Database Administration II  
Credit Hours: 4
In this course, the students gain a much deeper understanding of possibly the most important job of a DBA - backup and recovery. The concepts and architecture that support backup and recovery, along with the steps of how to carry it out in various ways and situations, are covered in detail. This includes how to define and test your own backup and recovery scenarios. Also, the DBA learns how to manage memory effectively and how to perform some performance evaluation and tuning tasks, including using some of the advisors. All types of flashback technologies, scheduling jobs inside and outside of the database, and controlling system resource usage are also covered. This course is designed to prepare students for the corresponding Oracle Certified Administrator Professional exam.

CTS2445C Oracle Developer  
Credit Hours: 3
This course starts with an introduction to PL/SQL and proceeds to list the benefits of this powerful programming language. Students are made aware of how to create PL/SQL blocks of application code that can be shared by multiple forms, reports, and data management applications. In addition, creation of anonymous PL/SQL blocks as well as stored procedures and functions are covered in this course. Students enhance their developer skills by learning to develop, execute, and manage PL/SQL stored program units such as procedures, functions, packages, and database triggers. Understanding the basic functionality of how to debug functions and procedures using the SQL Developer Debugger gives way to refined lines of code. Students also learn to manage PL/SQL subprograms, triggers, declaring identifiers, and trapping exceptions. The utilization of some of the Oracle-supplied packages is also in the course. Additionally students learn to use Dynamic SQL, understand design considerations when coding using PL/SQL, understand and influence the PL/SQL compiler, and manage dependencies. This course is designed to prepare students for the corresponding Oracle PL/SQL Developer Certification exam.

CTS2446C Oracle Developer II  
Credit Hours: 3
Oracle Forms Developer is used to build high performance applications for the Internet. Forms Developer is a web based application development tool that helps in quickly constructing database forms and business logic with minimal of effort. In this course students build, test, debug, and deploy interactive Internet applications. Working in a graphical user interface (GUI) environment, they develop an order entry application from the ground up. This application incorporates several advanced features that provide a rich user experience while implementing business rules. This course is designed to prepare students for the corresponding Oracle Forms Developer Certified Professional Certification.

CTS2451C Microsoft SQL Server Developer II  
Credit Hours: 3
This course provides in-depth knowledge on designing a Business Intelligence solution by using Microsoft SQL Server. The course will cover design and management of reports, data mining models, administering a BI solution, designing the BI architecture, designing and deploying SSIS packages, and designing an analysis services database.

CTS2464C SUN: Advanced Java Programming  
Credit Hours: 3
This course is designed to prepare students for the Oracle Certified Programmer for Java certification. Upon successful completion of this course, the students should be proficient in creating event-driven GUIs using Swing components, creating multi-threaded programs and creating simple Transmission Control Protocol/Internet Protocol (TCP/IP) networked client that communicates through a server through sockets.

CTS2651C Router Technology  
Credit Hours: 3
This course is designed to prepare a student to apply and understand the basics of networking concepts, and using networking hardware. The course covers network devices, router and IOS basics, router startup and configuration, routing and advanced routing protocols, basic switching configuration, and advanced switching concepts. Students are first introduced to theory-based concepts, which are followed-up with practical hands-on labs.

CTS2652C Advanced Router Technology  
Credit Hours: 3
This course is designed to prepare a student to apply and understand the advanced principles and applications of networking hardware. The course covers advanced router configurations; LAN switching; network management; and advanced network design. This course will help prepare students for the Cisco Certified Networking Associate (CCNA) examination.
CTS2852C Client-side Scripting  
Credit Hours: 3  
This course teaches developers how to use the features of the JavaScript language, design client-side, and platform independent solutions. Students learn how to write JavaScript programs, script for the JavaScript object model, control program flow, validate forms, animate images, target frames, and create cookies. Students will also understand and use the most popular applications of JavaScript.

CTS2854 CIW: E-commerce Strategies & Practices I  
Credit Hours: 3  
This course teaches students how to conduct business online using both business-to-business and business-to-consumer e-commerce models. Students will also explore the technological issues associated with constructing an electronic-commerce web site. Students will examine strategies and products available for building electronic-commerce sites, examine how sites are managed, and explore how they can complement an existing business infrastructure. This course helps prepare students for the CIW E-Commerce Strategies and Practices certification exam.

CTS2857C Server-side Scripting  
Credit Hours: 3  
This course will help students understand and utilize Server Side Scripting technology. Students will work with Server Side Scripting to create Internet-based applications. Students will learn to connect to databases, work with files, extract data from HTML forms, and how to build secure applications.

CTS2858C CIW E-commerce Specialist  
Credit Hours: 3  
This is a comprehensive course teaching students how to conduct business online and manage the technical issues associated with constructing an e-commerce Web site. Topics include designing and implementing commerce-driven Web sites; identifying the similarities and differences between traditional and electronic commerce, exploring e-commerce technologies at various levels of sophistication, and construction of a fully functional e-commerce website using skills taught in this and previous classes. This course helps prepare students for the CIW E-Commerce Strategies and Practices certification exam.

CVT1200 Cardiopulmonary Pharmacology  
Credit Hours: 3  
This course provides an overview of drugs related to the cardiopulmonary system with special emphasis on the drugs used to treat cardiac and pulmonary patients.

DAA1100 Beginning Modern Dance I  
Credit Hours: 2  
Basic modern dance technique, exercises, and choreography are used to achieve physical objectives, to increase artistic self-awareness and to extend cultural enrichment.

DAA1101 Modern Dance II  
Credit Hours: 2  
A continuation of DAA1104. Further development of modern dance techniques with an emphasis on vocabulary, alignment, movement phrasing, and rhythm. Participation in semester dance concert required.

DAA1501 Jazz Dance II  
Credit Hours: 2  
A course in jazz technique with emphasis on various jazz styles and performance. Includes warm-up, stretch and strengthening, center exercises, and intermediate level jazz dance combinations.

DAA1504 Jazz Dance I  
Credit Hours: 2  
This is a course in Jazz technique. Included are warm-up, stretch and strengthening, center exercises, and basic jazz combinations.

DAA1680 Dance Repertory  
Credit Hours: 1  
Participation as a dancer/performer in dance works of ballet, jazz, and modern vocabularies. Works include those of dance faculty, guest artists, as well as student choreography.

DAA2102 Modern Dance III  
Credit Hours: 2  
A continuation of DAA1105 with an emphasis on advanced movement phrases and combinations necessary to perform modern dance repertory. Further emphasis will be placed on the development of the students' style and performance quality.
DAA2220 Pointe I
Credit Hours: 1
This course is an introduction to the theory and practice of pointe work for the ballet class. Students will learn the history and structure of pointe shoes, proper fit and maintenance, and will develop strength, coordination and movement quality through exercises and performance.

DAA2280 Ballet I
Credit Hours: 2
An academic study of techniques and theoretical concepts of ballet for the performance-oriented student. Includes warm-up, barre, and centre combinations.

DAA2281 Ballet II
Credit Hours: 2
Continuation of DAA1204. Ballet exercises and step combinations for the intermediate performance student, building on basic skills and culminating in a live performance.

DAA2282 Ballet III
Credit Hours: 2
Continuation of DAA1205. Emphasis on developing strength and coordination in more complex phrasing and movement. This course will explore and develop an understanding of the vocabulary, technique, and theoretical concepts of ballet on an intermediate level.

DAA2610 Dance Composition
Credit Hours: 2
This course is designed to introduce the student to the creative process of dance composition. Through the use of compositional structures and choreographic devices, the student will create movement studies. Improvisation, aesthetic principles and elements of dance will be examined.

DAN2100 Dance Appreciation
Credit Hours: 3
Dance Appreciation is an introductory survey class that examines dance as a primary mode of human expression and communication. This course introduces dance as an art form and will enhance knowledge of the historical, cultural and aesthetic aspects of dance via the study of its origins in ritual, courtly, social and theatrical settings.

DAN2600 Music for Dance
Credit Hours: 2
Designed to provide both the dancer and choreographer with the musical knowledge and tools to enhance how they use music in their discipline and how they communicate their musical needs to musicians.

DEA0000 Introduction to Dentistry
Credit Hours: 1
An overview of dentistry and the dental assisting profession including its history, ethical and legal aspects, duties and responsibilities of the dental health team, professional organizations, and proper conduct and grooming of the dental assistant.

DEA0025 Pre Clinical
Credit Hours: 2
Designed to orient the student to the dental office and the use and sterilization of all instruments and equipment used in the practice of dentistry.

DEA0025L Preclinical Laboratory
Credit Hours: 4
Laboratory/clinical portion of DEA0025. Provides hands-on instruction of use and sterilization of all instruments and equipment used in the practice of dentistry.

DEA0130 Allied Dental Theory
Credit Hours: 1
Designed to acquaint the student with basic body structures, functions and diseases which affect dental treatment. Basic concepts of microbiology and their relevance to sterilization. General aspects of oral pathology, including common pathological conditions of the mouth, teeth, and their supporting structures will be covered. Additional consideration will be given to the pharmacological properties, therapeutic applications and any toxicities or contraindications of drugs and medicaments commonly used in dentistry. Essential material on the symptoms, treatment, and equipment required to render adequate care for the common office emergencies will be included.

DEA0150 Dental Psychology
Credit Hours: 1
This course will offer material on the basic theories of psychology which enable the dental assistant to possess a greater understanding of why people act as they do. Included in the course are practical techniques for effective patient management and basic guidelines for
establishing a better interpersonal relationship between the dental assistant, dental staff and the dental patient.

DEA1003 Introduction to Dentistry
Credit Hours: 3
An overview of dentistry and the dental assisting profession including its history, ethical and legal aspects, duties and responsibilities of the dental health team, professional organizations, and proper conduct and grooming of the dental assistant.

DEA1030 Pre Clinical
Credit Hours: 4
Designed to orient the student to the dental office and the use and sterilization of all instruments and equipment used in the practice of dentistry.

DEA1030L Preclinical Laboratory
Credit Hours: 2
Laboratory/clinical portion of DEA1030. Provides hands-on instruction of use and sterilization of all instruments and equipment used in the practice of dentistry.

DEA1131 Allied Dental Theory
Credit Hours: 2
Designed to acquaint the student with basic body structures, functions and diseases which affect dental treatment. Basic concepts of microbiology and their relevance to sterilization. General aspects of oral pathology, including common pathological conditions of the mouth, teeth, and their supporting structures will be covered. Additional consideration will be given to the pharmacological properties, therapeutic applications and any toxicities or contraindications of drugs and medicaments commonly used in dentistry. Essential material on the symptoms, treatment, and equipment required to render adequate care for the common office emergencies will be included.

DEH1002 Clinical Dental Hygiene Procedures
Credit Hours: 2
A course designed to provide knowledge of the principles of dental hygiene with a detailed study of instrumentation. The course includes data collection and mastery of beginning techniques in dental care.

DEH1002L Preclinical Dental Hygiene Lab
Credit Hours: 2
The laboratory portion of this course is designed to provide hands-on instruction in the application of dental hygiene procedures with a detailed study of instrumentation. The course includes data collection and mastery of beginning techniques in dental patient care.

DEH1130 Oral Histology & Embryology
Credit Hours: 2
This course studies the embryonic development and the histology of the components of the oral cavity. This includes a comprehensive study of the cells and tissues of the oral cavity.

DEH1602 Periodontology
Credit Hours: 3
This course presents the etiology and classification of periodontal disease and principles of periodontia pertinent to dental hygiene practice. Principles of occlusion and periodontal surgery techniques are discussed through the use of case presentations.

DEH1602L Periodontology Lab
Credit Hours: 1
Encompasses a continuation of learning current periodontal trends in the dental office. This laboratory provides the student with hands on activities to insure effective patient treatment including phase microscopy, ultrasonic instrumentation, desensitizing agents, Soft Tissue Management, chemotherapeutic agents, advanced perio assessment, therapy and treatment procedures.

DEH1800 Dental Hygiene I
Credit Hours: 2
This course provides instruction on removal of hard and soft deposits, treatment planning, preventive procedures, care of instruments, pre and post-operative procedures, and dental hygiene diagnosis.
DEH1800L Dental Hygiene I Clinic  
Credit Hours: 2  
This course will provide clinical experience in comprehensive patient care. Emphasis is placed on treatment planning and dental hygiene assessment techniques.

DEH1802 Dental Hygiene II  
Credit Hours: 3  
A course designed to provide further knowledge in the application of dental hygiene procedures. This includes information on treatment planning, periodontal charting, ultrasonic scaling and comprehensive dental hygiene care.

DEH1802L Dental Hygiene II Clinic  
Credit Hours: 4  
This course will provide clinical experience in treatment planning, periodontal charting, ultrasonic scaling and comprehensive dental hygiene care.

DEH2300 Dental Pharmacology  
Credit Hours: 2  
This course provides an understanding of the drugs commonly encountered in the dental office. The student will gain knowledge in the origin, physical and chemical properties, modes of administration and effects upon the body system.

DEH2400 General & Oral Pathology  
Credit Hours: 2  
This course provides principles of general and oral and pathology as it relates to diseases of the oral cavity. There will be emphasis on the importance of the dental hygienist's recognition of normal and abnormal conditions.

DEH2701 Community Dental Health  
Credit Hours: 2  
This course will teach the student the concepts of community dental health. Topics covered include the measurement of dental disease, prevention programs, community outreach programs, and simple statistical analysis.

DEH2701L Community Dental Health Lab  
Credit Hours: 1  
This course is the follow through for DEH2701. The student will apply community health principles by designing and presenting dental health education principles to various community audiences.

DEH2804L Dental Hygiene III Clinic  
Credit Hours: 4  
The laboratory portion of this course provides advanced application of the principles of preventive dental hygiene and oral prophylaxis techniques on patients in the clinic under supervision.

DEH2806 Dental Hygiene IV  
Credit Hours: 2  
This course provides continuation of theoretical material related to clinical dental hygiene practice. Discussions include advanced periodontal therapy with emphasis on synthesis or case information, recognition of advanced disease states and treatment regimens including the medically compromised.

DEH2806L Dental Hygiene IV Clinic  
Credit Hours: 4  
Continuation of clinical experience with patients, developing previously learned skills and knowledge. Emphasis placed on advanced instrumentation and patient management skills necessary to treat more difficult patients.

DEH2840L Advanced Dental Technology Lab  
Credit Hours: 1  
This laboratory course is designed to provide the dental hygiene students with basic concepts of computer technology and dental software used in the current practice of dentistry. The course will focus on advanced technologies which include dental software programs, intraoral camera, microscope, digital radiography, clinical assessments and practice management. Dental hygiene students will get hands on opportunities all software programs assuring their future success.

DEP2002 Developmental Psy I:Child Psychology  
Credit Hours: 3  
Study of the concepts and principles of growth and development in infancy and childhood.

DEP2004 Developmental Psychology  
Credit Hours: 3  
This is a developmental psychology course that considers human growth from conception to death. This course covers the physical, cognitive, and psycho-social process of human development. It is designed to give a general overview of the developmental processes.
DEP2302 Developmental Psych II: Adolescent & Young Adult
Credit Hours: 3
The personal, social and developmental aspects of adolescence and early adulthood are reviewed in this course. A focus is placed upon the research dealing with the characteristic problems and adjustments of this life stage.

DES0021 Dental Anatomy & Physiology
Credit Hours: 1
The study of head and neck anatomy with emphasis placed on the structure, morphology, and function of the primary and permanent human dentitions.

DES0103 Dental Materials
Credit Hours: 1
Designed to familiarize the student with the various types of materials, their physical properties and characteristics, proper manipulation and designed application in the practice of dentistry.

DES0103L Dental Materials Lab
Credit Hours: 1
Laboratory portion of DES0100. Proper manipulation and designed application in the practice of dentistry. Projects demonstrating proficiency in the technical applications and proper manipulation of specified dental materials will be required.

DES0400 Basic Anatomy & Physiology
Credit Hours: 1
A basic anatomy and physiology course designed specifically to meet the needs of dental assisting students. Emphasis will be placed on the human body structure, functions of its components and associated diseases which affect the total care of the dental patient.

DES0501 Dental Office Management
Credit Hours: 1
The study of efficient dental office management. Basic concepts to be presented will include telephone etiquette and communication. Guidelines for better interpersonal relations, methods for effective appointment control, dental bookkeeping systems and practices, business writing techniques, collection and billing, filing of patients records and procedures for tax and health insurance forms. Computer proficiency must be demonstrated by the student for course completion.

DEP0801 Clinical Procedures I
Credit Hours: 1
Lecture series acquaints the student with the necessary background material and assisting procedures involved in each dental specialty.

DES0801L Clinical Procedures I Lab
Credit Hours: 5
Practicum phase provides the opportunity for each student to receive closely supervised individual instruction in all phases of chairside assisting.

DES0802 Clinical Procedures II
Credit Hours: 1
Practicum phase is a continuation of DES0801 with the addition of a supervised externship program utilizing dental offices and public health facilities in the community. Lecture demonstration series focuses on selected dental topics pertaining to effective dental assisting and the additional duties permitted by rules and regulations of the Florida State Board of Dentistry.

DES0802L Clinical Procedures II Laboratory
Credit Hours: 4
Practicum phase is a continuation of DES0801L with the addition of a supervised externship utilizing dental offices and public health facilities in the community.

DES0830 Expanded Functions I
Credit Hours: 2
The course is designed to provide the basic knowledge and clinical practice necessary for the dental assisting student to perform the expanded functions permitted by the rules and regulations of the Florida State Board of Dentistry.

DES0831 Expanded Functions II
Credit Hours: 1
The course is designed to be a continuation of dental auxiliary expanded functions I. It will provide the basic knowledge necessary to perform the more complex expanded functions permitted by the rules and regulations of Florida State Board of Dentistry.

DES0831L Expanded Function II Lab
Credit Hours: 2
This course is designed to be a continuation of dental auxiliary expanded functions I. It will provide the clinical practice necessary to perform the more complex expanded functions permitted by the rules and regulations of Florida State Board of Dentistry.
**DES0844 Preventive Dentistry**  
Credit Hours: 1  
Emphasis is placed on the development of a plaque control program to meet individual patient needs. Materials on methods of tooth brushing, supplementary aids for oral physiotherapy and the use of fluorides, and nutritional counseling in preventive dentistry will be presented.

**DES1020 Dental Anatomy & Physiology**  
Credit Hours: 3  
The study of head and neck anatomy with emphasis placed on the structure, morphology, and function of the primary and permanent human dentition.

**DES1054 Pain Control & Dental Anesthesia**  
Credit Hours: 2  
This course provides a study of agents used in dentistry for local anesthesia and pain control.

**DES1100 Dental Materials**  
Credit Hours: 2  
Designed to familiarize the student with the various types of materials, their physical properties and characteristics, proper manipulation and designed application in the practice of dentistry.

**DES1100L Dental Materials Lab (ATD)**  
Credit Hours: 1  
Laboratory portion of DES1100. Proper manipulation and designed application in the practice of dentistry. Projects demonstrating proficiency in the technical applications and proper manipulation of specified dental materials will be required.

**DES1200 Dental Radiography**  
Credit Hours: 3  
Fundamentals of radiological science as applied to dentistry will be presented. Special consideration will be given to radiation physics, hazards, biological effects, protection, and control methods. Also proper techniques for exposing, processing and mounting of radiographs are included.

**DES1200L Dental Radiography Lab**  
Credit Hours: 1  
Laboratory portion of DES1200. Proper techniques for exposing, processing, and mounting radiographs. Laboratory exercise demonstrating proficiency in these techniques will be required.

**DES1404 Basic Anatomy & Physiology**  
Credit Hours: 2  
A basic anatomy and physiology course designed specifically to meet the needs of dental assisting students. Emphasis will be placed on the human body structure, functions of its components and associated diseases which affect the total care of the dental patient.

**DES1502 Dental Office Management**  
Credit Hours: 3  
The study of efficient dental office management. Basic concepts to be presented will include telephone etiquette and communication. Guidelines for better interpersonal relations, methods for effective appointment control, dental bookkeeping systems and practices, business writing techniques, collection and billing, filing of patients records and procedures for tax and health insurance forms. Computer proficiency must be demonstrated by the student for course completion.

**DES1805 Clinical Procedures I**  
Credit Hours: 2  
Lecture series acquaints the student with the necessary background material and assisting procedures involved in each dental specialty.

**DES1805L Clinical Procedures I Lab**  
Credit Hours: 3  
Practicum phase provides the opportunity for each student to receive closely supervised individual instruction in all phases of chairside assisting.

**DES1807 Clinical Procedures II**  
Credit Hours: 1  
Practicum phase is a continuation of DES0801 with the addition of a supervised externship program utilizing dental offices and public health facilities in the community. Lecture demonstration series focuses on selected dental topics pertaining to effective dental assisting and the additional duties permitted by rules and regulations of the Florida State Board of Dentistry.

**DES1807L Clinical Procedures II Laboratory (ATD)**  
Credit Hours: 3  
Practicum phase is a continuation of DES1805L with the addition of a supervised externship utilizing dental offices and public health facilities in the community.

**DES1832 Expanded Functions I**  
Credit Hours: 1  
The course is designed to provide the basic knowledge and clinical practice necessary for the dental assisting
DES1832L Expanded Function I Laboratory
Credit Hours: 1
Designed to provide the basic knowledge and clinical practice necessary for the Dental Assisting student to perform the Expanded Functions permitted by the Rules and Regulations of the Florida State Board of Dentistry.

DES1833 Expanded Functions II
Credit Hours: 2
The course is designed to be a continuation of dental auxiliary expanded functions I. It will provide the basic knowledge necessary to perform the more complex expanded functions permitted by the rules and regulations of Florida State Board of Dentistry.

DES1833L Expanded Function II Lab
Credit Hours: 1
This course is designed to be a continuation of dental auxiliary expanded functions I. It will provide the clinical practice necessary to perform the more complex expanded functions permitted by the rules and regulations of Florida State Board of Dentistry.

DES1840 Preventive Dentistry
Credit Hours: 2
Emphasis is placed on the development of a plaque control program to meet individual patient needs. Materials on methods of tooth brushing, supplementary aids for oral physiotherapy and the use of fluorides, and nutritional counseling in preventive dentistry will be presented.

DES1840L Preventive Dentistry Laboratory
Credit Hours: 1
Laboratory portion of DES1840. This course is designed to teach the students how to educate and motivate patients in controlling their dental plaque, thus preventing dental diseases. Dental floss, brushing methods, adjunctive supplementary oral physiotherapy aids, intra-oral imaging, nutritional counseling, microscopes, and biofilm collection will be utilized. An emphasis is placed on the development of a plaque control program to meet individual patient needs.

DIG2100C Web Development 1
Credit Hours: 3
The student will learn the basics of using Browsers to view web sites, create a web site and will progress through the processes of analysis, design, development, and implementation of complete web sites using HTML, XHTML, XML language with text editors. This course includes Web Programming with HTML, XHTML, XML, with emphasis on CSS on layout and structure of web sites, hyperlinks, multimedia, forms, tables, testing, maintenance and uploading web sites to servers applying good web design and web site usability.

DIG2101C Web Development 2 Using Dreamweaver
Credit Hours: 3
This course uses Adobe Dreamweaver software to create websites importing Flash and video movies and different disciplinary content. Students will explore the pre-production, layout, structure, and Internet Services Provider (ISP) of websites. Students will test and debug their websites from your host ISP. Students should have complete knowledge of graphics and XHTML.

DIG2109C Digital Publishing with Indesign
Credit Hours: 3
This course is designed to teach desktop publishing using Adobe InDesign with emphasis on typography and desktop publishing techniques. Student will learn to layout and design documents with visual impact. Effective use of graphics, color, print separations, export to PDF, and preflight topics as they are used with desktop publishing are covered.

DIG2115C Digital Imaging Fundamentals Using Photoshop
Credit Hours: 3
This course uses Adobe Photoshop software to create images for digital media applications. Students will learn how to create, edit, and manipulate graphics. Color theory, resolution, special effects, output, and design will be covered.

DIG2116C Digital Imaging Advanced
Credit Hours: 3
The student will learn the advanced image processing techniques to prepare images for various output venues for web and multimedia. Multimedia and web developers use sophisticated graphic software (Fireworks and Photoshop or other similar software) to create interactive and stunning visuals that are easily integrated into dynamic multimedia and web pages. Students will learn how to create graphics with vector and bitmap images, apply special effects, build buttons, rollovers, animated gifs, image maps, compare graphic formats, optimize web graphics & palettes. Projects
focus on resolution, color management including palettes and bit depth, optimization, image and texture creation, alpha channels for compositing, and special effects. Industry standard software will be used including Photoshop and Fireworks.

DIG2132C Digital Art & Design with Illustrator
Credit Hours: 3
This course provides a sound theoretical introduction to the concepts, principles, and techniques of digital art and design. Explores the use of the computer as an art production and drawing tool using drawing and illustration software such as Adobe Illustrator to create and generate visuals.

DIG2280C Digital Video/Audio Editing
Credit Hours: 3
This course is an introduction to video/audio production for digital media/multimedia. Students will gain an in-depth knowledge and skills needed for video production to include hands-on experience in videography and video/audio editing for the creation of video/audio projects to include but not limited to documentaries/music videos/storytelling and commercials/public service announcements. Software used: the Adobe Production Suite including Premiere Pro, Sound Booth, Audition and Encore.

DIG2292C Digital Post Production with After Effects
Credit Hours: 3
This course focuses on digital post-production used for film, animation, video, digital media, and the web. Using Adobe After Effects students integrate both technical and aesthetic, 2-D graphics, 3-D models and animations, and background elements in projects. Students will become familiar with match-moving and compositing techniques.

DIG2302C 3D Animation I
Credit Hours: 3
This course covers 3-D modeling, mapping, and rendering. Students will also learn techniques used in moving images and simulations as well as applying lighting and materials to 3-D objects.

DIG2303C 3D Animation 2
Credit Hours: 3
Continuation of DIG2302C with more animation and modeling techniques. Development of complex 3-D models such as aircraft, cars, & boats. Learn virtual film-making with Maya 3-D. Apply Cloth, Particle, Paint, and Fluid dynamics.

DIG2304C 3D Animation 3
Credit Hours: 3
Using Maya 3D software (or similar) you will create advanced 3D animation for characters; rigging techniques for body parts to create realistic and believable movements. You'll learn advanced rigging concepts that involve MEL scripting and advanced deformation techniques and even how to set up a character pipeline.

DIG2311C Fundamental of Digital Media Using Flash
Credit Hours: 3
Web developers use Flash (or another animation tool) to create beautiful, resizable, and extremely small and compact navigation interfaces, technical illustrations, long-form animations, and dazzling effects for web sites and other Web-enabled devices (such as WebTV). Students will create graphics and animations using drawing tools or imported vector artwork; animate that artwork; and make interactive movies.

DIG2300C Multimedia Authoring
Credit Hours: 3
This course concentrates on entry-level skills in creating and implementing basic multimedia applications. The topics are covered in both theory and practice (hands-on). The software and hardware used in current industry-standard multimedia are covered in detail. Applications include multimedia design, authoring, and product delivery. The student uses many other feeder programs to complete his/her projects.

DIG2380C Digital Media Portfolio
Credit Hours: 3
This is a capstone course intended for students to apply knowledge gained in the areas of web, graphics, video or 3D production to create a polished, presentable collection of their best work (a portfolio), showcasing their talents as they prepare to enter the professional field.

DIG2490 Internship in Digital Media
Credit Hours: 3
An Internship in Digital Media will provide the student with practical work experience in the field. In addition the student will produce an e-portfolio and resume to present to potential employers.

DSC1002 Terrorism & Domestic Security
Credit Hours: 3
A study of domestic and international terrorism as it relates to domestic security. Topics include terrorist
organizations and motivations, investigating terrorism threats, conducting vulnerability assessments of potential terrorist targets, and the role of government agencies in response to a terrorist incident and recovery afterwards.

DSC1006 Introduction to Homeland Security
Credit Hours: 3
This course will introduce students to the vocabulary and important components of Homeland Security. Students will learn about the important agencies associated with Homeland Security and their interrelated duties and relationships. Students will examine historical events that impact Homeland Security. Students will explore state, national, and international laws impacting Homeland Security and students will examine the most critical threats confronting Homeland Security.

DSC2242 Transportation & Border Security
Credit Hours: 3
Overview of modern border and transportation security challenges (post 9/11 attacks to the present) as related to our transportation infrastructure, including seaports, ships, aircraft, airports, trains, train stations, trucks, highways, bridges, rail lines, pipelines and buses. The course will also explore technology used to enhance security of borders and transportation systems. Students will be required to discuss the legal, economic, political and cultural concerns associated with transportation and border security.

DSC2590 Intelligence Analysis & Security
Credit Hours: 3
This course examines intelligence analysis and its indispensable relationship to the security management of terrorist attacks or disasters, man-made and natural. It also explores the vulnerabilities of our national defense and private sectors and threats posed to these institutions. Students will discuss substantive issues regarding intelligence support of homeland security measures and explore how the intelligence community operates.

EAP0100C Speaking/Listening I
Credit Hours: 3
Beginning level speaking and listening course. Students will develop the ability to understand frequently used words in oral contexts and understand and respond appropriately to simple phrases and questions.

EAP0120C ESL Reading I
Credit Hours: 3
This is a level 100 beginning ESL reading course designed for students in English for Academic Purposes (EAP) programs. It emphasizes vocabulary and comprehension on a basic level.

EAP0185C ESL Grammar/Writing I
Credit Hours: 6
A low-beginning level combined skills course for speakers of other languages designed principally to guide the students to the development of basic grammar and basic writing structures as applied to academic English. Students will develop writing skills in the context of guided discourse on personal topics with an emphasis on logical thought and mechanics.

EAP0200C Listening/Speaking II
Credit Hours: 3
High beginning level listening and speaking course. Students continue to develop the ability to understand frequently used words in oral contexts and to understand and appropriately respond to simple phrases and questions.

EAP0220C ESL Reading II
Credit Hours: 3
This is a level 200 high beginning ESL reading course designed for students in English for Academic Purposes (EAP) programs. It emphasizes vocabulary and comprehension on a basic level.

EAP0285C ESL Grammar/Writing II
Credit Hours: 6
A high-beginning level combined skills course for speakers of other languages designed principally to guide the students to the development of basic grammar and writing structures as applied to academic English. Students will develop writing skills in the context of guided discourse on personal topics with an emphasis on logical thought and mechanics.

EAP0300C Listening/Speaking III
Credit Hours: 3
A course designed to guide native speakers of languages other than English toward appropriate production of the consonant and vowel sounds, and the stress, intonation, and rhythm patterns of American English as encountered in everyday communicative situations.

EAP0320C ESL Reading III
Credit Hours: 3
This is a level 300, low intermediate ESL reading course designed for students in English for Academic
Purposes (EAP) programs. It emphasizes vocabulary and comprehension on an intermediate level.

EAP0385C ESL Grammar/Writing III
Credit Hours: 6
An intermediate level combined skills course for speakers of other languages designed principally to guide the students to the mastery of grammar and writing structure applied to academic English.

EAP0400C Communication Skills IV
Credit Hours: 3
This course is designed to guide the students toward applying pronunciation, phrasing, and intonation of oral American English in communication situations such as academic and social settings. It involves interview presentation and emphasis on developing listening skills.

EAP0420C ESL Reading IV
Credit Hours: 3
This is a level 400 high intermediate ESL reading course designed for students in English for Academic Purposes (EAP) programs. It emphasizes vocabulary and comprehension on an intermediate level.

EAP0485C ESL Grammar/Writing IV
Credit Hours: 6
A high intermediate combined skills course for speakers of other languages designed principally to guide the students to the mastery of complex grammar and sentence structures, and basic paragraph writing.

EAP1540C ESL Advanced Composition I
Credit Hours: 3
A composition course in English for speakers of other languages. Designed principally to guide the student to the mastery of paragraph structure using various paragraph modes and the multi-paragraph essay. The grammar focuses on elements which closely tie in with composition, e.g. connectors and sentence combining.

EAP1640C ESL Advanced Composition II
Credit Hours: 3
This is an advanced composition course in English for speakers of other languages. Students are given intensive practice in the writing of the multi-paragraph essay for the various modes. Emphasis is given to clear and logical development of ideas. Students apply advanced grammar skills and precise vocabulary usage to essay writing.

ECO2013 Principles of Macroeconomics
Credit Hours: 3
An introductory course in macroeconomic principles covering basic economic problems and concepts. Topics discussed and analyzed include basic economic problems of unemployment and inflation. Students will recognize the role of households, businesses and governments in the market economy and in their own lives. This is a writing credit course.

ECO2023 Principles of Microeconomics
Credit Hours: 3
An introductory course stressing microeconomic theories. Topics studied include the theory and application of supply and demand elasticity; theory of consumer demand, utility; production and cost theory including law of diminishing returns; the firm's profit-maximizing behaviors under market models ranging from pure competition to pure monopoly; the theory of income distribution; comparative advantage, trade policies exchange rates, balance of payments, and other international issues.

ECO2220 Money & Banking
Credit Hours: 3
A general survey of the economics of money and banking covering the evolution, nature and functions of money; the nature of banking and its regulation; monetary standards; structure and functions of the Federal Reserve System; monetary policy, monetary theory and the price level; and the role of banking and money in international finance.

ECO3703 International Economics
Credit Hours: 3
An exploration of why nations trade, the effects of trade on the economy, international commercial policy, balance of payments, exchange rate determination, the Eurocurrency markets, and international trade institutions.

ECS2390 The Economy of Spain
Credit Hours: 3
An analysis of the Spanish economic system covering the historical development in the public and private sectors; agriculture and industry; and foreign trade relations. Only offered in conjunction with the Semester-In-Spain program.
EDF1005 Introduction to the Teaching Profession  
Credit Hours: 3  
This is a survey course including historical, sociological, and philosophical foundations of education, governance and finance of education, educational policies, legal moral and ethical issues and the professionalism of teaching. Students will be provided exposure to the Florida Educator Accomplished Practices, Sunshine State Standards, and the Professional Educator Competencies. Students are required to complete a minimum of 15 hours of field experience in a K-12 setting. The field experience should be performed at actual schools or similar settings and not via virtual modes of film or Internet.

EDF2070 Perspectives in Education  
Credit Hours: 3  
A study of the principles of American education. Emphasis is placed on the historical, philosophical, sociological, and legal foundations of education in America and their impact on curriculum development, learning, and the teaching profession.

EDF2085 Intro to Diversity & Exceptionalities for Edu  
Credit Hours: 3  
Designed for the prospective educator, this course provides the opportunity to explore issues of diversity, including an understanding of the influence of culture, socioeconomic status, ethnicity/race, gender, religion, exceptionality, language, and age upon the educational experience. Students will explore personal attitudes toward diversity and exceptionalities. Students will be provided exposure to the Florida Educator Accomplished Practices, Sunshine State Standards, and Professional Educator Competencies. A minimum of 15 hours of field-based experience is required working with diverse populations of children in schools or similar settings that are not virtual.

EDF3280 Instructional Strategies  
Credit Hours: 3  
This course prepares participants to become proficient in planning, organizing, and implementing instructional strategies for the contemporary PK-12 classroom. A variety of research-validated instructional strategies are reinforced, including those that support constructivist approaches to classroom organization and student learning. Participants will learn to identify, deliver and improve instructional strategies that are most appropriate in specific circumstances.

EDF4430 Educational Tests & Measurements  
Credit Hours: 3  
This course helps Education majors develop a philosophy of assessment and understand how a variety of measures combine to provide an accurate picture of student progress and achievement in the current multicultural classroom, develop knowledge and skills necessary to measure and assess learner progress effectively and develop actual teacher assessment skills and acquire skills in and perspectives on traditional and alternative assessment strategies. Topics include the basic principles of measurement, formative and summative assessment strategies, test construction, performance assessments, reading and interpreting data from state and standardized achievement tests, and fairness in accommodating diverse learners.

EDF4930 Special Topics in Teacher Education  
Credit Hours: 1  
This course focuses on current and emerging issues in teacher education. Its format and topic will vary by semester.

EDG2949 CO OP Work Experience  
Credit Hours: 3  
A course designed to provide training in a students field of study through work experience. Students are graded on the basis of documentation of learning acquired as reported by student and employer.

EDG4410 Classroom Management  
Credit Hours: 3  
This course provides an identification and knowledge of classroom management and communication theories, strategies, and concerns. Emphasis will be placed on Behavior Management, Discipline and Reward Strategies, Accommodating Special Needs Pre-professional educators, Managing Diverse Cultures, Establishing Rapport and Credibility, Effective Communications Strategies, and Legal and Safety Issues as they apply and relate to the classroom setting.

EDP2002 Introduction to Educational Psychology  
Credit Hours: 3  
This course reviews psychological principles relevant to effective teaching and learning. Stage theories will be used to address issues of pupil variability. The course will enable students to design and use objectives. Units on instruction will include behavioral, information processing, humanistic and cognitive theories. Finally, measurement and evaluation, as well as classroom management, will be addressed.
EDP4004 Principles of Educational Psychology  
Credit Hours: 3  
This course provides a foundation in educational psychology and its application to classroom settings. Special emphasis is placed on development, learning theory, intelligence, motivation, memory, higher-order thinking, diversity, and instructional and assessment strategies.

EEC1200 Early Childhood Education  
Credit Hours: 3  
This course reviews the history and present day aspects of early childhood programs for infants, toddlers, preschool, and school children. Basic principles and foundations of early childhood education are covered.

EEC1603 Child Guidance  
Credit Hours: 3  
This course provides child guidance and group management techniques to foster the development of self-esteem, self-control, and social skills in young children.

EET1015C DC Circuits  
Credit Hours: 3  
This is a first course in electric circuits. Upon completion of this course the student should demonstrate an understanding of the definitions and interrelationships of voltage, current and power in circuits containing passive circuit elements and multiple sources. Extensive laboratory experience is included.

EET1025C AC Circuits  
Credit Hours: 3  
Upon completion of this course the student shall demonstrate a knowledge of circuit analysis using alternating voltage sources, including the behavior of resistive and reactive passive circuit elements, and frequency and transient response. Magnetic circuits, resonance and ideal transformers are also included. Extensive laboratory experience is included.

EET1084C Introduction to Electronics  
Credit Hours: 3  
This course provides an introduction to the basic fundamentals, terminology, and applications used in the electronics industry. The topic coverage will include circuit theory principles, electronic components, transistor usage, amplifiers, power supplies, digital logic techniques, and electronic instruments. This course will also include some basic laboratory exercises to strengthen the topic coverage as it pertains to basic measurement involving both analog and digital circuits.

EET1141C Linear Techniques I  
Credit Hours: 3  
This is the first course covering semi-conductor devices and laboratory experiments. Topics covered include: semi-conductor principles, rectifier diodes, zener diodes, BJT amplifiers, negative feedback amplifier, Field effect transistors and FET amplifiers. Extensive laboratory experience is included.

EET2142C Linear Techniques II  
Credit Hours: 3  
This is the second course covering advance semi-conductor devices and laboratory measurements. The topics covered include: power amplifiers, frequency response of amplifiers, thyristors, LED and special diodes, operation amplifiers, filters, voltage regulators, basic communications circuits and programmable analog devices. The student will be able to use computer software to solve technical problems, program arrays, and aid in measurement systems. The course requires an extensive laboratory experience.

EET2326C Electronic Communications  
Credit Hours: 3  
Basic electronic communications systems, RF amplifiers and oscillators, amplitude modulation, single side band modulation, frequency and phase modulation, pulse modulation, demodulation, and digital communication methods. Extensive laboratory experience.

EET2355C Data Communications  
Credit Hours: 3  
The student will study data communications systems including pulse amplitude, pulse width modulation and RS-232, RS-422, IEEE-488. Descriptions of BISYNC, HDLC and local area networks will be include UART and MODEM implementation.

EET2358C Advanced Communication Technology  
Credit Hours: 3  
This is an advanced course in telecommunication technology, with topics covering analog and digital communication, switching systems, Digital Modulation, Wireless communication systems, Personal Communication Systems, and Paging and Wireless Data Networking. Extensive laboratory practice is included in the course.
EEX3011 Introduction to Exceptional Student Education  
Credit Hours: 3  
This course will focus on the characteristics and needs of students with disabilities. Course content will include the different types of programs and services that make up exceptional student education (ESE) and the history on how they came to exist. The Introduction to Exceptional Student Education course will serve as the foundation for the development of a personal and professional understanding and philosophy of ESE.

EEX3094 Nature & Needs of the Autism Spectrum Disorder STD  
Credit Hours: 3  
This is an overview course examining issues in providing educational services to individuals with Autism Spectrum Disorder Students (ASD). Emphasis will be placed on definitions and concepts, classification, prevalence, behavioral characteristics, communication, intervention strategies, classroom technology, multicultural issues, and family involvement. Service delivery systems will be reviewed and current trends discussed. 10 school-based hours.

EEX3103 Teach K-12 Students with Lang & Comm Disorders  
Credit Hours: 3  
This course is designed to introduce knowledge and skills for teaching students with language and communication disorders in a variety of settings and inclusive classrooms. This course covers language and communication behaviors of children with specific exceptionalities and emphasizes research-based instructional strategies for facilitating and improving communication skills in a variety of contexts. It includes an understanding of the connection between language and literacy, language development, language disorders and characteristics, and intervention strategies. It also includes exploration of adaptive and assistive communication devices.

EEX3280 Transition Planning for Students with Disabilities  
Credit Hours: 2  
This course is designed for students enrolled in the Bachelor of Science Degree program in Teacher Education. This is an overview course examining issues related to transition planning for secondary (high school) exceptional education students. Emphasis will be placed on data collection, assessments, self-advocacy and adult services. Federal requirements for the development of the Transition Individualized Education Plan (TIEP) will be reviewed and transition process from school to post school will be covered.

EEX3601 Positive Behavioral Support  
Credit Hours: 3  
This is an overview course examining issues related to positive behavioral supports for exceptional education students. Emphasis will be placed on data collection, analysis and interventions related which address problem behaviors in the classroom. This course is designed to prepare teachers for the educational management of exceptional students with emphasis on behavior management and consultation skills. Students will gain a basic knowledge of how to create and maintain an on-task, safe and healthy environment for learning in the exceptional classroom as well as the inclusive classroom.

EEX4293 Assessment & Strategies in Exceptional Student Ed  
Credit Hours: 3  
This course introduces and familiarizes students with formal and informal evaluation techniques and materials for the educational assessment of exceptional learners, including those from diverse linguistic backgrounds, in a variety of settings and inclusive environments.

EEX4472 Instructional Practices for Students with Moderate/Severe Disabilities  
Credit Hours: 3  
This course will examine how particular types of low-incidence disabilities; including mental retardation, autism, physical disabilities, traumatic brain injury, deafness, blindness, multiple disabilities, and other health impairments, affect academic performance. Students will learn and demonstrate current methods for teaching individuals with low incidence disabilities. Students will participate in a field experience with students with low incidence disabilities.

EEX4486 Differentiated Instruction for Students with Exceptionalities  
Credit Hours: 3  
This course is designed to provide educators with a practical framework of research-based reading, writing and mathematics curriculum and commercial and software programs to effectivly teach students with learning, behavior and/or attention difficulties in inclusive settings. The course emphasizes current research and effective practice on a from proactive through intervention strategies.
EEX4843 Teaching Exceptional Learners Practicum
Credit Hours: 3
This course includes characteristics and educational needs of all types of exceptional learners. It is designed to prepare pre-professional educators for the student teaching internship. Pre-professional educators work directly with classroom teachers and have opportunity to teach both large and small group activities. This course is designed to develop the competencies relative to program planning, instruction, daily scheduling, record keeping, evaluation, classroom management, reporting to parents, professional organizations and teacher ethics. Students spend a minimum of 60 school-based hours in the classroom.

EEX4945 Student Teaching Internship in ESE
Credit Hours: 9
This course is designed for students enrolled in the Bachelor of Science Degree program in Teacher Education. This course requires a candidate to demonstrate and apply teaching competencies during an internship in a public school approved by the department. A minimum of 37.5 contact hours per week for 15 weeks are required for internship. Twelve hours of seminar accompanies this course. The purpose of the student teaching internship is for the intern to apply and integrate teaching competencies and responsibilities for teaching students with disabilities in a K12 school setting. The intern will incrementally assume all duties of the mentor teacher in the areas of planning, instruction, management, collaboration and other essential classroom activities.

EGS1001 Introduction to Engineering
Credit Hours: 3
This course is a basic introduction to engineering. It will explore the various engineering fields, engineering problem solving, and basic math and physics used by engineers. Other topics such as safety, ethics, and engineering communications will also be addressed.

EGS2949 CO OP Work Experience
Credit Hours: 3
A course designed to provide training in a student's field of study through work experience. Students are graded on the basis of documentation of learning acquired as reported by students and employer.

EME2040 Introduction to Educational Technology
Credit Hours: 3
This course is a theory and application course that introduces students to instructional design principles, traditional and emerging technologies, and software and how they are used in the teaching profession. Students will be provided an overview of the Florida Educator Accomplished Practices, Sunshine State Standards, and the Professional Educator Competencies.

EME2041 Educational Technology Integration in Everyday
Credit Hours: 3
This course will explore applications of technology integration to improve teaching and learning. Students will learn ways to use technology for the development of independent learning in order to facilitate active, learner-centered classroom experiences.

EME3410 Enhancing Mathematics & Science Education with Technology Applications
Credit Hours: 2
This course will explore the interaction of K12 mathematics and science content, technology that supports mathematics and science teaching and learning, and the cognitive and social processes of learning that yields maximum learning opportunities for all students. Students will identify technologies that align with student intellectual abilities and learning styles in mathematics and science. Incorporate inquiry-based learning with technology and discover the interdisciplinary connections between mathematics, science and technology.

EMS1119 Emergency Medical Technician Basic
Credit Hours: 6
This course is designed to prepare the basic emergency medical technician in accord with U.S. Dept. of Transportation curriculum and Florida State EMS guidelines includes an introductory survey of emergency medical services including medical legal/ethical aspects, role of the EMT, patient assessment, care of wounds and fractures, airway maintenance, medical and environmental emergencies, patient transportation, emergency, childbirth, basic extrication.

EMS1119L Emergency Medical Technician Skills Laboratory
Credit Hours: 1
Lab practice and testing of basic emergency medical technician skills included in the Department of
Transportation EMT ambulance curriculum and Florida State EMS guidelines. Skills include CPR at AHA basic rescuer level, patient assessment, triage, airway maintenance, bandaging, splinting, mast suit application, emergency childbirth, and basic extrication.

EMS1381 EMT Recertification
Credit Hours: 1
This course is designed to review the basic knowledge and skills of emergency care, and to introduce the student to current methods use of new equipment and changes in medico legal aspects of emergency medical care.

EMS1381L EMT Recertification Lab
Credit Hours: 1
Application of skills and procedures involved in the U.S. Department of Transportation's Emergency Medical Technician Refresher Course.

EMS1411 EMT Hospital Clinical
Credit Hours: 2
Practical application of (EMT), emergency medical technician clinical knowledge and skills under professional supervision in the Hospital setting. Course emphasizes the development of student skill in recognition of signs and symptoms of illness and injuries and in the proper procedures of emergency care.

EMS1421 Emergency Medical Technician (EMT) Field Clinical
Credit Hours: 2
Practical application of EMT emergency medical technician clinical knowledge and skills under the professional supervision in the prehospital or field setting. Provides for observation and patient care experiences in EMS rescue vehicles. Course emphasizes the development of student skill in recognition of signs & symptoms of illness and injuries and in the proper procedures of emergency care.

EMS2010 Paramedic A&P, Pathophysiology, Life Span Develop
Credit Hours: 3
This course presents information on the structure and function of the human body in a normal and diseased state. The general concepts of anatomy and physiology for the assessment and management of emergency patients by the paramedic in the prehospital field area will be emphasized. The interaction of the body systems as they maintain homeostasis with particular attention placed on the nervous, cardiovascular and respiratory systems will be covered. Pathophysiology & Life Span Development are also included. Objectives from the United States Department of Transportation (USDOT) National Standard Paramedic Curriculum on anatomy, physiology, pathophysiology & life span development will be included.

EMS2311 EMT Leadership
Credit Hours: 2
Introduces the student to professional issues in EMS through special projects.

EMS2391 Paramedic Review Recertification
Credit Hours: 2
This course is based on the department of transportation's (DOT), paramedic refresher training course and is designed to review and update the graduate in the delivery of emergency medical services.

EMS2391L Paramedic Review Recertification Lab
Credit Hours: 1
Application of skills and procedures involved in the Department of Transportation's Paramedic Refresher Course.

EMS2631 Paramedic Science I
Credit Hours: 3

EMS2631L Paramedic Science I Lab
Credit Hours: 1
Review of basic life support skills required for advanced level life support skills practiced by the Paramedic. Additional skills include those contained in the latest Department of Transportation (DOT) National Paramedic Curriculum and include prep topics related to Paramedic well-being, injury prevention, ambulance operations, Medical Incident Command (MCI), Haz-Mat and crime scene awareness. The student is expected to demonstrate basic level skill proficiency in patient care scenarios appropriate for beginning Paramedic practice.
EMS2632 Paramedic Science II
Credit Hours: 3
Topics include general principles of pathophysiology, pharmacology, venous access and medication administration. Patient Assessment including history taking, techniques of physical examination, assessment procedures, clinical decision making, and radio communications are included. Material includes 1998 U.S. Department of Transportation, (DOT), National Paramedic Curriculum objectives for Module 1, Units 6,7,8 and Module 3, Units 1-5.

EMS2632L Paramedic Science II Lab.
Credit Hours: 1
Skills Lab related to pharmacology, venous access and medication administration. Patient Assessment skills including history taking, techniques of physical examination, assessment procedures, clinical decision making, and radio communications are included. Other topics include Airway Management/Ventilation and cardiology. Material includes skills in the U.S. Department of Transportation, (DOT), National Paramedic Curriculum objectives for Module 1, Units 6,7,8 and Module 3, Units 1-5.

EMS2633 Paramedic Science II - Cardio-respiratory
Credit Hours: 3
Topics deal with Airway Management and ventilation. Selected units from Medical Emergencies are Pulmonary conditions, and Cardiology to include an introduction to 12 Lead Interpretation and the prehospital management of acute myocardial infarction. Material covers 1998 U.S. Department of Transportation, (DOT), National Paramedic Curriculum objectives for Module 1, and Module 5, Units 1,2.

EMS2634 Paramedic 3 - Trauma
Credit Hours: 3
Topics deal with Trauma patient care including: Trauma Systems & Mechanisms of Injury; Bleeding; Soft Tissue Injury, Burns; Face & Neck Trauma; Head & Spine Trauma; Chest Trauma; Abdominal & Genitourinary Trauma; and Orthopedic Trauma. Additional topics include: Environmental Emergencies; Transport Operations; Vehicle Extrication & Special Rescue; Hazardous Materials; and Crime Scene Awareness. Material includes the most current objectives and learning outcomes from the National Paramedic Curriculum.

EMS2634L Paramedic Science III - Trauma Lab.
Credit Hours: 1
Skills lab dealing with topics of trauma care, medical emergencies, and special care considerations related to obstetrics, neonatology, pediatrics, geriatrics, abuse and assault, patients, with special challenges and acute interventions for the chronic care patient. Material includes U.S. Department of Transportation (DOT), National Paramedic Curriculum objectives for Module 4, and Module 5, Units 3-14 and Module 6, Units 1-6.

EMS2635 Paramedic Science III - Medical Emergencies
Credit Hours: 3
Topics include Medical Emergencies related to neurology, endocrinology, allergies and anaphylaxis, gastroenterology, renal/urology, toxicology, hematology, environmental conditions, infectious and communicable diseases, behavioral and psychiatric disorders, gynecology, and obstetrics. Special Considerations related to neonatology, pediatrics, geriatrics, abuse and assault, patients with special challenges and acute interventions for the chronic care patient are also included. Material includes U.S. Department of Transportation, (DOT), National Paramedic Curriculum objectives for Module 5, Units 3-14 and Module 6, Units 1-6.

EMS2636 Paramedic Science IV
Credit Hours: 3

EMS2636L Paramedic Science IV Lab.
Credit Hours: 1
Final skills lab dealing with scenarios covering all aspect of the curriculum. Demonstration of skill competencies for Certification in ACLS, PEPP, 12 Lead ECG, Support, Emergency Management of Acute Stroke, and Traumatic Brain Injury required.

EMS2641 Paramedic Science - Hospital Clinical I
Credit Hours: 2
First of three hospital courses stressing Advanced Life Support (ALS) skills for the paramedic student.
Provides for directed supervised experiences in local hospitals including patient assessment, documentation and recording of patient care. Clinical experiences with patients having Cardio-Respiratory problems are stressed. Invasive procedures for IV therapy and medication administration are emphasized. Data recording of skill competencies on web based computer system is required.

EMS2642 Paramedic Science - Hospital Clinical II
Credit Hours: 2
Second of three hospital courses continuing Advanced Life Support (ALS) skills for the paramedic student. Provides for directed supervised experiences in local hospitals. Clinical experiences with patients having Medical and Trauma Emergencies is stressed. Special patients of interest include OB-GYN, neonates, pediatric, psychiatric, geriatric, and patients with special challenges. Data recording of skill competencies on web based computer system is required.

EMS2643 Paramedic Science - Hospital Clinical III
Credit Hours: 2
Last hospital courses involving patient care in a variety of emergency and health care agency sites Clinical experiences with patients of all age groups and medical/traumatic conditions is continued. Data recording of skill competencies on web based computer system is required. Health and Liability insurance required.

EMS2650 Paramedic Science I Field
Credit Hours: 1
First of four field courses dealing with the application of didactic material in the rescue field. Provides for directed, supervised experiences on EMS Advanced Life Support (ALS) vehicles. Emphasis on clinical activities and observations related to the US Department of Transportation (DOT), National Paramedic Curriculum, Module 1 and 8. Activities limited to practice of basic life support skills, assisting as a member of the EMS team and observation of paramedic level skills and activities. Documentation of patient care observations and patient care experiences using web based data collection system is required.

EMS2651 Paramedic Science II Field
Credit Hours: 3
Second of four field courses that provides for directed, supervised experiences on EMS Advanced Life Support (ALS) vehicles. Emphasis on clinical activities related to physical assessment with emphasis on patients with Cardio-Respiratory problems. Invasive procedures for IV therapy and medication administration are introduced. Data recording of skill competencies on web based computer system is required.

EMS2652 Paramedic Science III Field
Credit Hours: 3
Third of four field courses stressing continuation of Advanced Life Support Skills for the Paramedic student. Provides for directed, supervised experiences on Advanced Life Support (ALS) vehicles. Emphasis on clinical activities related to trauma care, medical emergencies, obstetrics, pediatrics, geriatrics and specialty areas.

EMS2653 Paramedic Science IV Field Internship
Credit Hours: 4
Final field course where student serves as team leader on EMS calls under supervision of EMS agency preceptor. Provides for directed, supervised experiences on Advanced Life Support (ALS) vehicles with increasing responsibility for the management of the EMS response.

EMS2850 Paramedic Curriculum Bridge
Credit Hours: 4
This course provides a bridge for the 1998 DOT Paramedic Curriculum. Topics include emergency care coverage for heart attack and stroke victims, enhanced 12 lead interpretation, use of thrombolytics, and inclusion/exclusion criteria for thrombolytic therapy. In addition, this course includes a number of sections not covered or briefly covered in 1985 DOT National Paramedic Curriculum. These specific topics include the well-being of the paramedic, injury prevention, therapeutic communications, life-span development, general principles of pathophysiology, clinical decision making, hematology, abuse and neglect, patients with special challenges, acute interventions for the home health-care, assessment based management, and crime scene awareness. Material includes 1998 U.S. Department of Transportation, (DOT), National Paramedic Curriculum objectives for Module 1, Units 2,3,6,9, and 10, Module 3, Unit 4, Module 5, Units 2 and 9, Module 6, Units 4, 5, and 6, Module 7, and Module 8, Unit 5.

ENC0015C Developmental Writing I
Credit Hours: 4
This course provides an overview of the fundamentals of grammar, mechanics, usage, sentence structure, and
paragraph development. A laboratory component will supplement classroom instruction.

ENC0017C Accelerated Literacy Reading/Writing Integration
Credit Hours: 4
This course will focus on critical thinking skills required to read, analyze, and synthesize written information, including the expansion of vocabulary and grammatical/mechanical skills required to successfully negotiate the writing process in preparation for reading and writing at the college level.

ENC0025C Developmental Writing II
Credit Hours: 4
A refinement of grammatical, mechanical, and usage principles including an overview of the strategies of paragraph and essay development. A laboratory component will supplement classroom instruction.

ENC1101 Composition I
Credit Hours: 3
A university parallel course in which the student writes expository themes in various modes. Research methods and library skills are introduced and a documented paper is required. Each student is encouraged to use the writing lab to strengthen writing skills.

ENC1102 Composition II
Credit Hours: 3
Composition II is designed to further develop a student's composition skills by building on the rhetorical modes/strategies learned in ENC1101. The course requires students to observe the conventions of Standard American English and create documented essays, demonstrating the student's ability to think critically and write analytically. Selected readings supplement the course and provide topics for discussion and written assignments. Students use library research methods for primary and secondary sources to produce MLA style-documented and well-argued essays and research paper.

ENC2210 Professional and Technical Writing
Credit Hours: 3
A composition course focusing on writing for business, science, and technology. Assignments include letters, memos, resumes, reports, proposals, an oral presentation, and the use of graphics. Students use a variety of research and investigative techniques to produce documented papers on science, business or technological subjects.

ENG2101 The Film as Literature
Credit Hours: 3
Focuses on the relationships of two art forms - literature and film - and pays particular attention to how film has evolved as an art form and the ways which literature and its elements have influenced film. Also examines uses of literary techniques and the ways they have been adapted to film. Selected novels, short stories, plays, essays and/or memoirs may also be read as a means of comparing film and literature.

ENL2012 British Literature to 1798
Credit Hours: 3
Traces the development of the thematic, linguistic, and literary characteristics of British literature up to the 18th century. Emphasis will be placed on Chaucer, Shakespeare, Milton, Swift, and authors that reflect the changing literary canon.

ENL2022 British Literature Since 1798
Credit Hours: 3
Students will be introduced to works that represent the diverse literature of British literature published since 1798 to the present. Texts may be selected from major authors such as Amis, Austen, Blake, the Brontes, the Brownings, Byatt, Coleridge, Darwin, Dickens, Elliot, Ishiguro, Marx, Pinter, Tennyson, Wollstonecraft, Wordsworth, Byatt, Rushdie or Achebe. Upon successful completion of the course, students will understand the significant concepts, contexts, movements, figures, and works of British Literature since 1798 to the present.

ENL2330 Introduction to Shakespeare
Credit Hours: 3
This course introduces students to the background of Shakespeare's life and work. Shakespeare's sonnets or narrative poems and plays are presented and the structure, content, and vision of Shakespearean histories, comedies, tragedies, and romances are studied. The course offers an opportunity to reinforce critical reading, writing, and research skills with regard to an iconic writer of western literature.

ENY1001 Bugs & People
Credit Hours: 3
A survey course in entomology for non-majors. The focus will be on both beneficial and detrimental impacts of insects and related arthropods and their role in the environment. Interactions with man, such as insects as disease vectors, agricultural pests, urban pests, indicators of environmental health, pollination and
forensic crime-solving tools will be given emphasis. Both current and historical events and their impacts will be examined. The students will be given a non-anthropogenic view and expand their knowledge about the abundance and diversity of the largest group of animals on the Earth.

ENY3005 Principles of Entomology
Credit Hours: 2
An introduction to entomology with lecture and labs on insect structure, development, classification, habits and control.

ENY3005L Principles of Entomology Lab
Credit Hours: 1
An introduction to entomology with lecture and labs on insect structure, development, classification, habits and control.

ENY4161 Insect Classification
Credit Hours: 3
Classification of major families of adult insects with emphasis on their identification, habitat and niche. A properly curated collection is required.

ESC1000 Earth Science
Credit Hours: 3
An integration of the three classic disciplines of the earth sciences, geology, meteorology, and oceanography. Course will focus on the basic principles governing these disciplines, and the effect of each on man.

ESC1000L Earth Science Laboratory
Credit Hours: 1
This course will have experiments and exercises that will be investigating the hydrosphere, lithosphere and atmosphere of earth. The earth will also be mapped and investigated as an object in space. At least 3 of the following five units will be covered: Credit Hours: 1 Introduction to Laboratory Study, Credit Hours: 2 The Solid Earth, Credit Hours: 3 Earth’s Waters, Credit Hours: 4 Earth’s atmospheres and Credit Hours: 5 Mapping.

ESC4074 Weather & Climate
Credit Hours: 3
This course provides an introduction to general meteorology and atmospheric sciences for students in the TEP (Teacher Education Program). It includes the composition and structure of the atmosphere and characteristics that affect it, such as temperature, humidity and pressure. The course examines the development of meteorological phenomena, such as storm systems, hurricanes, weather fronts and cloud formations. Climatologic concepts will also be explored. This course maintains scientific integrity and addresses technologies used in both meteorological and climatic studies.

ETD1320 Basic CAD
Credit Hours: 3
First course in computer aided design (CAD), lab work using AutoCAD software. Topics include fundamentals of DOS, AutoCAD command structure, setting units and limits, drafting primitives, layering, use of editing tools; grid, snap, and axis commands. Assignments requiring extensive use of the CAD lab.

ETD2350C Advanced CAD
Credit Hours: 3
Covers additional topics in AutoCAD which include blocks, move and copy, array, mirror, text, text styles, 3-D and isometric modes. The development of macro operations.

ETI1110C Introduction to Quality Assurance
Credit Hours: 3
This course defines the role of quality in an industrial environment. Topics include the use of quality management techniques and quality philosophies, process development, techniques used for evaluation, approaches used on continuous operations, methods used to control quality, and the International organization for Standardization (ISO) series of standards. The responsibility of quality assurance during the engineering, manufacturing, and marketing of a product is also covered.

ETI1420 Processes & Materials
Credit Hours: 3
This course provides coverage of the characteristics, fundamentals, and manufacturing properties of materials, including metal alloys, polymers, ceramics, and composites. The metal-casting processes and the shaping and forming processes are also covered along with the machines needed for manufacturing.

ETI1701 Safety
Credit Hours: 3
This course focuses on the theories and principles of occupational safety and health in a practical and useful real world job related setting. The major topics include the Occupational Safety and Health Administration (OSHA) compliance, safety standards, code
enforcement, ergonomic hazards, mechanical hazards, falling, lifting, electrical hazards, fire hazards, industrial hygiene, radiation, noise, emergencies, and environmental safety.

ETM1010C Measurement & Instrumentation
Credit Hours: 3
This course provides the basic foundation for both mechanical and electronic measurement techniques used in manufacturing environments. The course will integrate the concepts, principles, and techniques of mechanical measurement with the use of various types of instruments including micrometers, verniers, calipers, gages, and other types of measuring equipment. The course will also introduce the student to the basic measurement techniques employing electronic test equipment including the operation and usage of digital multi-meters, function generators, and oscilloscopes.

ETP2402C Introduction to Solar Photovoltaic (PV) Systems
Credit Hours: 3
This course delivers an introduction to background essential theory, principles, and future of distributive energy technology. It focuses on solar/photovoltaic systems work and integrate with the electrical grid. This course is the first of a two-part series (precursor to the installation course EET2551C) that will prepare the student for the North American Board of Certified Energy Practitioners (NABCEP) certification.

ETP2410C Installation of Solar Photovoltaic (PV) Systems
Credit Hours: 3
This course covers the design and installation of photovoltaic systems. It is the second course in a two-part series (follow-up to the Introduction to PV Systems EET 2550) which provides all the content necessary to prepare the student for the North American Board of Certified Energy Practitioners (NABCEP) certification.

ETS2224C Fiber Optic Communications
Credit Hours: 3
This extensive lab experience covers fiber optic communication systems and devices. Topics include electronic and optical devices, splices and fiber optic cables as well as telecommunications applications of fiber optic systems.

ETS2436C Biomedical Instrumentation I
Credit Hours: 3
Students will acquire proficiency in biomedical equipment maintenance through classroom and laboratory environment and will gain familiarity with and learn to evaluate, troubleshoot, test, and repair various types of biomedical equipment. Students will also learn to function in a hospital environment through an internship in the biomedical department of a participating hospital or biomedical equipment company.

ETS2542C Programmable Logic Controllers (L)
Credit Hours: 3
This course teaches the fundamental principles of Programmable Logic Controllers (PLCs), and how they are used to control industrial processes. Topics covered are PLC hardware, number systems and codes, fundamentals of logic, PLC programming, wiring and ladder diagrams, programming timers, and programming counters.

ETS2940 Biomedical Engineering Tech. Internship
Credit Hours: 3
The student will participate in a 13 weeks internship, 24 hours per week at a cooperating hospital. Topics will include orientation, orientation to biomedical engineering, medical instrumentation theory, safety standards, "hands-on" preventive maintenance procedures and equipment repair activities. The hospital biomedical engineering staff will directly supervise all aspects of this course.

EUH1000 Survey of Western Civilization I
Credit Hours: 3
Historical survey of Western culture from its roots in the ancient Near East to the beginning of the early modern period. Provides students with broad foundation of knowledge to understand socio-economic, intellectual, political and other cultural forces which have shaped (and continue to shape) Western civilization. Students will explore and apply general principles of historical methodology, and will develop their critical reading, thinking, and writing skills throughout the course. Geographic range: Near East, Mediterranean basin, Western Europe. Course themes comprise: development, expansion, and cultural influence of Greco-Roman civilization; encounters between diverse cultures over the several millennia which comprise Western Civilization, and the transformations which result from such encounters; the rise and fall of governmental, economic, and social systems; and the intersection of cultural institutions and historic events.
EUH1001 Survey of Western Civilization II
Credit Hours: 3
This course surveys the major political, social, economic, cultural and international developments that shaped Western Civilization from the 17th century to the 21st century. Major topics include the evolution of the European nation-state, the emergence and consequences of modern political ideologies, and the roles of revolution, war, industrialization and technological innovations in an era that saw Europe achieve and then lose world hegemony.

EUH2032 History of the Holocaust
Credit Hours: 3
This course examines the historical origins, execution, and consequences of the Holocaust.

EUH2052 History of Spain
Credit Hours: 3
This course will examine Spain's historical development from prehistoric times to the present. Particular emphasis is placed on tracing the effects upon modern Spain of the major events in the nation's history, as well as the impact on the country of historical phenomena such as the Renaissance, the Enlightenment, the Napoleonic Wars and industrialization. The last part of the course examines the Spanish Civil War, Francoism and the country's subsequent reemergence in the international community.

EVR1001 Environmental Science
Credit Hours: 3
Study of the physical environment, its relationship with the biosphere, and man's impact upon natural systems. This course includes ecological systems, Florida environments and geology, pollution and environmental regulations, renewable and nonrenewable resources, and Sustainability.

EVR1263 Fundamentals of Air Pollution
Credit Hours: 3
This course will cover the fundamentals of air pollution like various types of pollutants, their sources and health effects they on humans, animals and plants; monitoring and control aspects of gaseous and particulate pollutants; meteorological aspects governing the air pollution; automobile pollution; air pollution legislation and standards.

EVR1858 Environmental Regulation
Credit Hours: 3
This course deals with the purpose of federal, state, and local environmental law and its impact on South Florida and the larger world community. Reason for protection of the environment, compliance with legislation, and the concept of due diligence are emphasized. Extensive use of the case studies approach will be used to illustrate the application of law.

EVR2930 Environmental Science Seminar
Credit Hours: 1
Selected current topics in environmental science and related subjects are discussed. Placement by Testing Department.

EVR2949 CO OP Work Experience
Credit Hours: 3
A course designed to provide training in a student's field of study through work experience. Students are graded on the basis of documentation of learning acquired as reported by student and employer.

EVS2893C Environmental Sampling & Analysis
Credit Hours: 5
This course provides an introduction to EPA and DEP-approved methods for the collection and analysis of environmental samples. The laboratory is integrated with class theory. Topics include; sampling of water, soils, sediments and hazardous waste; application of field and laboratory-based analytical methods; documentation procedures; method validation including generation of precision, accuracy, and detection limits; writing comprehensive and project-specific quality assurance plans.

FES2010 Introduction to Emergency Management
Credit Hours: 3
A study of Emergency Management, including the current organizational structure/procedures of emergency management programs, the 4 phases of emergency management: mitigation, preparedness, response and recovery, and past and current emergency management systems.

FFP1000 Introduction to Fire Science
Credit Hours: 3
This introductory course will examine the evolution of the modern fire department, chemistry and physics of fire, fire hazard properties of materials; combustion; theory of fire control; importance of fire protection; public fire defenses; and other materials pertinent to fire service.
FFP1505 Fire Prevention Practices  
Credit Hours: 3  
Fundamentals of fire prevention are introduced with examination of fire causes and effects. The function of fire prevention bureaus, enabling legislation regulations and standards are discussed. Additional areas of study include the inspection process, fire code enforcement, local decisions, fire investigations, records and reports.

FFP1510 Codes & Standards  
Credit Hours: 3  
Review of specific requirements of codes and standards that have a direct influence on life safety in both new and existing structures. Study includes discussion on the requirements for property protection.

FFP1540 Private Fire Protection Systems I  
Credit Hours: 3  
This course examines requirements for and testing of fire sprinkler and standpipe systems, chemical systems, detection and alarm systems.

FFP1740 Fire Service Course Delivery  
Credit Hours: 3  
Examines the instructor's role and responsibility in the teaching/learning process, introduction of teaching/learning styles, job task analysis, learning objectives, lesson planning and development, testing and evaluation, and administration of programs.

FFP1793 Fire & Life Safety Educator I  
Credit Hours: 3  
This course is designed to provide the public educator with the knowledge and skills to successfully perform as a fire and life safety educator. Case study topics include fire behavior, community assessment, injury prevention and juvenile fire-setting. The student will also develop presentation skills and learn how to formulate public education programs. This course meets state and national certification criteria for Fire and Life Safety Education, Level I.

FFP1810 Firefighting Tactics & Strategy  
Credit Hours: 3  
A study of tactical considerations and strategic options employed in the extinguishment of fires; Pre-planning and company level field operations will be analyzed with application of course concepts.

FFP1830 Introduction to Hazards  
Credit Hours: 3  
An in-depth study of the details and dynamics of natural and man-made hazards. Includes methods and means to measure, monitor and predict the physical impact of hazards on society. Special emphasis on hazards that impact Florida.

FFP2111 Fire Chemistry  
Credit Hours: 3  
Study of the physical and chemical properties of matter, with a particular emphasis on hazardous materials, hydrocarbons, oxidation-reduction chemistry, and residuals of pyrolysis. Topics covered include atomic structure, the periodic table, chemical bonding, chemical measurement, stoichiometry, and the study of chemical properties according to group, class, and reactivity. Sample collection and analysis is included as a practical component of the course.

FFP2120 Fire Service Building Construction  
Credit Hours: 3  
Course examines objectives and criteria of South Florida building code requirements for various types of occupancies, classification by types of construction, building materials, fire resistant standards, egress, permits, inspections, and standards, and other pertinent material for building construction.

FFP2301 Fire Hydraulics  
Credit Hours: 3  
Study of the physical properties of water used in fire protection. Basic hydraulic measuring units, facts, theories and formulas for problem solving.

FFP2302 Fire Apparatus & Procedures  
Credit Hours: 3  
This course offers study in evolution of fire apparatus; apparatus construction; pumps and pump accessories; pumping procedures; pump tests; trouble shooting; aerial ladders; aerial platforms; maintenance; driving fire apparatus.

FFP2521 Construction Documents & Plans Review  
Credit Hours: 3  
Students will review actual building plans and apply codes, standards and inspection techniques, to find errors and omissions. Students shall make appropriate corrections according to the code, and with preferences identified.
FFP2541 Private Fire Protection Systems II
Credit Hours: 3
This course is an in-depth discussion of pre-engineered and portable systems, extinguishing agents, inspection procedures for code compliance and enforcement, and alarm systems. Contemporary systems are examined through case studies. This course is part of the Fire Inspector II State Certification.

FFP2610 Origin & Cause
Credit Hours: 3
A study of the arson and investigation problems examining facts and figures, motives and the role of fire department in arson suppression. Reviewing chemistry of explosions. Analyzing the juvenile arson problem. Analysis of urban fires, automobile fires, and reports, interrogation and presenting the arson case in the courtroom.

FFP2630 Latent Investigation
Credit Hours: 3
Study of proper crime scene and fire scene investigation including conduct of appropriate documentation, collection and preservation of evidence, and the qualitative analysis of data to determine whether or not prosecution for the crime of arson is indicated. Special situations/problems will be examined including the arsonist's use of explosive and hazardous materials. Motives for arson will be discussed, and distinctions made between civil and criminal situations.

FFP2670 Legal Issues for Investigators
Credit Hours: 3
Study of the applicable laws and attending legal considerations associated with the successful prosecution of arson cases. Specific areas of concentration include witness statements, interviews, interrogations, depositions, and written reports. Expert qualification and effective courtroom testimony will be examined and evaluated. Distinctions will be discussed between civil and criminal situations. Students will be required to prepare a case for prosecution from evidence gathered and/or provided in class, and present their testimony in a mock trial activity.

FFP2706 Public Information Officer
Credit Hours: 3
This course prepares the student to serve effectively as an organizational spokesperson, according to current practices in the profession of public relations and numerous examples from the fire service. Particular emphasis will be placed on case studies in crisis communications and the role of the Public Information Officer's role in the Incident Command System. This course is part of the Fire Officer II and Fire Inspector II State Certification programs.

FFP2720 Company Officer
Credit Hours: 3
Study of superior subordinate relationships, motivation, leadership, morale, discipline, work planning and other supervisory responsibilities related to fire dept. operations.

FFP2741 Fire Service Course Design
Credit Hours: 3
Course covers the principles of effective curriculum design in the Fire Service field. It stresses the principles of adult and student-centered learning. Students learn to design courses and units that address learning, performance, and behavioral objectives as related to Fire Science.

FFP2770 Ethical & Legal Issues for the Fire Service
Credit Hours: 3
This course deals with the entire spectrum of issues facing today's fire service leaders. Topics include: labor relations, human rights and diversity, conflicts of interest and frameworks for ethical decision-making are used. Case studies are used to explore contemporary issues. Students will be notified prior to the class. Part of Fire Officer II.

FFP2780 Fire Department Administration
Credit Hours: 3
An introduction into managing fire services and community fire protection programs. Relationships between the insurance industry, the professional community, contemporary management and planning concepts are analyzed.

FFP2800 Emergency Management Public Education Programs
Credit Hours: 3
The design, development and delivery of emergency disaster safety and informational programs to the public, including targeting program audiences and evaluating the effectiveness of the programs are analyzed.

FFP2811 Firefighting Tactics & Strategy 2
Credit Hours: 3
This course applies the basic principles learned in FFP1400 to specific fire problems, e.g., churches, flammable gases and liquids, lumberyards, department
stores, residential, supermarkets, and warehouses. Included are additional pointers on solving these problems and those of a miscellaneous nature; also command responsibilities on the fire ground.

FFP2831 Hazard Planning & Mitigation
Credit Hours: 3
An examination of how to develop programs that will reduce losses from future disasters, emergencies and other extreme events caused by natural and man-made hazards.

FFP2840 Disaster Response & Recovery
Credit Hours: 3
This course teaches all aspects of disaster operations with an emphasis on disaster response and recovery. Tactics, techniques and procedures for meeting the needs of disaster victims, providing mass care, and organizing and maintaining response operation.

FFP2841 Emergency Planning for Business & Industry
Credit Hours: 3
A study of the contingency planning process of emergency/disaster preparedness in the corporate world, including a step-by-step approach to emergency planning, response and recovery for companies of all sizes.

FIL1100 Screenwriting 1
Credit Hours: 3
The course is a workshop in which students will develop their own original stories, while learning basic narrative structure for feature length screenplays. Student will also learn to break down and analyze popular screenplays.

FIL1131 Screenwriting II
Credit Hours: 3
The course is a workshop in which students will develop their own original stories, while learning advanced structure and formatting for complex short narrative screenplays.

FIL1420C Introduction to Film Production I
Credit Hours: 4
Provides a basic understanding of digital film production technology, equipment operation, terminology, and techniques, as well basic industry positions, procedures and protocols in the production of several short narrative motion pictures.

FIL1456C Film Production Design
Credit Hours: 3
In this course, students will learn basics of production design and its importance in film. Production design concepts and techniques will be developed and applied in class.

FIL1552C Film Post Production I: Editing
Credit Hours: 3
Basic theory and practice of nonlinear editing for narrative motion pictures using industry motion picture editing software are examined.

FIL2000 Introduction to Film Studies
Credit Hours: 3
This course is designed to provide an introduction to film as an art form, cultural product and social artifact. It will include then understanding of basic analytical and technical forms, concepts, issues and development of critical skills. It will also include the history, development, theory and criticism of film art, as well as the basic principles of film making and film production.

FIL2432C Film Production II
Credit Hours: 4
Building on the basic concepts of film production 1, students continue to develop an understanding of professional digital film production with the addition of basic lighting and sound for cinematic storytelling. Industry positions, procedures and protocols will be emphasized during the production of several short narrative motion pictures.

FIL2438C Film Production III
Credit Hours: 4
Building on the concepts of the first two Film Production Courses, students continue to develop an understanding of professional digital film production with emphasis on documentary production. Industry positions, procedures and protocols will be emphasized during the production of several short motion pictures.

FIL2471C Film Post Production III: Visual Effects
Credit Hours: 3
This course will introduce students to the basic theory and techniques used in digital visual effects for film. Topics covered will include Text Effects, 3-D Effects with Motion, Image Compositing and Green-Screen compositing.
FIL2515C Film Production IV  
Credit Hours: 4  
This course emphasis preproduction and production protocols, direction of actors, rehearsals, camera staging, visual effects, scene coverage and shooting for continuity. Working in teams, the students learn to apply the knowledge acquired in previous film courses to the production of short narrative sound films of portfolio quality.

FIL2537C Film Post Production II: Sound Design  
Credit Hours: 3  
This course will introduce students to the basic theory and techniques used in sound design for film and video. Topics covered will include sound recording and the use of sound editing software to execute dialogue replacement, effects, sweetening, and foley. Students will create a mix of the three stems of sound design: Dialogue, Music, and Sound Effects.

FIL2572C Film Post Production IV: Advanced Post  
Credit Hours: 3  
Students will employ advanced theory, techniques and procedures used in editing, sound design, visual effects and color correction for film using industry-standard software.

FIL2611 Film Business & Entrepreneurship  
Credit Hours: 3  
In this course, students will learn the business aspect of filmmaking, including creating a business plan that involves marketing, distribution and exhibition. Legal aspects of filmmaking are also covered.

FIL2647 Film Producing & Production Management  
Credit Hours: 3  
This course will introduce students to the theory and practice of producing and managing picture productions, from preproduction to post, including the management of above-the-line talent. Topics covered will include budgeting, script breakdown, scheduling, location scouting, and crew procurement, among others.

FIL2791C Motion Picture Visual Post Production 1  
Credit Hours: 3  
Basic theory and practice of computerized photo retouching, digital video compositing, and motion graphics for narrative motion pictures using industry standard imaging software such as Photoshop and After Effects are examined.

FIN1100 Personal Finance  
Credit Hours: 3  
This course provides a survey of the areas of personal economic problems with which all individuals must contend. Course content guides each person towards receiving favorable results in the following areas: buying on credit, borrowing money, using bank services, and investing savings; selecting from various types of insurance coverage; home ownership vs. renting; obtaining investment information, investing in stocks and bonds; income taxes; Social Security; Medicare, retirement planning and annuities; and estate planning, wills, and trusts.

FIN2051 Finance of International Trade  
Credit Hours: 3  
This course provides a general survey of international trade. Topics studied include transportation modes, cargo insurance and the various special terms of sale used in overseas transactions. Also covered are import/export, foreign exchange, pricing and quotations; import/export documentation and procedures; documentary credits, international payments and collections; bank financing sources for international trade and alternative financing techniques.

FIN3400 Principles of Financial Management  
Credit Hours: 3  
This is an introductory course in managerial finance in which the student should attain a clear, basic understanding of the fundamentals of finance and their associations to the decision-making framework faced by a financial manager. Topics include time value of money risk and rates of return, asset valuation, financial planning and forecasting, working capital management and international financial management.

FIN3403 Managerial Finance  
Credit Hours: 3  
This is an introductory course in managerial finance in which students GAIN A CLEAR clear, basic understanding of the fundamentals of finance and its related decision-making. The course will cover all elements of organizational finance from budget development to finance management, and from procurement to accounting. topics include: how financial structure and operational efficiency affect a firm; alternative methods of raising funds; concepts of equity versus borrowed funds; financial planning and forecasting, working capital management; international financial management and other topics relevant to the acquisition, financing, and management of business assets and business decision-making, with emphasis on doing business in a multi-national environment.
FOS2201 Food Service Sanitation & Safety
Credit Hours: 3
This course provides the student with the basic concepts of food microbiology and food borne diseases. Standards enforced by food regulatory agencies will be identified. All information will lead to the application of measures to prevent food borne illness. This course includes a comprehensive exam leading to national certification.

FRE1000 Elementary French Conversation
Credit Hours: 3
A custom made course for those residents in the community who require a cursory knowledge of French to help them communicate with French speaking people.

FRE1120 Beginning French I
Credit Hours: 4
Fundamentals of speaking, listening-comprehension, reading, writing, and Francophone culture. Classroom practice and exercises supplemented by laboratory and/or multi-media designed to develop communicative competence and cultural sensitivity. Student expected to continue further implementation and expansion of their proficiencies in FRE 1121 and FRE 2220. Students are encouraged to study abroad.

FRE1121 Beginning French II
Credit Hours: 4
A continuation of FRE 1120 which further develops the basic skills in speaking, listening-comprehension, reading, writing, and appreciation of Francophone culture. Classroom practice and exercises supplemented by laboratory and/or multi-media activities designed to develop and enhance communicative competence and cultural sensitivity.

FRE2220 Intermediate French I
Credit Hours: 4
A continuation of FRE 1121 with a review of the most essential grammatical structures and an introduction of new grammatical and idiomatic material, composition and readings in French prose and culture, & conversation at an easy and enjoyable pace. Upon successful completion of this course, the students should be able to demonstrate an understanding of the more complex concepts of the grammatical and idiomatic principles of French and write and speak properly within the limits of this course. In addition, the student must show proficiency in comprehending various cultural and literary reading selections in the original French with different levels of reading difficulty.

FSS1203C Quantity of Food Production 1
Credit Hours: 3
Students will acquire the fundamental concepts, skills and techniques involved in the management of resources, use of recipes, use and care of equipment, and evaluation of food products. Special emphasis is given to practical demonstrations in breakfast cookery, salads, dressings, cold sauces, sandwiches, and safety and sanitation principles. Students must successfully pass written and practical cooking examination covering a variety of techniques and procedures.

FSS1240C Classical Cuisine
Credit Hours: 3
This course provides the professional culinary student with new menu items and terminology. It sets and applies standards to hot/cold hors d'oeuvres, appetizers, large and small dinner parties, and pastry products. The students observe preparation skills, write recipes, practice correct serving techniques, and taste the prepared food.

FSS1246C Baking & Pastries I
Credit Hours: 3
Students will acquire knowledge of the composition and properties of baking ingredients. They will utilize the proper equipment and tools, and standardized recipes to prepare yeast breads, rolls, pastries, and cakes in the food service laboratory. The instructor will evaluate the products prepared based on established food service standards.

FSS1284 Catering
Credit Hours: 3
This course provides a survey of catering operations. Topics covered include the preparation of a menu, estimating cost and food quantities, planning the room arrangement, the setup of buffet and service tables, and the performance of services. In addition, the allocation of time to prepare, transport, and setup the equipment and food for a catered affair are studied.

FSS2204C Quantity of Food Production 2
Credit Hours: 3
This course will enable students to learn and execute various methods preparing vegetable, starch, meat, fish, and poultry cookery, including the basic cooking techniques: sautéing, roasting, poaching, braising and frying.
FSS2205C Quantity of Food Production 3
Credit Hours: 3
Students will focus on the knowledge and preparation of job descriptions. Students will utilize all commonly accepted methods of recruiting a successful staff. Menu selection, staffing, and balance will be studied. The course also emphasizes safety and sanitation procedures. Students will learn about common problems in hiring and supervising employees.

FSS2242C International Cuisine
Credit Hours: 3
This course covers international cookery as it applies to modern menu use and selection. It includes preparation of cold buffet, entree, dinner accompaniment, and flambe dessert. The students observe preparation skills, write recipes, practice correct serving techniques, and taste the prepared food.

FSS2247C Baking & Pastries II
Credit Hours: 3
Students will continue to build knowledge of the composition and properties of baking ingredients. They will utilize the proper equipment and tools, and standardized recipes to prepare yeast breads, rolls, pastries, and cakes in the food service laboratory. The instructor will evaluate the products prepared based on established food service standards.

FSS2248C Garde Manger
Credit Hours: 3
Students will acquire knowledge and demonstrate skills in the cold foods area of the kitchen. The key topics will include sausages, pats, terrines, cured and smoked foods, cheese making, hors d'oeuvres, appetizers, condiments, garnishing and ice carving.

FSS2251 Food & Beverage Management
Credit Hours: 3
Covers the principles and procedures involved in an effective food and beverage control system, including standards determination, the operating budget, cost-volume-profit analysis, income and cost control, menu pricing, theft prevention, labor cost control, and computer applications.

FSS2500 Food Service Costing & Controls
Credit Hours: 3
This course provides a cost managing approach to the study of food and labor controls. Students examine the relationship of food and labor costs to selling price; cost control procedures for recipes and menus; pre-cost and pre-control techniques; the preparation and utilization of management reports. A review of mathematics and its application to practical problems is covered. Emphasis is placed on the utilization of controls as a tool of management.

GEA2000 World Geography
Credit Hours: 3
Regional geographical characteristics, area relationships and major regional internal as well as interactive problems will be analyzed. The theme of this course is to impart geographic knowledge at the world regional level, then explain how these factors create global contrasts. Special emphasis will be placed on how the world has become more interdependent as complex economic systems have evolved and become more specialized.

GEA2030 Geography of the Eastern World
Credit Hours: 3
A regional survey of the human/cultural and physical/environmental aspects of the non-western world including the following regions: North Africa & SW Asia, Sub-Saharan Africa, South Asia, Southeast Asia, East Asia, and the Pacific Island Realm. The characteristics and special problems of each region will be analyzed from a geographical perspective in order to understand global diversity and the forces and issues that help shape the world.

GEA2040 Geography of the Western World
Credit Hours: 3
A regional survey of the human/cultural and physical/environmental aspects of the western world including the following regions: Europe, Russia and the C.I.S., Anglo America, Middle America, South America, and Australia. The characteristics and special problems of each region will be analyzed from a geographical perspective in order to understand global diversity and the forces and issues that help shape the world.

GEB1011 Introduction to Business
Credit Hours: 3
This course provides a basic study of business activity and how it relates to our economic society. Topics covered include how businesses are owned, organized, managed and controlled. Course content emphasizes business vocabulary, areas of business specialization, and career opportunities.
GEB2112 Entrepreneurship  
Credit Hours: 3  
This course presents a modern treatment of business. It explores start-up/buy-out, franchising, business plans, marketing plans, human resources, financial planning, legal forms, products/services, selling, advertising, management policies, accounting systems, tax issues, capital management, information technologies, risk management, and ethical issues.

GEB2430 Business Ethics  
Credit Hours: 1  
A brief practical approach to recognizing, understanding and solving ethical problems confronting today's business people and organizations. Students will review the historical development of ethics, examine a variety of ethical dilemmas, and will practice resolving them through ethical reasoning. Reference to statutory and professional codes will be addressed. Logical and responsible decision-making will be stressed with individual, organizational and societal needs being addressed.

GEB2949 CO OP Work Experience  
Credit Hours: 3  
A course designed to provide training in a student's field of study through work experience. Students are graded on the basis of documentation of learning acquired as reported by student and employer.

GEB2955 International Current Business Practices  
Credit Hours: 3  
Upon successful completion of this course, students should have a broad conceptual viewpoint of international business activity in areas such as finance, marketing, production and manufacturing. This course covers the nature and purpose of business between nations as well as the concepts of the multinational corporation and its importance in the world marketplace. Business concepts of other nations are studied through actual visits to foreign business enterprises. Emphasis is given to the differences in business policies between countries and their relationship to business activity.

GEB3213 Business Writing  
Credit Hours: 3  
This course focuses on techniques to improve writing skills. The course will use a workshop format that relies on writing assignments, discussions, and classroom activities. An emphasis on global business writing will be included.

GEO1000 Introduction to Geography  
Credit Hours: 3  
This course is a study of the geographical patterns of both human and physical phenomenon and the interaction between humans and their environment. Through readings in the text and/or supplemental sources and via class lectures, activities and discussions analysis will target the earth's physical systems including landforms, hydrosphere, and climates; human systems such as culture, population and economic/urban development; as well as and human impact on the world's natural resources.

GEO2200 Physical Geography  
Credit Hours: 3  
This course serves as an introduction to the manner in which natural systems function at global and regional scales. The course uses a geographical perspective to analyze landforms, climate, the water cycle, and the biosphere, examining spatial relationships and regional variations and addressing spatial patterns of human activity as related to environmental phenomenon.

GEO2370 Conservation of Natural Resources  
Credit Hours: 3  
A survey of the use and mismanagement of natural resources within the environment, including problems of development, pollution, biotic systems, population, resource depletion and technology. Special emphasis will be placed upon the spatial/geographical Manifestation of conservation issues.

GEO2420 Introduction to Human / Cultural Geography  
Credit Hours: 3  
This course will introduce students to geographical concepts as applied in human/cultural issues and problems of the world today. Emphasis will be placed on tensions between globalization and human diversity. The systematic approach will offer theories and techniques developed by geographers that assist in understanding both human-cultural interaction and human-environmental interaction.

GER1120 Beginning German I  
Credit Hours: 4  
Fundamentals of speaking, listening-comprehension reading and writing in German are covered. Introduction to the German-speaking world, German language and culture. Classroom practice supported by on-line, laboratory and/or multi-media exercises, designed to develop student proficiency and confidence. Students
are expected to further their skills in GER1121 and GER2220.

GER1121 Beginning German II
Credit Hours: 4
This course further develops speaking, listening comprehension, reading and writing in German. Students become more acquainted with the German speaking world, German language and culture. Classroom practice supported by on-line, laboratory and/or multi-media exercises, designed to develop student proficiency and confidence. Students are expected to further their skills in GER2220.

GER1170 German Study Travel
Credit Hours: 3
A course designed for students who wish to combine the study of German with subsequent travel to a German speaking region.

GER2220 Intermediate German I
Credit Hours: 4
Continued practice of speaking, listening comprehension, reading and writing in German. Students acquire more in-depth knowledge about the German speaking world, German language and culture. Classroom practice is supported by on-line, laboratory and/or multi-media exercises, designed to develop student proficiency and confidence. Students are expected to further their skills by studying abroad.

GIS1000 Mapping Fundamentals
Credit Hours: 3
Mapping Fundamentals introduces students to the design, compilation, and construction of thematic maps. Topics include map projections, page layout, scale change and generalization, lettering, symbols, color usage and reproduction. The major types of thematic mapping (proportional symbols, isopleths, and choropleths) are studied. Exercises utilizing graphics software (Adobe Illustrator 7.0) are designed to introduce students to computer assisted cartography. Lab assignments provide an opportunity to apply cartographic theory in a wide range of mapping exercises.

GIS1030 Remote Sensing & Applications
Credit Hours: 3
This course introduces basic concepts and fundamentals of remote sensing, image processing, and the Global Positioning System (GPS). The principles and processes involved in airphoto interpretation will be reviewed and examined. Image processing techniques will be reviewed from practical and mathematical points of view. The course is intended to provide the student with the background information necessary to successfully use remotely sensed imagery and GPS in conjunction with GIS technology.

GIS1040C Introduction to Geographic Information Systems I
Credit Hours: 4
The intent of this course is to provide the student with a detailed introduction in Geographic Information Systems (GIS) and support this information with laboratory activities. The course will cover all working knowledge of the theory aspects of geographic information systems including data collection, preprocessing, data management and data analysis as well as an introduction to the application of these systems.

GIS1042C Introduction to Geographic Information Systems II
Credit Hours: 3
This course will build upon the student's fundamental knowledge of GIS gained in the prerequisite course titled Introduction to Geographic Information Systems I. The student will learn how to implement geographic concepts in GIS systems. The course will provide the student with the fundamental of computing and information science systems and cartography. It will introduce the student to the theory and practice of computer-aided cartography. In addition, the student will delve more deeply into data representation, manipulation and presentation.

GIS1047C Applications of Geographic Information Systems
Credit Hours: 3
A combined lecture and laboratory course in which students will draw upon the principles learned in GIS I and GIS II to increase/refine skills and apply them to individual and/or group projects.

GIS2040C Introduction to Geographic Information Systems I
Credit Hours: 4
The intent of this course is to provide the student with a detailed introduction in geographic information systems (GIS) and support this information with laboratory activities. The course will cover all working knowledge of the theory aspects of geographic information systems...
including data collection, preprocessing, data management and data analysis as well as an introduction to the application of these systems. Prerequisite: knowledge of Windows operating system.

GIS2042C Introduction to Geographic Information
Credit Hours: 3
This course will build upon the student's fundamental knowledge of GIS gained in the prerequisite course titled "Introduction to Geographic Information System I". The student will learn how to implement geographic concepts in GIS systems. The course will provide the student with the fundamental of computing and information science systems and cartography. It will introduce the student to the theory and practice of computer-aided cartography. In addition, the student will delve more deeply into data representation, manipulation and presentation.

GIS4301C Advanced Geographic Information Systems
Credit Hours: 3
This is an advanced project-based course where the student will apply fundamental and intermediate concepts in geographic information systems (GIS) to a specific project utilizing GIS technology and industry standard software. Students should come prepared with a project topic, scope, goals and objectives, and data sources. An oral presentation of the project will be made at the completion of the course.

GLY1010 Physical Geology
Credit Hours: 3
Study of geologic agents, minerals, rocks, structure, and land forms. The effects of geologic events upon life and human relations are discussed.

GLY1010L Physical Geology Laboratory
Credit Hours: 1
Study of common rocks and minerals including their classification and origin and the interpretation of landforms through the study of geologic maps.

GLY1100 Historical Geology
Credit Hours: 3
A study of the origin and evolution of the Earth and the history of life on our planet. The course encompasses the causes and effects geologic change and the evolution of life, and the role of plate tectonics on the geologic and biologic evolution of Earth. Emphasis is placed on how and why past geologic and biologic changes occurred. Interpretations of Earth's past history are also used to help explain current events and predict future trends. Field trips are optional.

GLY1100L Historical Geology Laboratory
Credit Hours: 1
This course is utilizes activities to interpret the earth's geologic history and augments the topics covered in GLY-1100. These exercises include a review of rocks and minerals interpretation of maps and aerial photography using principles to determine the sequence geologic events, application of paleontologic data, interpretation of depositional environments, stratigraphic correlation, interpreting surface and subsurface structure, and pale geographic exercises.

GLY4203 Environmental Geology & Lithospheric Processes
Credit Hours: 3
A comprehensive study of the materials that make up the Earth's lithosphere, followed by addressing the linkage between surface and lithosphere geology and the Earth's physical environment. Emphasis is placed on recognizing geologically related environmental issues and the interactions between people and the Earth's physical environment.

GLY4731 Coastal & Marine Science
Credit Hours: 3
This course introduces students to physical, biological, and "man caused" processes that occur in the coastal environment. Marine forces that control sediment movement and morphology changes will be examined. These forces, acting on a coastal ocean environment are waves and currents with the latter being generated by waves, winds and/or tides. Together with biological processes and the active and passive action of humans from the Coastal and Marine Science. Topics to be covered include: tides, wave theory, wave and current measurements, wave hindcasting and forecasting, sediment transport, beaches and bars, sediment budget. The goal of the course is to make students aware of the most important physical and biological processes that act in the coastal environment and the role they play in shaping the coastline. After completion of the course students will be able to identify the most important relevant processes for a particular coastal environment (i.e., inner shelf, beach, tidal inlet, estuary), and apply quantitative formulations as related to an environmental and/or engineering study relevant to that environment.
GLY4746 Global Environmental Change  
Credit Hours: 3  
The Earth is viewed as a system of complexly linked, continuously changing, geologic, atmospheric, biologic, and chemical processes that are characteristic of a dynamic and evolving planet. These physical, chemical, and biologic changes (both natural and anthropogenic) are explored over a wide range of space and time scale.

GLY4825 Hydrogeology  
Credit Hours: 3  
This course provide an introduction to the theory and principles of ground water flow as well as stream flow. Topics include the hydrologic equation, evapotranspiration, well drilling and and testing, porosity and permeability, Darcy’s law, confined and unconfined aquifers, water table maps, well logs, and hydrographs. An important aspect of the course is the geological control on groundwater. The movement of water from wells to Regional settings are explored. The mathematical equations used to describe groundwater flow are examined. Commonly used methods for measuring aquifer properties are discussed. Additional topics such as water law, aquifer contamination, and aquifer management will be introduced. Salt Water intrusion in Biscayne, FL or other similar examples will be examined. This course examines fluid flow through porous materials and the mathematics used to interpret hydraulic test data.

GLY4825L Hydrogeology Lab  
Credit Hours: 1  
This course is designed to pair GLY4825. Students will learn to use instruments to determine physical, chemical, hydrologic and geologic factors that control the occurrence and dynamics of groundwater. Students will develop the ability to investigate groundwater systems and to solve simple problems in basic and applied hydrogeology.

GRA1110C Applied Design 1  
Credit Hours: 3  
An introduction to the theory, history and practice of graphic design that explores a graphic designer’s role in today’s marketplace through lectures, speakers and field trips. Students will survey industry job titles including layout artist, package designer, web designer, advertising and branding design, as well as the increasing role of user experience and social networking design. Students will research and present a detailed examination of one facet of the industry. The class will also address ethics, copyright, and sustainability as well as business practices and professional organizations.

GRA1144C Web Publishing  
Credit Hours: 3  
This course is a basic course in designing web pages, web site architecture and navigation. Students will be instructed in the most current applications used for production of web pages. Proper coding of the pages using current web tools, with consideration of various platforms, will be provided. A special emphasis will be placed on interactivity design and page layout, and proper use of typography and images for delivery on the Internet. The class is portfolio driven, training students to follow a business process for analyzing client needs, conducting research and developing a concept for production within a budget.

GRA1151C Illustration Design 1  
Credit Hours: 3  
This course addresses the concepts and techniques necessary to create computer-generated illustrations for use in print, web and multimedia applications. Students will work with software packages utilized by professional designers. Assignments include the creation of technical illustrations, business graphics (charts, maps, tables, and diagrams) and art for other applications. The class is portfolio driven, training students to follow a business process for analyzing client needs, conducting research and developing a concept for production within a budget.

GRA1201C Typographic Design  
Credit Hours: 3  
This course is an introduction to computerized typography. The emphasis is on the visual effects of type as a design and communication element. Students will form an understanding of the fundamental rules related to type design, such as kerning and leading. The primary focus of the instruction will be in how type is used in contemporary graphic design applications, but some practice in hand lettering will be included as well as a study of the how various type styles are designed. Also included is a study of font management, postscript, and handling of digital files. Students will solve a variety of problems commonly encountered in the production of a body of type for both print and electronic output.

GRA2121C Publication Design  
Credit Hours: 3
This course introduces the student to principles governing page layout and the design of publications. The industry standard software will be used for the production of professional looking publications which may include magazines, newsletters, catalogs, newspapers, books, or annual reports. Topics covered include the basic principles of effective typography; the use of grids; integration of graphics and photos into publications; basic information design principles, working with spot, process color and separations, principles of page assembly and other methodologies to design and produce a variety of single and multi-page publications.

GRA2157C Illustration Design II
Credit Hours: 3
This advanced illustration class will expand the students' visual problem-solving vocabulary to include informational graphics, mapmaking and editorial illustration. Illustrations will use digital 2-D and 3-D solutions. In addition, students will incorporate natural material and construction into the process of illustration design. For informational graphics, students will research complex ideas and synthesize them into easily understood visual representations.

GRA2171C Brand & Ad Design
Credit Hours: 3
This course will introduce advertising and marketing principles. Students will apply design and technical skills introduced in foundation level classes. The focus will be on solving real world advertising and promotional problems, carrying projects from initial concept to final presentation of the product. Projects will satisfy the current industry client base which demands that a graphic artist conceive a given graphic idea for production in a variety of print outputs, as well as output for the Web, TV and multimedia. The class is portfolio driven, training students to follow a business process for analyzing client needs, conducting research and developing a concept for production within a budget.

GRA2180C Applied Design II
Credit Hours: 3
The student will apply all the knowledge acquired in previous courses to this portfolio building class. Projects will cover the full spectrum of graphic design jobs, including advertising, identity systems, packaging, way finding systems, and site-specific design. The designer will produce examples to show potential clients and/or employers the range of their skills.

GRA2185C Design Production
Credit Hours: 3
This course is an advanced level course that forms an integral part of the final skills needed to complete the Graphic Design Technology A.S. Degree requirements. It is intended to support the portfolio and internship courses by providing practice in advanced concept formulation and art direction strategies and practical experience in production of their portfolio at a service bureau.

GRA2190C Introduction to Graphic Design
Credit Hours: 3
This course is an introduction to the theory, practice, materials, techniques, and production methods used in graphic arts, pointing out how various layout techniques lead to a printed piece. Intended for art majors who wish to pursue a BFA degree in graphic design or want to seek entry level employment.

GRA2191C Graphic Design II
Credit Hours: 3
Communication and creativity theory for graphic designers, featuring preparation of art for reproduction using the computer as a graphic design problem-solving tool, combining text, image and digital design. Intended for art majors who wish to pursue a BFA degree in Graphic Design or want to seek entry-level employment.

GRA2403 Principles of Project Management
Credit Hours: 3
Students in this course will gain a comprehensive understanding of the skills required of project managers. This includes software presentation training, instruction in monitoring and controlling projects, procurement planning techniques, and an introduction to using project management software.

GRA2425C Portfolio & Business of Design
Credit Hours: 4
Students will collect their work into a print and web portfolio that represents their mastery of the skills and standards of the graphic design program. This capstone class will include business practices, ethics, contracts and copyright issues. Issues of sustainability and environmental sensitivity will be stressed.
GRA2754C Web Design II
Credit Hours: 3
Extends students' expertise in web design, this class will add advanced CSS, HTML5, Flash, search engine optimization, content management system and integration, as well as usability assessment and interface design. The student will also integrate social media, podcasting and blogging into web development.

GRA2940C Graphic Design Internship
Credit Hours: 3
This course is a culmination of the Graphic Design two years A.S. Program. Students will learn the necessary business protocol and job interviewing skills that will place them in an internship situation. The intern will work in a studio setting, e.g., advertising agency, graphic design department of a large company, commercial printing business, etc. The experience will involve all duties usually associated with the current graphic design profession. Interns are expected to complete project assignments from start to finish with minimal guidance from the sponsoring entity/establishment.

HBR1120 Beginning Hebrew I
Credit Hours: 4
Covers fundamentals of speaking & understanding reading & writing. Classroom practice & exercises supplemented by language and laboratory sessions are designed to develop confidence and a basic proficiency in Modern Hebrew.

HBR1121 Beginning Hebrew II
Credit Hours: 4
Continuation of HBR 1120. Further development of the basic language skills already mastered. Classroom discussions and practice are supplemented by exercises and multi-media activities designed to develop and enhance communication.

HBR2220 Intermediate Hebrew I
Credit Hours: 4
Classroom discussions and practice are supplemented by exercises and multi-media activities designed to develop and enhance communication and cultural awareness. Students will acquire a basic understanding of Hebrew syntax, grammar, and morphology, as well as an introduction to Hebrew literature of various eras.

HCP0001 Health Careers Core Curriculum
Clock Hours: 75.00
The Health Careers Core Curriculum course presents basic knowledge & skills for students majoring in a health science degree program. The course introduces students to a health care delivery system, the health occupations, and teaches basic medical and employability skills.

HFT1050 Introduction to Tourism Industries Administration
Credit Hours: 3
This course provides a survey of the history, organization, problems, opportunities and future trends in the areas which comprise the travel and tourism industries. Emphasis is placed on the economic benefits and social implications of tourism. This course is beneficial to the purchaser of tourism services as well as the marketer.

HFT1210 Supervisory Development
Credit Hours: 3
This course provides training on the art of supervising employees and the development of sound relations with other departments. It covers methods of controlling costs, development of cost consciousness, cost improvements, techniques in the supervision of employees, and developing sound relations with other departments.

HFT1941 Operations & Service Practicum
Credit Hours: 3
This course requires practical work experience or participation in formalized internship program in related disciplines in an approved segment of the hospitality/restaurant/travel industries and is coordinated with a weekly seminar. Faculty makes regular appraisals of the learning progress through on-site visitations and consultation with supervisors. Emphasis is placed on how the job relates to the satisfaction of customer needs. In addition, the essence of the service transaction offered by the organization is analyzed, including both the tangible and intangible components.

HFT2220 Organization & Personnel Management
Credit Hours: 3
This course covers the organization, supervision and direction of operations in the hospitality/restaurant/travel industries. It analyzes the internal organizational structure and its administrative roles and
functions. The course considers techniques of employee training, promotions, job specifications, discipline and morale. The course borrows from the behavioral sciences by emphasizing the human dimensions of management.

HFT2250 Hotel Management
Credit Hours: 3
This course provides a study of the growth and progress of the hotel industry and how hotels are developed, organized, financed and operated.

HFT2410 Front Office Systems & Procedures
Credit Hours: 3
This course provides basic training in front office procedures, and focuses on the rooms division of a hotel: front office, housekeeping, guest service, engineering, and security/loss prevention.

HFT2460 Financial Management
Credit Hours: 3
A study of accounting systems for the hospitality/restaurant/travel industries with emphasis on operating statistics and financial reports. The utilization of financial statements by management is studied.

HFT2500 Marketing
Credit Hours: 3
This course emphasizes how to sell and promote the services the hospitality/restaurant/travel industries offer guests. It covers the development of business through personal selling, media advertising and publicity. In addition, the operations of a sales and convention department are studied.

HFT2511 Convention & Group Business Marketing Management
Credit Hours: 3
This course covers the functions of the convention organizer and tour wholesaler in relation to the suppliers of travel and hospitality services. The responsibilities of each organization in the marketing of facilities and activities to organizers, retailers, and/or consumers are emphasized.

HFT2600 Hospitality Law
Credit Hours: 3
This course provides a study of the nature and function of our legal system as applied to hospitality, restaurant and travel operations. Operator/guest relationships, contracts, torts, civil rights and insurable risks are emphasized.

HFT2721 Travel Agency Management & Operations
Credit Hours: 3
This course provides familiarization with travel agency operations including the selling, transporting, storing, advertising, planning, and management of travel services. The course also provides hands-on training in computerized reservations (SABRE) and keyboarding, and incorporates key aspects of managing corporate travel.

HFT2730 Tour Packaging
Credit Hours: 3
This course provides a study of how to create, develop and sell package tours. Methods of customizing tours through the proper matching of destinations with market segments are covered.

HFT2942 Management & Control Practicum
Credit Hours: 3
This course requires practical work experience or participation in a formalized internship program in related disciplines in an approved segment of the hospitality/restaurant/travel industries and is coordinated with a weekly seminar. Faculty make regular appraisals of the learning progress through on-site visitations and consultations with supervisors. Emphasis is placed on human relations, motivational techniques and management styles relating to the control of employees, money, and material as they are used to satisfy customer needs.

HIM1000 Intro to Health Information Technology Management
Credit Hours: 3
This 3 credit course is the initial and introductory course to the health information technology program. This course introduces the student to learning technologies, learning styles, and oral competencies to enhance their degree of success entering the program. The course continues by introducing the student to the program and the Health Information Management professional. The student will also learn about the protected health record, healthcare delivery systems, ethical standards related to coding and protected health records, functions within the traditional health information management department.

HIM1110 Health Data Concepts
Credit Hours: 3
This course provides an introduction to the basic concepts and techniques for managing and
maintaining health record systems. Topics include: record content, format and uses of healthcare data, record systems, storage and retrieval, quantitative analysis of health data, forms design and control, release of information, function of indexes and registers, accreditation, certification and licensure standards applicable to healthcare facilities. Through the Virtual Healthcare Systems Lab, students will be given access to work on a variety of healthcare electronic system enhancing their technology skills and knowledge such as: Athens/Cerner Electronic Health Records, QuadraMed MPI QuadraMed Smart ID, QuadraMed Encoder, and McKesson Horizons. Students will be given the opportunity to utilize and practice with current software packages common to the industry.

HIM1110L Health Data Concepts Lab
Credit Hours: 1
This course provides an introduction to the basic concepts and techniques for managing and maintaining health record systems. Through the Virtual Healthcare Systems Lab, students will be given access to work on a variety of healthcare electronic system enhancing their technology skills and knowledge such as: Athens/Cerner Electronic Health Records, QuadraMed MPI QuadraMed Smart ID, QuadraMed Encoder, and McKesson Horizons. Students will be given the opportunity to utilize and practice with current software packages common to the industry.

HIM1253 Coding I
Credit Hours: 3
This course is designed to provide an introduction into basic ICD coding and coding guidelines. The course will focus on defining basic coding definitions, review of coding guidelines, introduction to billing methodology and application of codes to specific basic coding assignments using ICD.

HIM1253L Coding I Lab
Credit Hours: 1
This lab course provides HIM students an opportunity to apply basic concepts and techniques for ICD-9-CM coding using actual patient records and simulated patient records; both paper and electronic format from different treatment venues. Students will be guided through the practice coding by an experienced coding instructor with a detail analysis of correct coding technique. Students will be able to assess their own level of proficiency and access assistance in areas of identified coding weaknesses. Students will be introduced to encoding systems: 3M and QuadraMed.

HIM1260 Reimbursement Methodology
Credit Hours: 2
This course examines the complex financial systems within today's healthcare environment and provides an understanding of the basics of health insurance and public funded programs, managed care contracting and how services are paid. In addition to the step by step details about how each payment system functions, a brief historical review is also provided the student for a greater understanding of the impact has had on all stakeholders. This course will include a review of billing forms, different prospective payment systems and a discussion of claims management.

HIM1430 Survey of Human Structure & Disease I
Credit Hours: 3
This is the first of a 2 course series that will be a survey of the structure, function, and disease processes of the human body along with the current diagnostic and clinical treatment modalities. This course is geared to the health information technology student who will be utilizing this knowledge to code and classification diagnoses, procedures, diagnostic services rendered to patients in the healthcare environment. In Part I of this course series, the student will learn about the basic structure and functions of the cell, tissues and systems, basic diagnostic testing and pharmacological treatment for conditions found in the following systems: Skeletal, Muscular, Integumentary, and Nervous. Students will be introduced to basic pharmacology throughout the course and will learn the 50 most commonly prescribed medications. The medications studied will be by body systems so as to give the student a comprehensive understanding of the clinical treatment modalities.

HIM1435 Survey of Human Structure & Disease II
Credit Hours: 3
This is the second of a two course series that will be a survey of the structure, function, and disease processes of the human body along with the current diagnostic and clinical treatment modalities. This course is geared to the health information technology student who will be utilizing this knowledge to code and classification diagnoses, procedures, diagnostic services rendered to patients in the healthcare environment. In Part II of this course series, the student will learn about the basic structure and functions of systems, basic diagnostic testing and pharmacological treatment for conditions found in the following systems: Endocrine, the Senses, Cardiovascular, Respiratory, Lymphatic and Immune, Gastrointestinal, Urinary and Reproductive Systems. Students will be introduced to basic pharmacology
throughout the course and will learn the 50 most commonly prescribed medications. The medications studied will be by body systems so as to give the student a comprehensive understanding of the clinical treatment modalities.

HIM1800 Professional Practice Experience: Basic
Credit Hours: 2
This is an introductory level course giving the students their initial supervised Professional Practice experience in the health information management department. Emphasis is on record assembly, analysis, filing, admission and discharge procedures. Basic doing will be addressed. Upon completion, the student shall have an understanding of the daily functional operations of a health information management department. Each student will be responsible for completion of a Professional Practice I Workbook.

HIM2012 Health Records Law
Credit Hours: 3
This course focuses on the impact of legal and ethical issues in health information management. Topics include an overview of: the branches of government; tort law; confidentiality and release of information; subpoenaed information; record retention and security; information consent; liability; patient rights; negligence and malpractice; and ethics. Upon completion, students should be able to comply with legal requirements and be aware of legislative and regulatory trends.

HIM2112C Electronic Medical Record & Technology
Credit Hours: 3
This course will review the history of the electronic health record and current trends in healthcare information applications such as clinical information systems, administrative information systems, and management support systems. Students will explore the transition from a paper-based health record to an electronic health record and associated issues.

HIM2214L Health Statistics
Credit Hours: 1
This hands-on lab course covers the collection, compilation, analysis, verification and display of healthcare statistics. Topics include: the uses for statistics, basic statistical principles, commonly computed rates, vital health statistics, uniform reporting requirements, data display and the role of the HIM department.

HIM2232 Coding II
Credit Hours: 2
This coding course is designed to build onto the HIM1253 Coding I course by enhancing the students quality of coding and understanding of sequencing for ICD-9-CM. The student will be introduced to basic CPT coding using both a manual system and automated encoder. Introduction to DRG logic, APC's, RBRVS, PPS as well as Coding Guidelines for Hospital-Based Outpatient Services, Emergency Rooms, and Physician Offices. Different levels of HCPCS as well as outpatient reimbursement issues will be covered.

HIM2232L Coding II Lab
Credit Hours: 1
This lab course provides HIM students an opportunity to apply basic concepts and techniques for ICD-9-CM and CPT coding using actual patient records and simulated patient records; both paper and electronic format from different treatment venues. Students will be guided through the practice ending by an experienced coding instructor with a detail analysis of correct coding technique. Students will be able to assess their own level of proficiency and access assistance in areas of identified coding weaknesses. Students will be introduced to encoding systems: 3M and QuadraMed.

HIM2234C Advanced Coding Concepts
Credit Hours: 2
This is an advanced coding lecture lab course giving the student extensive hands-on experience in coding complex and sophisticated cases from inpatient, outpatient and physician office settings typically handled by the coding specialist on the job. Emphasis will be placed on quality of specific coding, sequencing, coding compliance and billing methodology. Students will be expected to code assigned cases utilizing the ICD-9-CM, ICD-10-CM, ICD-10-PCS and CPT coding manuals and automated coder/groupers. All coding exercises will be timed, conducted and verified in the classroom.

HIM2500 Performance Improvement
Credit Hours: 2
This course is an introduction to the principles of performance improvement and quality management in health care. Topics include: clinical quality improvement; utilization management; risk management; medical staff credentialing and peer review; accreditation standards; laws and regulations; tools for data collection, analysis, and display; and the role of the HIM department. Upon completion, students
should be able to apply performance improvement techniques; collect, analyze, and display data; and support a range of quality management activities.

HIM2512 Supervision & Organizational Life
Credit Hours: 2
This course covers management and supervision principles as they are applied to healthcare settings. A study of the aspects and techniques of planning, organizing, motivating, and controlling is presented with emphasis on communication, collaboration, and decision making.

HIM2652 Health Information Systems
Credit Hours: 3
This course is an introduction to information technology related to health care and the automated tools and techniques for collecting, storing, and retrieving data. Topics include: system analysis, design, and security; file structure, networking, telecommunications, document imaging, medical informatics, the electronic health record, and implementation issues. Activities include HIM computer applications. Upon completion, students should be able to assist in the design, implementation, evaluation, and maintenance of automated information systems in health care.

HIM2728 Coding III
Credit Hours: 2
This coding course is designed to provide an introduction into basic ICD procedural coding and coding guidelines. The course will focus on defining basic coding definitions, and review of coding guidelines. This course is taught in conjunction with a lab class to allow the student sufficient hands on inpatient procedural coding experience.

HIM2728L Coding III Lab
Credit Hours: 1
This lab course provides HIM students an opportunity to apply basic concepts and techniques for ICD-10-PCS coding using actual patient records and simulated patient both paper and electronic format from different treatment venues. Students will be guided through the practice coding by an experienced coding instructor with a detail analysis of correct coding technique. Students will be able to assess their own level of proficiency and access assistance in areas of identified coding weaknesses. Students will be introduced to encoding systems.

HIM2810 Professional Practice 2
Credit Hours: 2
This class is a continuation of the supervised professional practice experience in a health information management department. Emphasis is on health information systems, coding, and law and ethics. Upon completion, students should be able to apply health information theory to practice. Each student will be responsible for completion of a Professional Practice II Workbook.

HIM2930L Transition Seminar Lab
Credit Hours: 1
This hands on lab course will focus on assisting the student to begin integration into the health information management field by exploring career options, developing a professional development plan, creating a resume, exploring credentialing requirements, and preparing the student to leave the classroom and enter the workplace. Activities conducted in the classroom will assist the student to enter the workplace as a team player with a positive attitude and team communication skills. The course will introduce the student to the preparation needed to sit for the RHIT National Examination by AHIMA.

HIS2939 Special Topics in History
Credit Hours: 3
The content of this course will vary, to be determined by the instructor of record. The course is intended to offer students the opportunity for in-depth study of specialized areas and topics in history.

HIS2955 History Study Abroad
Credit Hours: 3
A combination of classroom preparation plus foreign travel. Variable content depending on countries visited. Historical background and travel preparation will be included.

HLP1081 Total Wellness
Credit Hours: 2
Total Wellness emphasizes the importance of knowledge, attitudes, and practices relating to personal wellness. It is a course designed to expose students to a broad range of issues and information relating to the various aspects of personal wellness including physical, social emotional, intellectual, spiritual and environmental wellness. This course integrates personal wellness and fitness in both a classroom and exercise environment. Evolving current topics such as nutrition, disease prevention, stress reduction, exercise
prescription, and environmental responsibility are integrated to enable the student to understand the lifelong effects of healthy lifestyle choices.

HLP1087 Wellness Workout
Credit Hours: 1
This course is an advanced extension of the wellness track classes. It reviews exercise principles and offers an opportunity for pre-testing to aid in Personal Program Development and post-testing for improvement evaluation. An individualized approach is used in helping class members to develop and implement a personal wellness program.

HLP2949 CO OP Work Experience
Credit Hours: 3
A course designed to provide training in a student's field of study through work experience. Students are graded on the basis of documentation of learning acquired as reported by students and employer. Students will be assigned specific course prefixes related to their academic major prior to registration.

HSA2810L Practicum in Health Facility Administration
Credit Hours: 6
An exposure and involvement in the managerial activity of health care facilities for the purpose of developing recognized competencies through the application and demonstration of prescribed objectives.

HSC1101C Introduction to Healthful Living
Credit Hours: 1
This course provides a personalized introduction to wellness; wellness components of flexibility, muscular strength/endurance, cardiovascular wellness, body composition, nutrition, weight management, stress management, and how students can apply this information to ensure healthful living. Opportunities are provided to learn updated information on coronary heart disease, cancer, and HIV-AIDS to assess one's personal wellness status through health related fitness and nutrition assessments.

HSC1149 Pharmacology
Credit Hours: 2
A course designed to introduce the Nursing student to the essential concepts and principles of pharmacology. Included are the concepts of pharmacokinetics and pharmacotherapeutics. There is an emphasis on the application of the nursing process as a practical organizational tool utilized in the care of the patient receiving pharmacological agents.

HSC1531 Medical Terminology
Credit Hours: 3
HSC 1531 provides a broad survey of the language of medicine and health technologies. Emphasis is placed primarily on the building of medical terms from word parts. The course is intended to be the foundation of a working medical vocabulary for individuals preparing for careers in both the health professions and other areas in which this knowledge is essential.

HSC2100 Personal and Community Health
Credit Hours: 3
This study of health problems relating to the individual community including mental health, physical fitness, nutrition, the use of tobacco, alcohol and drugs, marriage and family living, safety, and the study of diseases.

HSC2400 First Aid and Safety
Credit Hours: 3
Accepted practices and training in first aid care of the injured and medical self-help for survival in emergencies. Course includes suggested procedures effective until adequate medical assistance can be obtained. Principles of safety problems and accident prevention are included.
HUN1202 Essentials of Nutrition & Diet Therapy
Credit Hours: 3
A study of nutritional science, the nutrient, inter-relationships and the nutritional needs of persons at various stages of life cycle. Particular emphasis will be placed on diet therapy in the modification of disease process. This course is open to all allied health students only or with permission of the instructor.

IDH2121 Honors Interdisciplinary Studies in Gen. Education
Credit Hours: 3
The Honors Interdisciplinary Studies Seminar is the capstone course in the Honors Program. It is open to Honors Institute students who have attended Broward College for at least one term and have met half of the requirements for graduation from the Honors Institute. The course will be organized and unified around a specific theme, event, time period, issue/controversy, or concept, which will then be explored through at least two distinct and discernible academic fields of study. These two or more academic fields of study will come from within or across one or more of the following of Broward College's broad disciplinary units: Visual/Performing Arts, Criminal Justice, Business, Social Sciences, Mathematics, Biological Sciences, Behavioral Sciences, Communication, Education, Natural Sciences, Computer Science, and English/Literature. Students will be exposed to a variety of texts and knowledge, which will be integrated and connected using various modes of academic inquiry. These academic and intellectual inquires will be applied to and serve as the basis for numerous types of assessments. A Research Project is required as is at least one Critical Writing Assignment; other types of assessment should be varied and reflect the interdisciplinary nature of the course.

IDS1030 Introduction to Team Self-Management with Education
Credit Hours: 2
This course provides an introduction to Team Self-Management (TSM) theory and practice including its application in academic and work organizations. The course explores the connections among the student's purposes, intentions and behaviors; the course also develops the self-management skills required to attain personal, academic, and professional goals. The course will also provide students with an educational plan.

IDS1040 Team Self-management with Social Justice Topics
Credit Hours: 3
Introduction to Team Self-Management (TSM) with Social Justice Topics explores the theory and practice of team self-management, including leading and working on a self-managing team, and developing project management skills. Additional topics include: gaining an in-depth understanding of a social justice issue through utilizing primary-based research, and scenario planning methodologies.

IDS1999C Research in Social Justice
Credit Hours: 3
Develops professional skills that lead to professional career success. Skills include using scientific method-based approach for knowledge creation, facilitating team meetings, recording team discussions and decisions, and working within a self-managed team studying a social justice issue.

IDS2931 Interdisciplinary Leadership Studies
Credit Hours: 3
This seminar focuses on the refinement of leadership skills, provides an enhanced leadership and group dynamics theory and will assist the student in developing a personal philosophy of leadership and awareness of the moral and ethical responsibilities of leadership. Topics include decision making, goal setting, building trust, empowering others, conflict resolution, managing change, team building, and servant leaders. Reading and films from classic works in literature, contemporary and multi-cultural writing, and experiential learning exercises with current leadership theories and practices. Includes a service learning component, a shadowing experience, and a journal that highlights the students' entire leadership experience, both in and out of class, consisting of written responses to each of the classic works and contemporary reading assignments, specific critical analyses of films and other assignments as given in the class.

INR2002 Introduction to International Relations
Credit Hours: 3
A cross national analysis of the concepts of sovereignty, power, security, economic development and national interests in the formulation of foreign policy; the respective roles of the United Nations and the European Union within the context of the growth of Intergovernmental Organizations and Non-governmental actors such as legislatures and interest groups. Study of the utilization of those concepts on policy of both leading nations and the emerging states with emphasis on both conflictual issues related to both
tangible and intangible causes as well as the cooperative aspects of a more globalized and interdependent economic system.

ISM2311C IT Project Management: Capstone
Credit Hours: 3
This capstone course puts project management into an IT context, and thoroughly prepares students for the PMP or CAPM certification exam offered by the Project Management Institute (PMI).

ISM3013 Introduction to Information Systems Management
Credit Hours: 3
The course introduces fundamental concepts and methods related to the management of information systems in organizations. This course will cover a broad range of topics which will vary over time as technology advances. In the end, this course will equip students with the applied knowledge of management information systems for use in business decision making as impacted by information and decision support systems.

ISM3320 Information Systems Control
Credit Hours: 3
This course presents a balance of the management and the technical aspects of the discipline and addresses knowledge areas of the CompTIA Security+ certification exam throughout. It provides a comprehensive overview of network security and covers communication security, network and applications security, infrastructure security, threats and vulnerabilities, World Wide Web security, cryptography, operational/organizational security, disaster recovery, business continuity, as well as computer forensics.

ISM3432 Applied Quality Assurance Methodology
Credit Hours: 3
This course teaches the IT professional the fundamentals of quality assurance for system development and software creation. The learned outcomes will be an understanding of QA factors consisting of software, modeling, testing, training, standards and procedures as well as management's position on quality assurance.

ISM4314 Applied Project Management
Credit Hours: 3
This course has been designed to be relevant for all professionals confronting project-related tasks, with particular attention given to the information systems context. Course content includes an overview of technology, an introduction to software development approaches, facets of project management, and organizational issues related to successful project management.

ISM4382 Global Information Systems
Credit Hours: 3
This course addresses key management issues as they are applied to global information resources management. This course also addresses strategic global systems issues such as hardware, software, Enterprise Resource Planning (ERP), electronic business integration, security and infrastructure support for a variety of industries.

ITA1120 Elementary Italian I
Credit Hours: 4
Fundamentals of speaking, listening-comprehension, reading, writing, and Italian culture. Classroom practice and exercises are supplemented by laboratory and workbook exercises done on-line weekly. Students expected to continue further implementation and expansion of their proficiencies in ITA 1121.

ITA1121 Beginning Italian II
Credit Hours: 4
Continuation of ITA1120. Further development of the basic skills in speaking, listening-comprehension, reading, writing, selected readings, and appreciation of culture. Classroom practice and exercises supplemented by laboratory and multi-media activities done on-line weekly.

JOU1100 Basic Reporting
Credit Hours: 3
Pre-professional course providing fundamental instruction and practice in writing as a basis for all upper division courses in journalism. Includes writing in the news style, leads, defining news, types of stories, organization of stories, policy and libel.

JOU1400L Newspaper Practicum I
Credit Hours: 1
Practical application of news writing and editing principles through work with college media.

JOU1401L Newspaper Practicum II
Credit Hours: 2
Continuation of JOU1400L. Students may take JOU1400L and JOU1401L during the same term.
JOU1402L Newspaper Practicum III  
Credit Hours: 2  
Continuation of JOU1421L. Practical application of newspaper principles: copy editing, page layout, typesetting, headline writing, picture cropping, rewriting, copy preparation through work with the college newspaper.

JOU2200 Newspaper Editing and Makeup  
Credit Hours: 3  
Course provides instruction and practical experience in copy editing, rewriting, headline writing, page design for both makeup copy and advertising, picture cropping and scaling, cutlines, and an introduction to desktop publishing.

JOU2949 Co Op Work Experience  
Credit Hours: 3  
A course designed to provide training in a student's field of study through work experience. Students are graded on the basis of documentation of learning acquired as reported by student and employer. Students will be assigned specific course prefixes related to their academic major prior to registration.

JST1500 Survey of Jewish Culture  
Credit Hours: 3  
A survey of the development of Jewish culture through a study of the concepts, values, traditions and rituals of Judaism.

JST1700 The Holocaust  
Credit Hours: 3  
The historical, political, literary, religious, and philosophical dimensions of the Holocaust.

JST2400 Survey of Jewish Civilization  
Credit Hours: 3  
A survey of the history of Jewish civilization beginning with the origins of the Hebrews, through early Christianity and the Renaissance, to the State of Israel.

JST2815 History of Modern Israel  
Credit Hours: 3  
This course will begin with the period of the Enlightenment for the Jewish people and will follow the historical development which led to the development of the State of Israel.

LAH1004 The History of the Two Americas II  
Credit Hours: 3  
This course is a study of Latin America from the development and evolution of Amerindian society including the Mesoamerican, Andean and Brazilian worlds, through the conquest and colonization of the region by Europe, ending with the rise of independence by the middle of the 19th century.

LAH1005 The History of the Two Americas II  
Credit Hours: 3  
This course is a survey of significant social, political, and economic developments of modern Latin America after independence, from the consolidation of the national states to the present.

LEI1000 Introduction to Recreation  
Credit Hours: 3  
This course acquaints the individual with the recreation organization and opportunities for leaders in the field.

LEI1260 Introduction to Fitness & Outdoor Recreation  
Credit Hours: 3  
This course will introduce students to the career opportunities available in the field of outdoor recreation/adventure education.

LEI1700 Recreation for Special Groups  
Credit Hours: 3  
An overview of the characteristics and needs of members of special groups and how to plan and implement recreational activities appropriate for each group.

LEI2401 Sports, Fitness & Recreation Management  
Credit Hours: 3  
A course primarily designed for the student to learn about the different aspects of managing recreational programs and events. The student will be exposed to the many and varied needs of developing a quality program or event.

LEI2731C Sports, Fitness & Recreation Therapy  
Credit Hours: 2  
An overview of various therapies that can be useful in a recreational setting.

LEI2861 Sports, Fitness, Recreation\Technology & Equipment  
Credit Hours: 3  
The rapid growth of technology and sophistication of equipment, necessitate the recreation specialist to keep
abreast of developments in the market place. This course is designed to expose students to hardware, software, and equipment that are commonly used in centers across the nation to attract participants in recreational activities. Opportunities are provided for a hands-on learning experience in this technology and equipment.

LIT1172 Jewish Literature II: Holocaust to Present
Credit Hours: 3
A study of selected works from the Holocaust to the present. Analyzes the major characteristics of worldwide modern Jewish and Israeli literature. Includes such authors as Weisel, Malamud, Bellow, P. Roth, Ozick, Singer, Oz, Yehoshua and Appelfeld. May be used for study abroad.

LIT1370 The Bible as Literature
Credit Hours: 3
Students will examine the language, images, symbols, and literary structures of the Bible (New King James version or equivalent). Students will also actively explore the ways in which the Bible has shaped the literature of English-speaking cultures. Students will read substantial portions of the Old and New Testament and will critically interpret the book as they would any other literary text. The will also discuss the Bible's historical context.

LIT2000 Introduction to Literature
Credit Hours: 3
This introductory course exposes students to the study of literature and a range of widely recognized authors and works. Students will examine and interpret a diverse and representative body of short stories, poetry, creative non-fiction, plays, and novels from many periods and cultures within American, British, and World Literature. Upon successful completion of this course, students will be able to demonstrate an understanding of fundamental concepts and ideas in each of the major literary forms.

LIT2020 Introduction to the Short Story
Credit Hours: 3
A survey of the development of the short story, to include analysis of short stories by authors that reflect a diversity of cultural perspectives. This course may include a wide variety of authors such as Baldwin, Borges, Bellow, Camus, Carver, Cather, Chekhov, Chopin, Crane, De Maupassant, Faulkner, Fuentes, Hawthorne, Hemingway, Hurston, Kafka, Marquez, O'Connor, Oates, Poe, and Walker, among others.

LIT2030 Introduction to Poetry
Credit Hours: 3
Students will be introduced to a representative selection of poetry from various cultures and time periods. Texts may be selected from major figures within movements during specific periods, such as Romanticism, Modernism or New Formalism, the Black Arts Movement, the New York School or the San Francisco Renaissance, Confessional Poetry, Performance Poetry or Concrete Poetry, the Beats, Slam Poets, Language Poets or any other emerging forms, writers or groups within the art.

LIT2110 World Literature from Ancient World Through Renaissance
Credit Hours: 3
A survey of literature from the ancient, medieval, and early modern world. The works of selected authors may include Homer, Sappho, Plato, Sophocles, Ovid, Confucius, Lao Tzu, Dante, Chaucer, Boccaccio, Cervantes, and Shakespeare. Texts may also include excerpts from the Old and New Testaments, The Koran, Bhagavad-Gita, The Rubaiyat of Omar Khayyam, and The Arabian Nights. Upon successful completion of the course, students will comprehend the significant literary figures, mythologies, and historical and philosophical movements in world literature masterpieces.

LIT2120 World Literature from Enlightenment to Modern
Credit Hours: 3
Students will be introduced to a representative selection of world literature from the seventeenth century to the present. Texts may be selected from major literary figures such as Moliere, Voltaire, Rousseau, Franklin, Equiano, Wollstonecraft, deGournay, Tolstoy, Gandhi, Camus, Lessing, Eliot, Achebe, Neruda, and Garcia Marquez, Erdrich, Kincaid, and Lahari. Upon successful completion of the course, students will be exposed to significant authors, themes, literary genres, and historical and philosophical movements in world literature masterpieces.

LIT2190 Caribbean Literature
Credit Hours: 3
A survey of Caribbean Literature covering original and translated works from the Anglophone, Francophone and Spanish speaking Caribbean. Students will analyze texts from authors such as C.L.R. James, Jean Rhys, Edwidge Danticat, Maryse Conde, Antonio Benitez Rojo, Paule Marshall, David Dabydeen, V.S. Naipaul, among others. Upon successful completion, students
will evaluate significant concepts and assess a diverse body of literary figures including authors, poets, and critics associated with the Caribbean.

LIT2310 Literature of the Supernatural & Sci Fiction
Credit Hours: 3
A survey course of science fiction, high fantasy, and dark fantasy/horror literature. Students will examine works that cover such topics as the future, technology, science, other worlds, paranormal life forms and occurrences, aberrant psychology, and imaginary societies. This course may include readings from a wide variety of authors such as Isaac Asimov, Ray Bradbury, Michael Crichton, Mary Shelley, Edgar Allan Poe, Stephen King, J.R.R Tolkien, C.S. Lewis, J.K. Rowling, Clive Barker, and Lord Dunsany.

LIT2341 Mystery Fiction
Credit Hours: 3
A discussion and analysis of mystery fiction by investigation of the plot, characters, settings, themes, styles, motifs, and development of some of the most representative authors of detective, police, procedural, spy, and other mystery thriller fiction. Specifically traces the history and conventions of British and American traditions, placing them in context with the past and present of the genre. Includes an analysis of "classic" mystery fiction, and possibly further analysis of contemporary authors and styles that reflect the diversity and complexity of the genre today, as well as television and film. Includes authors such as Poe, Christie, Doyle, Collins, Hammett, Mosley, Leonard, Highsmith, and Flynn.

LIT2510 Male Female Images in Literature
Credit Hours: 3
An exploration of the ways literature represents and perpetuates sex roles and stereotypes. Readings include drama, short stories, novels, and poetry from classical to contemporary.

LIT2935 Seminar in Literature
Credit Hours: 3
Literary topics of special interest to students. Course offerings may be in such areas as western literature, the study of the greater novels, or ethnic literature. Class discussions may also include films.

MAC1105 College Algebra
Credit Hours: 3
A college algebra course containing topics such as solving, graphing and applying linear and quadratic equations and inequalities; exponential and logarithmic properties; linear, quadratic, rational, absolute value, square root, cubic, and reciprocal functions operations, compositions, and inverses of functions; and systems of equations and inequalities, all with applications throughout the course.

MAC1114 Trigonometry
Credit Hours: 3
This course, in conjunction with MAC1140, is designed to prepare the student for the study of calculus. Topics include a functional approach to trigonometry, trigonometric equations, trigonometric identities, solving triangles, vectors, polar coordinates and equations, and parametric equations. A graphing calculator may be required.

MAC1140 Pre-Calculus Algebra
Credit Hours: 3
This course, in conjunction with MAC1114, is designed to prepare the student for the study of calculus. Topics include sequences, series, mathematical induction, matrices, determinants, and systems of equations. Also included are polynomial, rational, exponential, and logarithmic functions and equations; and polynomial and rational inequalities. Functions and graphs are emphasized. A graphing calculator may be required.

MAC1147 Pre-calculus Algebra & Trigonometry
Credit Hours: 5
This course is designed to satisfy the dual requirements of MAC1114 and MAC1140, thus preparing the student for the study of calculus. In this course the student will study various function families (e.g. polynomial, exponential, logarithmic, trigonometric) from both analytic and graphical viewpoints, and will use them to model real-life situations. The student will be exposed to additional topics that will deepen their mathematical understanding, including systems, matrices and determinates, sequences and series, parametric equations, and polar coordinates and equations. A graphing calculator may be required.

MAC2233 Calculus for Business, Social & Life Sciences
Credit Hours: 3
This is a general education course which includes the college-level skills of calculus such as: functions, graphs, limits, differentiation, integration, average and instantaneous rates of change, and other applications.
MAC2311 Calculus & Analytical Geometry I
Credit Hours: 5
This is the first of a three-course sequence in calculus. Students may need to a graphing calculator throughout the sequence of courses. Topics include: analytic geometry, functions, limits, continuity, derivatives and their applications, transcendent functions, anti-derivatives, and definite integrals. Certain sections of this course may require the use of a graphing calculator.

MAC2312 Calculus & Analytical Geometry II
Credit Hours: 5
This is the second of a three-course sequence in calculus. Topics include techniques of integration, conics, polar coordinates, indeterminate forms, L'Hopital's Rule, proper integrals, infinite series, parametric equations, improper integrals, volume, arc length, surface area, work, and other applications of integration. A graphing calculator may be required in certain sections of this course.

MAC2313 Calculus & Analytical Geometry III
Credit Hours: 5
This is the third of a three-course sequence in calculus. Topics include vectors in 3 space, 3 dimensional surfaces, multivariate functions, cylindrical and spherical coordinates, multiple integrals, partial derivatives, vector fields. A graphing calculator may be required in certain sections of this course.

MAD2104 Discrete Mathematics
Credit Hours: 3
This course will emphasize mathematical theory, formal methods of proof, and applied problem-solving techniques. Topics include formal proof, sets, logic, functions, probability, relations, graphs, trees, and Boolean algebra.

MAE3143 Interactive Middle School Mathematics Projects
Credit Hours: 3
This course is designed for students who are majoring in middle and secondary mathematics education and who will be obtaining teaching certification in grades 5-9 and 6-12. In this course students learn principles of effective curriculum design and assessment and apply these principles by designing and developing interactive mathematics curriculum projects for middle school students. This course requires structured clinical placement in which students present their projects in a middle school classroom environment. This course addresses specific Sunshine State Standards, subject matter competencies, and pedagogy pertinent to the discipline and required certification. (20 school-based hours)

MAE3941 Teaching Middle & Secondary School Mathematics.
Credit Hours: 3
This course is designed to provide the student with the opportunity to apply learned concepts by observing and teaching small groups and whole class lessons in the mathematics classroom. Extensive Writing Component in the form of a journal is required. Forty hours (40) of structured school-based hours is required.

MAE4310 Methods of Teaching Math in Elementary School
Credit Hours: 3
This course introduces conceptually and developmentally appropriate mathematics content based on the five content areas identified by the Florida Sunshine State Standards. These are Numeration & Number Sense, Geometry, Measurement, Algebraic Thinking, and Data Analysis & Probability. Within these content areas, pre-professional educators will learn techniques consistent with the national process standards and research-based procedural strategies. This course addresses specific Sunshine State Standards, subject matter competencies, and pedagogy pertinent to the discipline and required for teacher certification. Fifteen hours of field placement are required.

MAE4320 Methods of Teaching Mathematics in Middle School
Credit Hours: 3
This course is designed to introduce methods and strategies that have been proven to be effective for teaching middle school mathematics. Topics in appropriate instructional techniques and selection of appropriate resources for diverse classroom activities. Additional topics include real world applications, the use of technology, understanding the diverse learner, multiple means of assessment and learning styles. In this course, the pre-professional educator learns principles of effective curriculum design and assessment and applies these principles by designing and developing interactive mathematics curriculum projects for middle school students. This course addresses specific Sunshine State Standards subject matter competencies.
MAE4330 Methods of Teaching Math in Secondary School
Credit Hours: 3
This course is designed to introduce methods and strategies that have been proven to be effective for teaching secondary school mathematics. Topics in appropriate instructional techniques and selection of appropriate resources for diverse classroom activities, real world applications, the use of technology, understanding the diverse learner, multiple means of assessment and learning styles. The pre-professional educator learns principles of effective curriculum design and assessment and applies these principles by designing and developing interactive mathematics curriculum projects for high school students. This course addresses specific Sunshine Standards subject matter competencies and pedagogy pertinent to the discipline. Contact instructor for details regarding 20 hours of field.

MAE4945 Student Teaching in Mathematics
Credit Hours: 11
This course is designed to "provide students with multiple opportunities to practice implementing the 12 Florida Educators Accomplished Practices including effective planning, instruction, management and assessment techniques in a real-world middle and high school classroom setting under the supervision of a certified teacher."

MAN2021 Introduction to Management
Credit Hours: 3
This course covers fundamental management principles and concepts. Emphasis is placed on the management functions of planning, organizing, staffing, directing and controlling. Principles of scientific management, motivation, and economic analysis are studied relative to their use in business decisions.

MAN2542 Supply Chain Modeling
Credit Hours: 3
This course will enable students to create quantitative models in Microsoft Excel, as supporting tools in decision-making. The course will follow the case study method, exposing students to business situations typically encountered by Supply Chain Management professionals. Students will learn how to select the applicable tool to address the situation described in every case, create the corresponding quantitative model, write objective recommendations derived from the analysis, and present these in a simulated boardroom meeting environment. The course will cover Decision Analysis, Linear Regression Modeling, Forecasting Methods, Optimization Modeling, and Monte Carlo Simulation.

MAN2604 International Business Environment
Credit Hours: 3
A basic course in international business theory and practice focusing on the challenges of managing the operations of an international business in diverse legal, political, economic, and cultural environments. Emphasis is placed on strategic planning and decision-making for the international operations of domestic, foreign and multinational corporations.

MAN3240 Applied Organizational Behavior
Credit Hours: 3
This course teaches students individual and group behavior in organizations. Students develop an understanding of how organizations can be managed more effectively. Course content includes motivation, group dynamics, conflict resolution, goal setting and rewards, job design, work stress, power/politics, and organizational change and development.

MAN3303 Management & Leadership
Credit Hours: 3
This course teaches students the basic concepts, principles, and techniques of business leadership. Emphasis is on developing a solid leadership foundation while centering in the real themes, demands, and opportunities of an evolving and dynamic business workplace. The course incorporates basic leadership skill development as it relates to the core aspects of management practice.

MAN3310 Human Resource Management
Credit Hours: 3
This course introduces the full range of human resource management functional areas, including recruiting and hiring staff, performance evaluations, employment regulations, discipline and termination, downsizing, compensation and benefits, job analysis, the organized labor setting, equity/diversity issues, and policy design. The approach will focus on current issues and applications.

MAN3930 Seminar in Business & Management
Credit Hours: 1
This course focuses on current and emerging issues in business management. Its format and topic will vary but it will be a seminar which will address a specific business and management topic such as financial
markets, international trade, human resources, cultural issues or economic subjects. The requirements of each student will vary with the topics in question. This course may not be repeated, and will only be offered in the Fall Semester.

MAN3931 Seminar in Business & Management II
Credit Hours: 1
This course focuses on current and emerging issues in business management. Its format and topic will vary but it will be a seminar which will address a specific business and management topic such as financial markets, international trade, human resources, cultural issues or economic subjects. The requirements of each student will vary with the topics in question. This course may not be repeated, and will only be offered in the Winter Semester.

MAN3932 Seminar in Business & Management III
Credit Hours: 1
This course focuses on current and emerging issues in business management. Its format and topic will vary but it will be a seminar which will address a specific business and management topic such as financial markets, international trade, human resources, cultural issues or economic subjects. The requirements of each student will vary with the topics in question. This course may not be repeated, and will only be offered in the Summer Semester.

MAN4102 Managing Cultural Diversity
Credit Hours: 3
This course represents the basic concepts, principles, and techniques associated with leading cultural diversity in the global marketplace. Emphasis will be on the students developing an understanding of the interplay between leadership, cultural diversity, and the global business models. Students will also gain an understanding of how these concepts relate to and are applied in the regional markets like Asia, Latin America, Europe, Africa and the Middle East.

MAN4120 Leadership Challenges & Supervision
Credit Hours: 3
This course teaches the application of leadership theories, which include skill formation to develop leadership abilities. Team building skills are emphasized and discussed to enhance leadership effectiveness. Students learn the importance of visioning in their organizations.

MAN4504 Operations Management
Credit Hours: 3
This course teaches the operational decision-making management techniques to improve the processes and productivity in organizations. Topics discussed are quality and outcomes; efficiency; forecasting; work flow processes; inventory control; design of goods and services; waiting lines; and critical path. Managing a project from beginning to end, including how to identify needs, and define, assign, and track items, is addressed.

MAN4570 Procurement Management
Credit Hours: 3
This course is an introduction to the concepts, principles, and techniques of purchasing physical resources. Students will develop a basic knowledge of sound procurement practices within a managerial setting for all types of organizations.

MAN4720 Strategic Management & Policy
Credit Hours: 3
This course emphasizes strategic planning and strategy implementation in an organization. Students learn how to perform internal and external audits, identify problems, and formulate goals and objectives. Students will develop action plans, and evaluate the effectiveness of the outcome of the plan. Case studies are used to promote decision-making abilities.

MAN4900 Capstone Project
Credit Hours: 3
This capstone course will provide the opportunity for the student to demonstrate that he/she has learned the material from the program and can apply it in the real world. It should be taken during the student's last semester at the college. It provides to the student with the opportunity to develop a plan to solve a problem dealing with management and organizational leadership issues of today. The student will choose one major plan to address the problem in detail.

MAP2302 Differential Equations
Credit Hours: 3
Topics include the classification, solution and application of differential equations, including numerical methods, Laplace transforms, linear systems, and series solutions.

MAR1011 Principles of Marketing
Credit Hours: 3
An introductory course covering the marketing management process. Special topics include the
marketing manager's role in a market-directed economy, marketing objectives, strategic planning, and developing marketing mixes for target markets. Material is presented as it relates to the four "P's" of marketing: product, place, promotion, and price. As a learning activity, students analyze and prepare case studies of businesses engaged in manufacturing, wholesaling, retailing and service.

MAR2141 International Marketing
Credit Hours: 3
This course examines basic marketing principles related to business in an international setting. Emphasis is placed on the role of the international marketing manager in the development of marketing strategies for a variety of markets in diverse cultural and economic situations. Topics covered include the decision-making process in the area of foreign market analysis, target market identification, product planning, promotion, and channels of distribution.

MAR2644C Data Based Marketing
Credit Hours: 3
This course provides a foundation for students to understand the core principles and tools of digital analytics and methods to improve business performance through digital measurement of sales, marketing, or other business data.

MAR3802 Marketing Management
Credit Hours: 3
This course helps develop the marketing knowledge and skills necessary for the successful manager to address the intermediate marketing issues surrounding the complex demand management problem all organizations face. Students will understand the marketing concepts, including the development of a marketing plan including objectives, strategies and tactics.

MAR4840 Services Marketing
Credit Hours: 3
This course is a study of marketing decision making in services sectors. Primary focus is on the unique aspects of services that impact marketing decision making in small and medium-size enterprises. This course will build upon basic marketing principles to provide learners with the skills necessary to market and manage services in an increasingly competitive global marketplace. Students will apply course concepts to solve problems in actual business cases involving firms in North America, Europe, and Asia.

MAS2103 Linear Algebra
Credit Hours: 3
A first course in linear algebra, emphasizing the algebra of matrices and vector spaces. Recommended for students majoring in mathematics or related areas.

MAS4300 Abstract Algebra with Introductory Number Theory
Credit Hours: 3
A course for math and math education majors. Abstract algebra is designed for the student experienced with using mathematical calculations to solve problems, and who now wishes to analyze the underlying justifications for these calculations' legitimacy. In MAS4300 the student will discover properties shared by seemingly disparate mathematical structures called groups, rings, and fields, by abstracting their common underlying features and creating proofs bases upon these commonalities. Number theory topics that are foundational to this course will be studied as well.

MAT0018C Developmental Mathematics I
Credit Hours: 4
This is a course designed to improve students' abilities with arithmetic, basic algebra, and problem solving. Topics studied include number families, arithmetic, order of operations, geometric formulas, unit analysis, linear equations in one variable, and data analysis. Problem solving is an integral part of this course. This course teaches the student to understand and communicate concepts of arithmetic and algebra, both orally and written, and helps prepare the student for college-level mathematics and math-based courses. A computerized laboratory component will supplement classroom instruction. Students will have individualized learning plans that depend on the results of a diagnostic test. Due to the nature of this course, calculators are not permitted.

MAT0022C Developmental Mathematics Combined
Credit Hours: 5
A course designed to satisfy the requirements of both MAT0018C and MAT0028C in one semester. Topics to be studied include arithmetic with whole numbers, integers and rational numbers, linear equations and inequalities in one variable, factoring, and basic linear graphing. Problem solving involving real-life scenarios is an integral part of this course. This course will teach the student to understand and communicate concepts of algebra in the language of mathematics, both orally and written. This course helps prepare the student for college-level mathematics and math-based courses. It is
nontransferable. Due to the nature of this course, calculators are not permitted.

MAT0028C Developmental Mathematics II
Credit Hours: 4
This is a course designed to broaden the students’ arithmetic and equation-solving skills to include solving linear inequalities in one variable, polynomial factoring, solving quadratic equations, laws of exponents, rational and radical expressions, and graphing lines. Problem solving involving real-life scenarios is an integral part of this course. This course will teach the student to understand and communicate concepts of algebra in the language of mathematics, both orally and written. This course enhances the student's problem-solving skills, and helps prepare the student for college-level mathematics and mathematics-based courses. A computerized laboratory component will supplement classroom instruction. Students will have individualized learning plans that depend on the results of a diagnostic test. Due to the nature of this course, calculators are not permitted.

MAT0029C Developmental Mathematics for Statistics
Credit Hours: 4
This course introduces basic statistical concepts and focuses on data analysis and quantitative reasoning. It will concentrate on statistical content with requisite arithmetic and algebraic concepts taught and applied in the context of statistics. This course emphasizes both written and verbal communication of statistical concepts, and helps prepare the student for college-level statistics and liberal arts math courses. This course is designed for students who do not intend to major in math, science, computer science, business, etc.

MAT0055 Developmental Mathematics Module
Credit Hours: 1
A course designed to satisfy the requirements of upper level developmental math in modular format. This course is for students who score between 109 and 112 on the PERT placement score. Students will then be given the PERT Diagnostic to identify skills in the developmental math sequence that have not yet been mastered. An individual learning plan will be established and students will be assigned to the module(s) containing those competencies not yet mastered. Topics for study determined by student's P.E.R.T. Diagnostic test results. This course will teach students to understand and communicate concepts of algebra in the language of mathematics, both orally and written. Due to the nature of this course, calculators are not permitted.

MAT0056 Developmental Mathematics Module
Credit Hours: 2
A course designed to satisfy the requirements of upper level developmental math in modular format. This course is for students who score between 109 and 112 on the PERT placement score. Students will then be given the PERT Diagnostic to identify skills in the developmental math sequence that have not yet been mastered. An individual learning plan will be established and students will be assigned to the module(s) containing those competencies not yet mastered. Topics for study determined by student's P.E.R.T. Diagnostic test results. This course will teach students to understand and communicate concepts of algebra in the language of mathematics, both orally and written. Due to the nature of this course, calculators are not permitted.

MAT0057 Developmental Mathematics: A Modular Approach
Credit Hours: 4
This course is designed to satisfy the requirements of both MAT0018 and MAT0028 in one semester. The course is delivered in a guided, self-paced format.

MAT1033 Intermediate Algebra
Credit Hours: 3
A course designed for students with strong arithmetic skills (without requiring a calculator) and an algebra background, such as solving linear equations in one variable and factoring polynomials. This course will extend students' algebra skills to include solving radical, rational, quadratic & absolute-value equations, and recognizing relationships between radical expressions and rational exponents. Complex numbers are introduced in this course as well. Problem solving involving real-life scenarios is an integral part of this course. In this course, students will enhance their problem-solving abilities and their ability to communicate concepts of algebra in the language of mathematics, both orally and written.

MCB2010 Microbiology
Credit Hours: 3
An introduction to microbiology emphasizing principles of basic morphology, physiology modes of transmission, biochemistry and genetic mechanisms. It will include a survey of representative types of microorganisms and the role of pathogenic organisms in causing diseases and infections.
MCB2010L Microbiology Laboratory  
Credit Hours: 1  
This lab course will complement Lecture topics and include the application of fundamental techniques in the isolation, cultivation, and identification of microorganisms.

MCB3020 General Microbiology  
Credit Hours: 3  
Structure, nutrition and growth of microorganisms; characteristics of representative microorganisms and viruses; metabolic properties and introduction to microbial genetics, pathogenicity, ecology and industrial applications of microorganisms.

MCB3020L General Microbiology Lab  
Credit Hours: 1  
This laboratory course will complement lecture topics and include the application of fundamental techniques used in the isolation, cultivation and identification of microorganisms and viruses.

MEA0005 Introduction to Medical Assisting  
Clock Hours: 32.00  
An overview of medical assisting and related health professions including duties and responsibilities. Public relations and interpersonal relationships of the healthcare team members are emphasized and will include therapeutic communication skills. Study of the various medical specialties and the history of medicine will be included.

MEA0204 Clinical Procedures  
Clock Hours: 64.00  
Designed to orient the medical assistant to all phases of patient care in the physician's examining room. Discussion of basic principles involved relating to: vital signs, physical examination, minor surgery, instrumentation sterilization, preparation of medications, physical therapy modalities.

MEA0204L Clinical Procedures Laboratory  
Clock Hours: 64.00  
Laboratory portion of MEA0204. Designed to orient the medical assistant to all phases of patient care in the physician's examining room. Practice of basic principles involved relating to vital signs, physical examination, minor surgery, instrumentation sterilization, preparation and administration of medications, basic principles of nutrition and physical therapy modalities will be studied.

MEA0233 Anatomy & Physiology for M.A.  
Clock Hours: 48.00  
A basic anatomy and physiology course designed to provide instruction on human body structure, function, and associated pathology.

MEA0242 Pharmacology for the Medical Assistant  
Clock Hours: 64.00  
An introduction to medications, their classifications, dosage, administration, and the legal and ethical considerations applied.

MEA0255 Medical Office Procedures I  
Clock Hours: 48.00  
Lecture portion of MEA0255L includes discussions in a classroom setting regarding urinalysis, microscopy, specimen collection and preparation, and basic office Microbiology/Bacteriology.

MEA0255L Medical Office Lab Procedures I  
Clock Hours: 48.00  
Laboratory portion of MEA0255. Includes practice regarding urinalysis, and basic office Microbiology/Bacteriology.

MEA0256 Medical Office Procedures II  
Clock Hours: 48.00  
Lecture portion of MEA0256L. Includes instruction in basic office hematology, immunology and chemistry. Professional uniform and shoes required.

MEA0256L Medical Office Laboratory Procedures II  
Clock Hours: 48.00  
Lab portion of MEA0256. Includes laboratory practice of basic office hematology, immunology and chemistry. Professional uniform and shoes required.

MEA0258 Radiology for the Medical Assistants I  
Clock Hours: 64.00  
Provides instruction in the basic principles of X-ray production, physics, radiographic equipment, imaging, processing, radiobiology, and radiation safety.

MEA0259 Radiology for Medical Assisting Part II  
Clock Hours: 64.00  
Provides instruction in radiographic anatomy, positioning, procedures, and pathology of the upper and lower extremities, shoulder girdle, pelvis, spine, bony thorax, chest, abdomen, skull, facial bones, and sinuses.
MEA0259L Radiology for Medical Assisting Part II Lab
Clock Hours: 48.00
Laboratory portion of MEA 0259. Practical application of the principles of radiation protection, radiographic technique, ion, film handling and processing, darkroom operation, radiographic positioning and procedures related to the upper extremities, lower extremities, and chest.

MEA0334C Administrative Office Procedures
Clock Hours: 56.00
The course will prepare students to work the Medical Front desk, basic financial duties, basic medical insurance protocols and medical coding. Aspects of human resource and office management will be addressed. Medico legal and ethical responsibilities regarding financial aspects of the medical office will be studied. Students will also be prepared to seek employment addressing resumes, cover letters, and interviewing techniques.

MEA0335C Electronic Medical Records
Clock Hours: 56.00
This course focuses on the various aspects of electronic health records including standards, set-up, administration, patient charts, office visits, clinical tools, templates and pop-up text. Other topics covered include tests, procedures, and diagnosis codes, productivity center and utilities. Students will gain invaluable real-world experience through the use of the HER software program. Taken as a whole, this course is designed to provide each student with the necessary tools needed to be successful in the rapidly growing field of electronic health records.

MEA0382 Medical Law & Ethics
Clock Hours: 32.00
The ethics of medicine and medical practice are studied. Legal requirements and implications to the medical professional are stressed.

MEA0540 Basic Electrocardiography for Medical Assistants
Clock Hours: 37.00
This course will discuss a brief history of electrocardiography, a brief discussion of the cardiovascular system, the role of the Medical Assistant, the care and use of the electrographic (EKG) machine, positioning the patient, electrical hazards, normal EKG pattern, identifying and reporting abnormal EKG patterns and mounting the EKG. Ambulatory cardiac monitors will be studied.

MEA0540L Basic Electrocardiography for Med Assistants Lab
Clock Hours: 38.00
Laboratory portion of MEA0540. This course will emphasize the role of the Medical Assistant, the care and use of the electrographic (EKG) machine, positioning the patient, electrical hazards, normal EKG pattern, identifying and reporting abnormal EKG patterns and mounting the EKG.

MEA0800 Practicum in Medical Assisting
Clock Hours: 209.50
Student assigned to physician's office, clinic, or laboratory for a total of two hundred hours. Conference meetings will be arranged on an individual or group basis at a time and place to be arranged by the student and the coordinator. Attendance at group orientation prior to assignment is mandatory.

MEA0952 Practicum in Medical Assisting
Clock Hours: 38.00
Lecture course designed to serve as a review for medical assisting students in preparation for their national certification examination. Selected areas of the curriculum will be emphasized as needed.

MET4700 Atmospheric Processes
Credit Hours: 3
Upper level, introductory course covering the origin, composition and structure of the atmosphere, solar energy and the Earth's energy budget, air temperature, humidity, clouds and cloud formation, precipitation, global circulation model, air masses, fronts, mid latitude cyclones, severe storms, air pollution, atmospheric optics, and global climates and climate change. The course focuses on the physical and chemical processes associated with each topic, and how each forms part of the global atmospheric system.

MGF1106 Foundations of Mathematical Reasoning
Credit Hours: 3
This is a general education course which includes the college-level skills not included in the courses MAT0012 Pre-Algebra, MAT0024 Elementary Algebra, and MAT1033 Intermediate Algebra. The course will include topics in logic, geometry, set theory, probability, and statistics. This course will also emphasize applications to real world situations and the
integration of other disciplines, including, but not limited to, business and the physical sciences.

MGF1107 Survey of Mathematics
Credit Hours: 3
This is a general education course which includes college-level skills from a variety of mathematical topics. The course will include at least four selected topics from among: mathematics of finance; linear and exponential functions; number systems; history of mathematics; elementary number theory; graph theory; numerical methods and algorithms; game theory; voting and apportionment theory; and student project(s) (strongly recommended). This course will also emphasize applications to real-world situations and the integration of other academic disciplines, including (but not limited to) business and the physical and social sciences.

MHF4404 History of Mathematics
Credit Hours: 3
A chronological study of the evolution of mathematical thought from primitive counting to modern ideas. The study will include the development of mathematics through history, the impact of mathematics on society, and how mathematics has broadened our knowledge of the world. Throughout the course students will be shown and encouraged to discover connections between historical and modern mathematics. The course is designed for math students who want to understand the development of mathematics, teachers of mathematics at all levels, and students who have an interest in social and cultural history.

MKA1021 Salesmanship
Credit Hours: 3
Through a combination of principles and techniques, this course identifies the why, what, how and when of selling. Students develop skills in prospecting, opening the sale, presenting customer benefits, overcoming objections, and closing the sale. Students will prepare an oral sales presentation based on selective criteria of the professor. Note: the DECA Sales Representative contest may be used as an example.

MKA1511 Advertising
Credit Hours: 3
This course introduces the use of promotional strategy and marketing communications in achieving marketing objectives. It focuses on how product features/benefits can be translated into promotional appeals that will influence customer purchasing behavior. Topics include promotional objectives, product positioning, selecting media, creative analyses, budgeting and measuring promotional effectiveness. As a learning activity, students prepare an advertising campaign for a product, business, or not-for-profit organization. Students will have the opportunity to participate in Delta Epsilon Chi activities.

MKA1930 Seminar I: Marketing in Perspective
Credit Hours: 3
This course includes marketing management related activities such as individual projects in promotion and entrepreneurship, marketing research and career planning. The students will have the opportunity to work on projects given by area businesses.

MKA2042 Retailing
Credit Hours: 3
This course provides an introduction to the management functions unique to retail store operations. Special topics include department store organization, shrinkage prevention, store location and layout, shopping centers, and merchandising. Upon successful completion of this course, students shall be able to demonstrate competencies needed in retailing positions at the mid-management and owner-management level.

MKA2701C Visual Informatics
Credit Hours: 3
This course is designed to allow students to implement the important concepts and techniques used to move from simple to complex visualizations of business data. This is a course in applied data collection and presentation.

MKA2931 Seminar II: Research in Marketing
Credit Hours: 3
This course includes marketing management related activities such as individual projects in advertising, promotion, entrepreneurship, marketing research and career planning. Students will expand and enhance the knowledge gained in the prerequisite course Marketing Seminar 1. Students will have the opportunity to develop leadership skills through participation in DECA and related activities.

MKA2932 Seminar III: Marketing Management
Credit Hours: 3
This course includes marketing management related activities such as individual projects in promotion and entrepreneurship, marketing research and career planning. The students have the opportunity to develop
leadership skills through participation in Delta Epsilon Chi related activities.

MKA2949 Co-Op Work Exp
Credit Hours: 3
A course designed to provide training in a student's field of study through work experience. Students are graded on the basis of documentation of learning acquired as reported by student and employer. Students will be assigned specific course prefixes related to their academic major prior to registration.

MMC1000 Intro to Mass Communication
Credit Hours: 3
Overview of contemporary mass media and its historical background. Includes processes and effects of media messages on the individual and society. Deals with the media industry, its responsibilities, legalities, and careers. Media discussed may include newspapers, magazines, books, radio, television, advertising, public relations, and the movie and recording industries.

MNA1161 Introduction to Customer Service
Credit Hours: 3
This course provides the student with the basic concepts and current trends in the customer service industry. Through actual case studies, the students analyze organizations which have implemented successful customer service strategies.

MNA1821C Introduction to E-commerce
Credit Hours: 3
This course examines the history, basic, tools, and other important issues surrounding the many forms of Electronic Commerce. The students develop skills and gain knowledge and experience with a networked community designed for business function and transactions. Subject areas include: types of E-Commerce; E-Marketing; E-Accounting; E-Customer Service; effective E-Commerce solutions and the development process.

MNA2345 Principles of Supervision
Credit Hours: 3
This course provides an overview of fundamentals of supervision and the management of people. It emphasizes the role of supervision in business organizations by focusing on supervisory processes; examining functions of planning, organizing, staffing, directing, controlling and their relationships to daily responsibilities of the supervisor.

MNA2905 Independent Study in Industrial Management
Credit Hours: 3
A directed study course available to both majors and non-majors who wish to investigate a particular concern or related issue in the field of Industrial Management.

MNA2949 CO-OP Work Experience
Credit Hours: 3
A course designed to provide training in a student's field of study through work experience. Students are graded on the basis of learning objectives and employer evaluations.

MSL1001 Foundations of Officership
Credit Hours: 2
Army ROTC: Examines the unique duties and responsibilities of officers, and the organization and role of the Army, reviews skills pertaining to fitness and communication, and analyzes Army values and expected ethical behavior.

MSL1002 Basic Leadership
Credit Hours: 2
Army ROTC: Presents fundamental leadership concepts and doctrine, student will practice basic skills that underlie effective problem solving and examine the officer experience.

MSL2101 Individual Leadership Studies
Credit Hours: 2
Army ROTC: Develops knowledge of self, self-confidence, individual leadership skills, problem solving and critical thinking skills, and improves communication and conflict resolution skills.

MSL2102 Leadership & Teamwork
Credit Hours: 2
Army ROTC: Focuses on self-development by gaining knowledge of self and group processes and by challenging current beliefs, knowledge and skills.

MSS0001 Medical Ethics & Standards for Massage Therapy
Clock Hours: 16.50
Course presents a detailed exploration of ethics and professionalism as it relates to massage therapy, focusing on the development and application of appropriate professional boundaries and the psychological dimensions of the client-therapist relationship. Licensure, national certification, professional organizations, malpractice insurance,
sexuality, cultural diversity, and other concepts related to ethical practice are discussed.

MSS0150 Anatomy & Physiology of Body Systems
Clock Hours: 45.00
The structure and function of human organ systems as they service massage therapy are presented. Basic pathophysiology of the major body systems and organs as they apply to massage therapy are discussed in relationship to appropriate care by the massage therapist. Systemic contraindications, local contraindications and cautions that influence massage are presented.

MSS0156 Anatomy & Physiology for Massage Therapy II
Clock Hours: 45.00
Course provides an opportunity for students to develop an applied understanding of neuromusculoskeletal anatomy. Postural analysis is presented. Students study the major muscles of the body, their origins, insertions, tendons of attachment, and actions; as well as associated bones, bony landmarks, and stabilizing ligaments for each joint. Planes of movement and lever classification are discussed.

MSS0156L Anatomy & Physiology Massage Therapy Lab. II
Clock Hours: 60.00
Course provides integration of neuromusculoskeletal anatomy into therapeutic application of massage. Massage techniques are presented sequentially with review of positioning, appropriate strokes, ethical situations, appropriate draping, etc. Throughout the course, charting and interviewing skills are taught and practiced.

MSS0250 Introduction to Massage Therapy
Clock Hours: 15.00
Course presents an introduction to the massage therapy profession. Effective and appropriate communication techniques for management of the client-therapist relationship; communication skills necessary for working with colleagues in the health care community; and responsibility to the professional community and one's own community, through civic participation and membership in a professional association are discussed. The theory and history of massage therapy are explored.

MSS0250L Introduction to Massage Therapy Lab
Clock Hours: 170.00
Course explores the effects, precautions and variations associated with basic massage strokes and issues associated with touch and trust. Students learn how to perform a full body massage that includes the five basic Swedish massage strokes and variations plus compression and fascia release. Proper draping, lubrication, bolster use and turning procedures during the massage are also taught as well as appropriate use of pressure, rhythm and movement to enhance the massage's effects. The ability to locate areas of tension or discomfort in clients is developed. Efficient body mechanics, hygiene and self-care while performing massage are practiced. Introductory record keeping as well as centering and breathing techniques are presented.

MSS0281 Allied Modalities
Clock Hours: 15.00
Basic principles of allied modalities such as Polarity Therapy, Asian massage, trigger point therapy, deep tissue massage, reflexology, myofascial massage, muscle energy techniques and others are explored and demonstrated. Specific techniques are related to the activities or needs of unique populations as appropriate, including older adults, children, persons with disabilities, and athletes. Introduction to the basic elements of other natural health care disciplines is presented.

MSS0281L Allied Modalities - Lab
Clock Hours: 120.00
Students learn how to help promote relaxation and relieve muscle tension via palpation as well as by determining joint range of motion, and then applying massage, exercise, and stretching to support normal motion, muscle tone and relaxation. General techniques for full body and seated massage are practiced. Emphasis continues on the development of correct body mechanics, injury prevention, table management, draping methods, and charting. Hands-on skills in several modalities such as reflexology, manual lymph drainage, and neuromuscular therapy are developed.

MSS0301 Hydrotherapy Modalities
Clock Hours: 15.00
The therapeutic use of superficial heat and cryotherapy is discussed with an emphasis on developing an ability to make professional judgments about the application of the appropriate modality for each client situation. The theory of hydrotherapy and principles of
hydrotherapeutic applications and equipment, indications, and contraindications are discussed. Basic principles of ultrasound, interferential current, TENS and electrical stimulation are presented.

MSS0301L Hydrotherapy Modalities - Lab
Clock Hours: 45.00
Practical experience in the use of ice, heat, and hydrotherapies is provided. Application of physical agent modalities are practiced with emphasis on proper technique, safety, indications and contraindications.

MSS0803L Massage Therapy Clinical Practicum
Clock Hours: 110.00
Course encourages the synthesis and integration of principles and techniques learned across the curriculum. Students provide comprehensive massage therapy services in the Massage Therapy Lab under direct supervision, including specific upper and lower body techniques. Introduces the experience of working in a massage clinic including learning principles of relating to clients, keeping records, determining fees, billing insurance, marketing and building a massage practice, maintaining hygiene standards and other activities. Students participate in case conferences and/or other professional discussions. In addition to laboratory sessions, students are required to engage in practice massage sessions outside of scheduled class hours, and must complete a minimum community service requirement.

MTB1310 Applied Mathematics
Credit Hours: 3
This course is designed for Associate of Science degree seeking students. The following topics are included: the metric system and measurement; linear and quadratic functions; ratios and proportions; exponents and logarithms; and descriptive statistics. Problem solving and applications requiring a calculator will be presented throughout the course.

MTB1325 Engineering Technology Math I
Credit Hours: 4
This is the first course in a two term sequence for electronics and computer engineering technology students. Topics include Euclidean geometry, algebra, exponents and radicals, graphing, trigonometry, vectors, complex numbers, and straight line concepts. Calculators will be used to solve problems after the basic principles have been mastered.

MTB1326 Engineering Technology Math II
Credit Hours: 4
This is the second course in a two term sequence designed for computer and electronics engineering technology students. Topics include systems of linear equations, factoring and fractions, roots and radicals, quadratic equations, complex numbers, exponentials and logarithms, trigonometry, analytical geometry, and linear inequalities. Calculators will be used to solve problems after the basic principles have been mastered.

MTB1370 Math Topics for Health Related Professions
Credit Hours: 1
This course provides an intensive review of mathematics operations involving fractions, decimals, percents, ratios, and proportions. Units and measures in apothecaries, metric, and household systems are also discussed with a major emphasis on application for the calculation of both oral and parenteral drug dosages.

MTE1004C Introduction to Marine Technology
Credit Hours: 3
Course provides the student with the basic skills needed in repairing the marine engine. Hands-on training includes safety rules and regulations; use of tools, identification of fasteners, gaskets, and seals; use of parts and electrical symbols for wiring diagrams.

MTE1018C Rigging & Make Ready
Credit Hours: 3
Preparation and deliverable of sales merchandise, mounting of various accessories, rigging cables, wiring, control boxes; minor maintenance and lubrication of systems are covered.

MTE1040C Marine Diesel Engines I
Credit Hours: 3
Course provides theory and hands-on application of the marine diesel engine and related systems. Instruction includes disassembly, reassembly, inspection, cleaning and troubleshooting engine parts and systems.

MTE1062C Marine Corrosion & Prevention
Credit Hours: 3
Upon completion of this course, students will be able to describe the basic theory of galvanic, electrolysis, fatigue, biological cavitation, and chemical corrosion as it pertains to the marine industry. Zinc sacrificial and impressed current commercial control systems are demonstrated and discussed. Composition, structure, application, and evaluation of commercial classes of protective coating for metals, proper metal preparation,
and coating applications are covered. Classroom instruction and tasks performed will be in accordance with applicable American Boat and Yacht Council (ABYC) Standards and industry best practices.

MTE1073C Gasoline Engine Diagnostics & Repair
Credit Hours: 3
A course on four and two-cycle in-line, and V-type inboard and outboard gasoline engines. Labs include troubleshooting with various kinds of test equipment, disassembly, and inspection and cleaning of various types of inboard gas engines by major manufacturers.

MTE1167C Marine Fuel Systems, Diesel & Gas
Credit Hours: 3
Course provides theory, operation, and service of gasoline and diesel fuel systems as well as conventional systems and characteristics of fuels and their oil mixture; safety; marine carburetors, tank construction and installation; and troubleshooting test equipment using a dynometer.

MTE1312C Advanced Marine Composites, Painting & Refinish
Credit Hours: 3
Principles of advanced composite marine construction and repair. Painting and refinishing surface fundamentals.

MTE1400C Marine Electricity
Credit Hours: 3
Basic electrical theory for both AC and DC circuits in marine systems. Application of electrical theory to the generating, starting and auxiliary circuits of the marine engine. Emphasis on theory of operation and repair of equipment in the field with special attention to marine problems in salt-water environments.

MTE1542C Air Conditioning & Refrigeration Systems
Credit Hours: 3
Principles of air conditioning and refrigeration systems on marine vessels.

MTE1543C Marine Auxiliary 2
Credit Hours: 3
This course develops skills in the student to prepare it, for the installation, reparation, diagnosis and inspection of systems such as: Auxiliary Power Systems, Hydraulic systems, Bow and Stern thrusters systems, Windlass anchor systems, Desalination systems and A/C Systems. The theory is complemented by projects in the laboratory, which help the student with the familiarization of the processes of installation and repair. At the end of the course the student will be ready to take the ABYC "Systems" certification exam.

MTE1651C Basic Welding
Credit Hours: 4
Provides basic welding knowledge and skills necessary to make repairs on ferrous materials used in the marine industry. Emphasis on metallurgy and uses of metals. The course is designed for the student with no welding background and includes the safety and theory of gas welding, metal cutting, brazing with brass and silver alloys, AC/DC arc welding stick, and introduction to aluminum TIG and MIG welding.

MTE2041C Diesel Engines II
Credit Hours: 3
Advanced theory of operation of diesel engines with an understanding of ABYC standards and recommended practices for systems.

MTE2234C Marine Inboard/Outboard Saildrive & Transmission
Credit Hours: 3
Course provides instruction on large outboard lower units, stern drives and marine gear assemblies of various manufacturers. Complete disassembly and reassembly procedures on outboard lower units. The study of hydraulics in transmissions and theory of propellers.

MTE2420C Advanced Electrical Systems
Credit Hours: 3
Advanced electrical systems and troubleshooting procedures, diagnosis and repair of circuits and equipment malfunctions on marine vessels.

MTE2490C Marine Electronics
Credit Hours: 3
Principles of on-board electronic systems, installation and troubleshooting of communication and navigational systems.

MTE2541C Marine Auxiliary Equipment
Credit Hours: 3
This course provides an introduction to centrifugal pumps; AC electricity and generators; hydraulic; air conditioning; and refrigeration systems. Theory of operation and fundamentals of servicing are taught with a strong emphasis on techniques.
MTE2949 Marine Internship  
Credit Hours: 2  
Internship co-operative course providing on-the-job training at a local marine repair station. Includes required student outcomes which meet industry standards.

MTG3212 Modern Geometry  
Credit Hours: 3  
A course for math and math education majors. Geometry is a major foundation of our mathematical understanding of the world, and this course will explore both its breadth and depth. This course rigorously examines the axioms and theorems of Euclidean geometry and the non-Euclidean geometries. The coordinate and translational geometries will be treated as well. This course is highly theoretical and proof-intensive.

MUE1440 String Class  
Credit Hours: 1  
Development of elementary performing skills on the violin. A basic study of all string instruments. Examines literature and teaching techniques for group instruction of students.

MUE1450 Woodwind Class  
Credit Hours: 1  
Development of elementary performing skills on the clarinet. A basic study of all woodwind instruments. Examines literature and teaching techniques for group instruction of students.

MUH2019 Development of American Popular Music  
Credit Hours: 3  
Popular music in the United States, from 1820 to the present, including the Big Band Era, Country and Western, Jazz, Black Music, and the Rock scene (beginning in 1955).

MUH2111 Music History & Literature  
Credit Hours: 3  
A survey course tracing the historical development of Western music from antiquity through the Classical Period. Emphasis is placed on major composers and their works. Recommended for second-year music students.

MUH2112 Music History & Literature  
Credit Hours: 3  
A survey course tracing the history of music from the beginning of the 19th century to the present, showing the significance of music's development resulting from social, international and cultural influences.

MUL2010 Music Appreciation  
Credit Hours: 3  
Course for non-music majors, designed to develop a basic music vocabulary, establish critical listening skills, and survey the evolution of Western music within a framework of world cultures.

MUM1600C Introduction to Recording Studio Procedures  
Credit Hours: 3  
Fundamentals and techniques of modern multi-track recording. Areas of concentration are studio procedures, equipment operation, microphone selection and placement, signal processors, musical instrument isolation, and acoustical properties.

MUM2601C Advanced Recording Engineering  
Credit Hours: 3  
This class focuses on advanced application of recording and mix-down techniques, incorporating the use of overdubs and special effects. A multi-track recording project will be required.

MUM2700 Introduction to Music Business  
Credit Hours: 3  
An introduction to the history, principles and practices of the music industry. A systematic survey of the career options in the music industry. Topics include recording, publishing, licensing, copyrights, promotions, arts management, music and instrument merchandising, contracts, music in mass communication, the internet and the music industry, live performance on a local and national basis, career options and career development with emphasis on commercial enterprise.

MUM2730 Music Marketing & Promotion  
Credit Hours: 3  
Music business marketing is a multifaceted and integrated approach that will teach the student an effective worldwide music marketing strategy and how to plan their active marketing plan tailored to the student's strengths and budget. The student will learn to: time a marketing campaign effectively; publicize music effectively for traditional print and emerging online outlets; understand the current opportunities for online, satellite and terrestrial radio play; and navigate various
retail and distribution options such as iTunes, Rhapsody, Amazon.com as well as brick and mortar outlets. Students will learn to maximize profitability of touring efforts and avoid common mistakes in music marketing.

MUN1120 Band
Credit Hours: 1
Open to all students, faculty, and members of the community who play a band instrument. Chairs assigned by the conductor through audition.

MUN1180 Concert Band
Credit Hours: 1
Open to all students, faculty and members of the community who play a band instrument. Chairs assigned by the conductor through audition.

MUN1210C Symphony Orchestra
Credit Hours: 1
Open by audition to all students, faculty and members of the community who play an orchestral instrument.

MUN1280C Orchestra
Credit Hours: 1
Open by audition to all students, faculty, and members of the community who play an orchestral instrument.

MUN1310 College Singers
Credit Hours: 1
Open to all college students by audition.

MUN1340C Vocal Ensemble
Credit Hours: 1
A select vocal ensemble performing a wide variety of literature, including Jazz and Pop. Open to all students by audition.

MUN1341C Seahawk Singers
Credit Hours: 1
A select vocal ensemble performing a variety of literature including jazz and pop. Open to all students by audition.

MUN1380C Broward Choral Society
Credit Hours: 1
Open to all student, faculty and members of the community who have experience in the art of singing.

MUN1430C Brass Ensemble
Credit Hours: 1
A select instrumental ensemble that performs music written or arranged for Brass instruments. Enrollment is determined by the director through audition.

MUN1440C Percussion Ensemble
Credit Hours: 1
A select instrumental ensemble that performs music written or arranged for Percussion instruments. Enrollment is determined by the director through audition.

MUN1460C Chamber Ensemble
Credit Hours: 1
Small group whose members are selected by the director through audition. Study and performance of repertoire appropriate to the specific chamber media.

MUN1480C Classical Guitar Ensemble
Credit Hours: 1
Open to all students, faculty and members of the community who play guitar. Enrollment is determined by the director through audition. Participants will study and perform music from all periods in preparation for public performance.

MUN1481C Jazz Guitar Ensemble
Credit Hours: 1
Open to all students, faculty and members of the community who play guitar. Enrollment is determined by the director through audition. Participants will study and perform music of various styles in preparation for public performance.

MUN1710C Jazz Ensemble
Credit Hours: 1
Enrollment is determined by the director through audition. Study and performance of music associated with the popular music and show presentation fields.

MUN1711 Jazz Combo
Credit Hours: 1
Enrollment is determined by the director through audition. Study and performance of music associated with the popular music and show presentation fields.

MUN1712 Combo Lab
Credit Hours: 1
Enrollment is determined by the director through audition. Study and performance of music associated with the popular music and show presentation fields.
MUN1780C Jazz/Pop Ensemble  
Credit Hours: 1  
Enrollment is determined by the director through audition. Study and performance of music associated with the popular music, show presentation and dance band fields.

MUS1360 Introduction to Music Technology  
Credit Hours: 3  
This class is an introductory survey of the fundamental aspects of music technology. Topics include use of microphones, digital audio, sound f/x, music notation programs and recording studio layout.

MUS2332C Live Sound Reinforcement  
Credit Hours: 3  
This course explores techniques used for recording and reinforcing music on location. Topics include commonly encountered acoustical problems and an investigation of equipment and techniques used to overcome them.

MUS2342C Digital Audio Music Production  
Credit Hours: 3  
Upon completion of this course the student will have acquired a deep understanding of desktop music production. The physical aspects of sound, digital audio technology and studio production techniques will be explained and demonstrated in detail. Topics covered in class will include non-linear editing, digital signal processing, an introduction to MIDI and sequencing, concepts of signal flow, sound effects, basic mixing, and basic recording techniques. Studio lab assignments are performed outside of class reinforcing weekly lecture topics.

MUS2344C Introduction to MIDI Systems & Sound Design  
Credit Hours: 3  
This course will offer the student a comprehensive study of the Musical Instrument Digital Interface (MIDI) and its many musical applications with an emphasis on sequencing and sound design. Concepts of music synthesis and sound design are presented through the use of a computer, keyboard, and appropriate software.

MUS2348C Digital Audio Music Production 2  
Credit Hours: 3  
This course explores techniques used for recording and reinforcing music on location. Topics include commonly encountered acoustical problems and an investigation of equipment and techniques used to overcome them.

MUS2349C Advanced Projects in Music Production  
Credit Hours: 3  
This course will offer the student a comprehensive overview of the music production process, including composing, tracking, mixing, advanced synthesis techniques and delivery.

MUS2905 Independent Study: Music  
Credit Hours: 3  
A directed, independent study course available to both majors and non-majors who wish to investigate a particular problem related to music. Prerequisite: instructor approval. Students will shape the course to fit their needs by planning activities with a faculty advisor.

MUS2930 MUSIC: Special Topics  
Credit Hours: 3  
Course centers around topics of current interest or of special interest to students or instructors. Topics or focus may vary from semester to semester. Topics will be identified by the MUS2930 course title published in the course schedules for each term that the course is offered. Special Topics credit hours are not automatically transferable. Transfer credit is the prerogative of the receiving institution.

MUS2940 Music Technology CO-OP Work Experience  
Credit Hours: 3  
A course designed to provide training in a student's field of study through work experience. Students are graded on the basis of documentation of learning acquired as reported by student and employer.

MUT1001 Fundamentals of Music  
Credit Hours: 3  
A study of basic music fundamentals for the non-music major or the beginning music major whose background in music has been minimal.

MUT1111 Music Theory I  
Credit Hours: 3  
A course on music theory and related keyboard skills. Emphasis on diatonic materials.

MUT1112 Music Theory II  
Credit Hours: 3  
A continuation of MUT1111.
MUT1241 Ear Training & Sight Singing I  
Credit Hours: 1  
A course in the development of sight singing and ear training skills.

MUT1242 Ear Training & Sight Singing II  
Credit Hours: 1  
A continuation of MUT1241.

MUT2116 Music Theory III  
Credit Hours: 3  
Continuation of MUT1112. Concentration on chromatic materials, musical forms, and 20th century techniques.

MUT2117 Music Theory IV  
Credit Hours: 3  
Continuation of MUT2116.

MUT2246 Ear Training & Sight Singing III  
Credit Hours: 1  
A continuation of MUT1242.

MUT2247 Ear Training & Sight Singing IV  
Credit Hours: 1  
Continuation of MUT2246.

MUT2641 Jazz Theory & Improvisation I  
Credit Hours: 3  
A study of the materials and structure of jazz music and the development of improvisational skills.

MUT2642 Jazz Theory & Improvisation II  
Credit Hours: 3  
A study of the materials and structure of jazz music and the development of improvisational skills.

MVB1011 Pre-principal Trumpet  
Credit Hours: 1  
College preparatory applied instruction in Trumpet for the music principal.

MVB1012 Pre-principal French Horn  
Credit Hours: 1  
College preparatory applied instruction in French horn for the music principal.

MVB1013 Pre-principal Trombone  
Credit Hours: 1  
College preparatory applied instruction in trombone for the music principal.

MVB1014 Pre-principal Baritone Horn  
Credit Hours: 1  
College preparatory applied instruction in baritone horn for the music principal.

MVB1015 Pre-principal Tuba  
Credit Hours: 1  
College preparatory applied instruction in tuba for the music principal.

MVB1211 Trumpet  
Credit Hours: 1  
One half-hour lesson weekly and one hour of practice daily.

MVB1212 French Horn  
Credit Hours: 1  
One half-hour lesson weekly and one hour of practice daily.

MVB1213 Trombone  
Credit Hours: 1  
One half-hour lesson weekly and one hour of practice daily.

MVB1214 Baritone Horn  
Credit Hours: 1  
One half-hour lesson weekly and one hour of practice daily.

MVB1215 Tuba  
Credit Hours: 1  
One half-hour lesson weekly and one hour of practice daily.

MVB1311 Principal Trumpet I  
Credit Hours: 1  
Applied instruction in trumpet for the music principal.

MVB1312 Principal French Horn I  
Credit Hours: 1  
Applied instruction in French horn for the music principal.

MVB1313 Principal Trombone I  
Credit Hours: 1  
Applied instruction in trombone for the music principal.

MVB1314 Principal Baritone Horn I  
Credit Hours: 1  
Applied instruction in baritone horn for the music principal.
MVB1315 Principal Tuba I
Credit Hours: 1
Applied instruction in tuba for the music principal.

MVB2221 Trumpet
Credit Hours: 1
One half hour lesson weekly and one hour of practice daily.

MVB2222 French Horn
Credit Hours: 1
One half hour lesson weekly and one hour practice daily.

MVB2223 Trombone
Credit Hours: 1
One half hour lesson weekly and one hour of practice daily.

MVB2224 Baritone Horn
Credit Hours: 1
One half hour lesson weekly and one hour of practice daily.

MVB2225 Tuba
Credit Hours: 1
One half hour lesson weekly and one hour of practice daily.

MVB2321 Principal Trumpet II
Credit Hours: 1
Applied instruction in trumpet for the music principal.

MVB2322 Principal French Horn II
Credit Hours: 1
Applied instruction in French horn for the music principal.

MVB2323 Principal Trombone II
Credit Hours: 1
Applied instruction in trombone for the music principal.

MVB2324 Principal Baritone Horn II
Credit Hours: 1
Applied instruction in baritone horn for the music principal.

MVB2325 Principal Tuba II
Credit Hours: 1
Applied instruction in tuba for the music principal.

MVJ1010 Pre-principal Jazz Piano
Credit Hours: 1
College preparatory applied instruction in jazz piano for the music principal.

MVJ1011 Pre-principal Jazz Voice
Credit Hours: 1
College preparatory applied instruction in jazz voice for the music principal.

MVJ1013 Pre-principal Jazz Guitar
Credit Hours: 1
College preparatory applied instruction in jazz guitar for the music principal.

MVJ1014 Pre-principal Electric Bass
Credit Hours: 1
College preparatory applied instruction in electric bass for the music principal.

MVJ1019 Pre-principal Jazz Percussion
Credit Hours: 1
College preparatory applied instruction in jazz percussion for the music principal.

MVJ1210 Jazz Piano/Secondary
Credit Hours: 1
One half-hour lesson weekly and one hour of practice daily.

MVJ1211 Jazz Voice Secondary
Credit Hours: 1
One half-hour lesson weekly and one hour of practice daily.

MVJ1213 Jazz Guitar/Secondary
Credit Hours: 1
One half-hour lesson weekly and one hour of practice daily.

MVJ1214 Electric Bass/Secondary
Credit Hours: 1
One hour lesson weekly and two hours of practice daily.

MVJ1219 Jazz Percussion
Credit Hours: 1
One half hour lesson weekly and one hour practice daily.

MVJ1310 Principal Jazz Piano I
Credit Hours: 1
Applied instruction in jazz piano for the music principal.

MVJ1311 Principal Jazz Voice I
Credit Hours: 1
Applied instruction in jazz voice for the music principal.

MVJ1313 Principal Jazz Guitar I
Credit Hours: 1
Applied instruction in jazz guitar for the music principal.

MVJ1314 Principal Electric Bass I
Credit Hours: 1
Applied instruction in electric bass for the music principal.

MVJ1319 Principal Jazz Percussion I
Credit Hours: 1
Applied instruction in jazz percussion for the music principal.

MVJ2220 Jazz Piano
Credit Hours: 1
One half hour lesson weekly and one hour of practice daily.

MVJ2223 Jazz Guitar
Credit Hours: 1
One half hour lesson weekly and one hour of practice daily.

MVJ2224 Electric Bass
Credit Hours: 1
One half hour lesson weekly and one hour of practice daily.

MVJ2229 Jazz Percussion
Credit Hours: 1
One half hour lesson weekly and one hour practice daily.

MVJ2320 Principal Jazz Piano II
Credit Hours: 1
Applied instruction in jazz piano for the music principal.

MVJ2323 Principal Jazz Guitar II
Credit Hours: 1
Applied instruction in jazz guitar for the music principal.

MVJ2324 Principal Electric Bass II
Credit Hours: 1
Applied instruction in electric bass for the music principal.

MVJ2329 Principal Jazz Percussion II
Credit Hours: 1
Applied instruction in jazz percussion for the music principal.

MVK1011 Pre-principal Piano
Credit Hours: 1
College preparatory applied instruction in piano for the music principal.

MVK1013 Pre-principal Organ
Credit Hours: 1
College preparatory applied instruction in organ for the music principal.

MVK1111 Piano Class
Credit Hours: 1
Basic piano skills for the beginning student.

MVK1112 Piano Class II
Credit Hours: 1
(Two hours weekly) basic piano skills for the intermediate student.

MVK1211 Piano
Credit Hours: 1
One half hour lesson weekly and one hour of practice daily.

MVK1213 Organ
Credit Hours: 1
One half hour lesson weekly and one hour of practice daily.

MVK1311 Principal Piano I
Credit Hours: 1
Applied instruction in piano for the music principal.

MVK1313 Principal Organ I
Credit Hours: 1
Applied instruction in organ for the music principal.

MVK2221 Piano
Credit Hours: 1
One half hour lesson weekly and one hour of practice daily.
MVK2223 Organ  
Credit Hours: 1  
One half hour lesson weekly and one hour of practice daily.

MVK2321 Principal Piano II  
Credit Hours: 1  
Applied instruction in piano for the music principal.

MVK2323 Principal Organ II  
Credit Hours: 1  
Applied instruction in organ for the music principal.

MVO1070 Applied Music Jazz Coaching  
Credit Hours: 1  
Applied music jazz coaching on the student's instrument.

MVP1011 Pre-principal Percussion  
Credit Hours: 1  
College preparatory applied instruction in percussion for the music principal.

MVP1211 Percussion  
Credit Hours: 1  
One half hour lesson weekly and one hour of practice daily.

MVP1311 Principal Percussion I  
Credit Hours: 1  
Applied instruction in percussion for the music principal.

MVP2221 Percussion  
Credit Hours: 1  
One half hour lesson weekly and one hour of practice daily.

MVP2321 Principal Percussion II  
Credit Hours: 1  
Applied instruction in percussion for the music principal.

MVS1011 Pre-principal Violin  
Credit Hours: 1  
College preparatory applied instruction in violin for the music principal.

MVS1012 Pre-principal Viola  
Credit Hours: 1  
College preparatory applied instruction in viola for the music principal.

MVS1013 Pre-principal Cello  
Credit Hours: 1  
College preparatory applied instruction in cello for the music principal.

MVS1014 Pre-principal String Bass  
Credit Hours: 1  
College preparatory applied instruction in string bass for the music principal.

MVS1015 Pre-principal Harp  
Credit Hours: 1  
College preparatory applied instruction in harp for the music principal.

MVS1016 Pre-principal Classical Guitar  
Credit Hours: 1  
College preparatory applied instruction in classical guitar for the music principal.

MVS1116 Guitar Class  
Credit Hours: 1  
Class instruction in beginning classical guitar techniques.

MVS1211 Violin  
Credit Hours: 1  
One half hour lesson weekly and one hour of practice daily.

MVS1212 Viola  
Credit Hours: 1  
One half hour lesson weekly and one hour of practice daily.

MVS1213 Cello  
Credit Hours: 1  
One half hour lesson weekly and one hour of practice daily.

MVS1214 String Bass  
Credit Hours: 1  
One half hour lesson weekly and one hour of practice daily.

MVS1215 Harp  
Credit Hours: 1  
One half hour lesson weekly, and one hour of practice daily.

MVS1216 Classical Guitar  
Credit Hours: 1
One half hour lesson weekly and one hour of practice daily.

MVS1311 Principal Violin I  
Credit Hours: 1  
Applied instruction in violin for the music principal.

MVS1312 Principal Viola I  
Credit Hours: 1  
Applied instruction in viola for the music principal.

MVS1313 Principal Cello I  
Credit Hours: 1  
Applied instruction in cello for the music principal.

MVS1314 Principal String Bass I  
Credit Hours: 1  
Applied instruction in string bass for the music principal.

MVS1315 Harp  
Credit Hours: 1  
One hour lesson weekly, and two hours of practice daily.

MVS1316 Principal Classical Guitar I  
Credit Hours: 1  
Applied instruction in classical guitar for the music principal.

MVS2126 Guitar Class  
Credit Hours: 1  
Class instruction in intermediate guitar techniques.

MVS2221 Violin  
Credit Hours: 1  
One half hour lesson weekly and one hour of practice daily.

MVS2222 Viola  
Credit Hours: 1  
One half hour lesson weekly and one hour of practice daily.

MVS2223 Cello  
Credit Hours: 1  
One half hour lesson weekly and one hour of practice daily.

MVS2224 String Bass  
Credit Hours: 1

One half hour lesson weekly and one hour of practice daily.

MVS2225 Harp Secondary  
Credit Hours: 1  
One half hour lesson weekly, and one hour practice daily.

MVS2226 Classical Guitar  
Credit Hours: 1  
One half hour lesson weekly and one hour of practice daily.

MVS2321 Principal Violin II  
Credit Hours: 1  
Applied instruction in violin for the music principal.

MVS2322 Principal Viola II  
Credit Hours: 1  
Applied instruction in viola for the music principal.

MVS2323 Principal Cello II  
Credit Hours: 1  
Applied instruction in cello for the music principal.

MVS2324 Principal String Bass II  
Credit Hours: 1  
Applied instruction in string bass for the music principal.

MVS2325 Principal Sophomore Harp  
Credit Hours: 1  
Applied instruction in harp for the music principal.

MVS2326 Principal Classical Guitar II  
Credit Hours: 1  
Applied instruction in classical guitar for the music principal.

MVV1011 Pre-principal Voice  
Credit Hours: 1  
College preparatory applied instruction in voice for the music principal.

MVV1111 Voice Class  
Credit Hours: 1  
Fundamentals of voice production and building of solo repertoire.

MVV1211 Voice  
Credit Hours: 1  
One half hour lesson weekly and one hour of practice daily.
MVV1311 Principal Voice I  
Credit Hours: 1  
Applied instruction in voice for the music principal.

MVV2221 Voice  
Credit Hours: 1  
One half hour lesson weekly and one hour of practice daily.

MVV2321 Principal Voice II  
Credit Hours: 1  
Applied instruction in voice for the music principal.

MVW1011 Pre-principal Flute  
Credit Hours: 1  
College preparatory applied instruction in flute for the music principal.

MVW1012 Pre-principal Oboe  
Credit Hours: 1  
College preparatory applied instruction in oboe for the music principal.

MVW1013 Pre-principal Clarinet  
Credit Hours: 1  
College preparatory applied instruction in clarinet for the music principal.

MVW1014 Pre-principal Bassoon  
Credit Hours: 1  
College preparatory applied instruction in bassoon for the music principal.

MVW1015 Pre-principal Saxophone  
Credit Hours: 1  
College preparatory applied instruction in saxophone for the music principal.

MVW1211 Flute  
Credit Hours: 1  
One half hour lesson weekly and one hour of practice daily.

MVW1212 Oboe  
Credit Hours: 1  
One half hour lesson weekly and one hour of practice daily.

MVW1213 Clarinet  
Credit Hours: 1  
One half hour lesson weekly and one hour of practice daily.

MVW1214 Bassoon  
Credit Hours: 1  
One half hour lesson weekly and one hour of practice daily.

MVW1215 Saxophone  
Credit Hours: 1  
One half hour lesson weekly and one hour of practice daily.

MVW1311 Principal Flute I  
Credit Hours: 1  
Applied instruction in flute for the music principal.

MVW1312 Principal Oboe I  
Credit Hours: 1  
Applied instruction in oboe for the music principal.

MVW1313 Principal Clarinet I  
Credit Hours: 1  
Applied instruction in clarinet for the music principal.

MVW1314 Principal Bassoon I  
Credit Hours: 1  
Applied instruction in bassoon for the music principal.

MVW2221 Flute  
Credit Hours: 1  
One half hour lesson weekly and one hour of practice daily.

MVW2222 Oboe  
Credit Hours: 1  
One half hour lesson weekly and one hour of practice daily.

MVW2223 Clarinet  
Credit Hours: 1  
One half hour lesson weekly and one hour of practice daily.

MVW2224 Bassoon  
Credit Hours: 1  
One half hour lesson weekly and one hour of practice daily.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MVW2225</td>
<td>Saxophone</td>
<td>1</td>
<td>One half hour lesson weekly and one hour of practice daily.</td>
</tr>
<tr>
<td>MVW2321</td>
<td>Principal Flute II</td>
<td>1</td>
<td>Applied instruction in flute for the music principal.</td>
</tr>
<tr>
<td>MVW2322</td>
<td>Principal Oboe II</td>
<td>1</td>
<td>Applied instruction in oboe for the music principal.</td>
</tr>
<tr>
<td>MVW2323</td>
<td>Principal Clarinet II</td>
<td>1</td>
<td>Applied instruction in clarinet for the music principal.</td>
</tr>
<tr>
<td>MVW2324</td>
<td>Principal Bassoon II</td>
<td>1</td>
<td>Applied instruction in bassoon for the music principal.</td>
</tr>
<tr>
<td>MVW2325</td>
<td>Principal Saxophone II</td>
<td>1</td>
<td>Applied instruction in saxophone for the music principal.</td>
</tr>
<tr>
<td>NMT1002</td>
<td>Intro to Nuclear Medicine Technology</td>
<td>3</td>
<td>This course is designed to introduce the student to the field of nuclear medicine. Upon completion of this course, the student will have knowledge upon vital signs, patient care, universal precautions, and phlebotomy. The student will also receive a brief overview on radiation safety and the most common procedures performed in nuclear medicine.</td>
</tr>
<tr>
<td>NMT1002L</td>
<td>Introduction to Nuclear Medicine Lab</td>
<td>1</td>
<td>The student will be introduced to aspects of the healthcare field and the fundamentals of nuclear medicine by applying the skills learned in Introduction to Nuclear Medicine to fully prepare the student for the hospital and/or clinical site.</td>
</tr>
<tr>
<td>NMT1430</td>
<td>Radiation Safety &amp; Radiobiology</td>
<td>3</td>
<td>This course is designed to educate students on the biological effects of radiation and also informs the student on the local, state and federal regulations regarding radiation protection and safety for themselves, others and the environment. The students will learn how to follow appropriate protection procedures; dose limits, the long and short term effects of radiation, and how to handle and dispose of radioactive materials; and practice personnel monitoring of radiation exposure.</td>
</tr>
<tr>
<td>NMT1630</td>
<td>Nuclear Physics &amp; Mathematical</td>
<td>3</td>
<td>This course educates the student on the fundamentals of nuclear physics including nuclear terminology and important photon interactions that interplay with common radioisotopes used in Nuclear Medicine. The student will also gain knowledge of the various calculations necessary for a successful nuclear medicine technologist to attain.</td>
</tr>
<tr>
<td>NMT1714</td>
<td>Nuclear Medicine Pathology</td>
<td>2</td>
<td>This course introduces the student to general pathological conditions with emphasis on those commonly seen in the field of nuclear medicine. Basic anatomy is reviewed in correlation to pathophysiology of disease. Descriptions of how diseases are classified, diagnosed and treated, as well as the natural course/prognosis of these diseases are presented. Topics will include; Pathogenesis, disease classification systems, and the study of specific disease of the respiratory, skeletal, gastrointestinal, hepatobiliary, urinary, cardiovascular &amp; hematopoietic, nervous, endocrine and reproductive systems with nuclear medicine imaging considerations.</td>
</tr>
<tr>
<td>NMT1804</td>
<td>Nuclear Medicine Clinical Education I</td>
<td>2</td>
<td>This course introduces the student to general pathological conditions with emphasis on those commonly seen in the field of nuclear medicine. Basic anatomy is reviewed in correlation to pathophysiology of disease. Descriptions of how diseases are classified, diagnosed and treated, as well as the natural course/prognosis of these diseases are presented. Topics will include; Pathogenesis, disease classification systems, and the study of specific disease of the respiratory, skeletal, gastrointestinal, hepatobiliary, urinary, cardiovascular &amp; hematopoietic, nervous, endocrine and reproductive systems with nuclear medicine imaging considerations.</td>
</tr>
<tr>
<td>NMT1814</td>
<td>Nuclear Medicine Clinical Education II</td>
<td>2</td>
<td>Second in a five-course sequence of supervised clinical instruction in nuclear medicine technology. In addition to topics covered in Clinical Education I, the student is expected to perform routine quality control and some</td>
</tr>
</tbody>
</table>
imaging procedures. Students must successfully complete a required number of competencies as stated in the clinical handbook for the respective semester.

NMT2061 Nuclear Medicine Seminar
Credit Hours: 3
This course challenges the student with comprehensive testing, discussions and refinement of their accumulated knowledge of all aspects of Nuclear Medicine technology in preparation for the National Board Examinations.

NMT2102 Nuclear Medicine Administration
Credit Hours: 1
The student will be introduced to the administrative duties required of a Nuclear Medicine Technologist. Upon completion, the student will attain knowledge of proper resume building skills, interviewing skills, stress management and overall successful in the healthcare field.

NMT2130 Nuclear Medicine Radiopharmacy
Credit Hours: 2
This course will educate the student upon all aspects of all the radiopharmaceuticals used in Nuclear Medicine and PET. The student will understand how radiopharmaceuticals are produced, to maintain radiopharmaceutical records; obtain a generator eluate; prepare radiopharmaceuticals and perform quality control tests on them; dispose of radioactive waste appropriately; demonstrate an understanding of ordering pharmaceuticals in appropriate dosage and at an effective time frame.

NMT2534 Nuclear Medicine Instrumentation
Credit Hours: 2
This class incorporates the principles of nuclear physics associated with the operation and calibration of radiation detection devices applied in nuclear medicine. Students will have a hands-on approach to the various types of devices and equipment that are commonly used in nuclear medicine. Students will be educated on quality control testing of imaging and non-imaging systems; which also include SPECT, PET, and CT applications.

NMT2713 Nuclear Medicine Methodology I
Credit Hours: 2
This is the first in a series of two courses which thoroughly educate the student about nuclear medicine imaging procedures to allow the student proper execution of these procedures during clinical rotation. The student will also demonstrate knowledge of respective PET imaging procedures frequently performed.

NMT2713L Nuclear Medicine Methodology I LAB
Credit Hours: 1
This is the first in a series of two laboratories which allows the student to apply their knowledge of the material they learn in Methodology I and enhance the student's familiarity with the clinical setting.

NMT2723 Nuclear Medicine Methodology II
Credit Hours: 2
This course enhances the student's knowledge attained from Methodology I by learning the remaining nuclear medicine procedures in order to properly execute all procedures successfully. The student will also demonstrate knowledge of any remaining PET imaging procedures not discussed in Methodology I.

NMT2723L Nuclear Medicine Methodology II Lab
Credit Hours: 1
This is the second in a series of two laboratories which allows the student to apply their knowledge of the material they learn in Methodology II and enhance the student's familiarity within the clinical setting.

NMT2779 Introduction to Multiple Modalities
Credit Hours: 2
This course educates the student about proper recognition and interpretation of cross sectional anatomy. The student will also compare and analyze images from complementary modalities. It is crucial for the nuclear medicine technologist to understand three dimensional imaging in order to enhance patient care and be an asset to the facility.

NMT2824 Nuclear Medicine Clinical Education III
Credit Hours: 3
The second in a five-course sequence of supervised clinical instruction in nuclear medicine technology. In addition to topics covered in NMT1814, the student is expected to perform routine quality control and quality assurance procedures. Students must complete patient care competencies as determined by the program.

NMT2834 Clinical Education IV
Credit Hours: 3
The fourth in a five-course sequence of supervised clinical education courses in nuclear medicine technology. In addition to topics covered in previous clinical education courses, the student is expected to
perform most, if not all, quality control procedures and imaging procedures. The student should be progressing toward refinement with clinical experience and expanded knowledge. Students must continue to successfully complete the required number of competencies as stated in the clinical handbook for the respective semester.

NMT2844 Nuclear Medicine Clinical Education V
Credit Hours: 2
The fifth in a five-course sequence of supervised clinical instruction in nuclear medicine technology. In addition to topics covered in all previous clinical education courses, the student is expected to perform all quality control and imaging procedures. Students must successfully complete all required competencies and random terminal competencies when asked.

NMT2905 Independent Study in Nuclear Medicine Clinical
Credit Hours: 3
A directed independent study course in nuclear medicine. The course is available to only majors who wish to investigate specific clinical education situations. Student must submit an application for the course to the Program Manager.

NMT2960 Nuclear Medicine Advance Applications
Credit Hours: 2
This course allows the student to take a more in depth perception upon previous taught courses with emphasis upon clinical application and knowledge developed from prior clinical education classes.

NSP2781 Refresher Nurse Update
Credit Hours: 5
This course has been developed to review current theory in relation to nursing practice so that the inactive R.N. may move with confidence into a staff nurse orientation and return to practice. The material presented will emphasize trends in nursing practice and nursing education today, and changes in the fundamentals of nursing skills necessary for providing effective nursing care in a variety of situations. A reasonable comprehensive review of the up-to-date nursing management of the adult patient with a medical surgical problem will be presented. Prerequisite: Current Florida RN license, current BCLS-C certificate, professional liability insurance, physical examination and recency of work experience.

NSP2781L Refresher Nurse Update Practicum
Credit Hours: 5
This course will provide various laboratory and clinical experiences for the R.N. in providing patient care, team leading, and exposure to nursing care in the specialty areas.

NUR1020 Nursing Process I
Credit Hours: 3
This is a theoretical course for the beginning nursing student. Nursing Process I provides the student with the fundamentals of nursing, including such basic skills as health assessment, legal aspects of nursing practice, communication and documentation technique, asepsis, the nursing process, caring for patients having special procedures or specimen collection, and the role of the nurse as a member of the health care team. This course also includes explanation of specific physiological and psychological human needs as hygiene, safety, sleep and rest, sensory, grief and loss, self-concept and the nurse's role in assisting a person to meet these needs, while sensitive to cultural diversity, human dignity, and development progression.

NUR1020L Nursing Process I Clinical Lab
Credit Hours: 2
A clinical course for the beginning nursing student. Initially skills are learned in simulation lab and then the student is introduced to direct patient care in an inpatient setting. The emphasis is on care of the adult experiencing medical/surgical situations. The focus is practical application and transference of the theoretical concepts covered in Nursing Process I.

NUR1210 Nursing Process II
Credit Hours: 3
The second in a series of theoretical courses for the beginning nursing students. This course builds on previously learned concepts and introduces more sophisticated nursing interventions related to medication and blood administration, care of patients experiencing alterations in the basic needs of nutrition, elimination, comfort, fluid and electrolyte balance, acid-base balance, oxygenation, mobility, and asepsis, and care of the surgical patient, aging patient, and patient with knowledge deficits.

NUR1210L Nursing Process II Clinical Lab
Credit Hours: 2
The second in a series of clinical courses building on previously learned concepts while incorporating more sophisticated nursing interventions related to medication
administration, care of patients experiencing alterations in the basic needs of nutrition, elimination, comfort, fluid and electrolyte balance, oxygenation, mobility, asepsis, and care of the surgical patient. Course activities focus on nursing care of the adult patient experiencing medical/surgical situations.

NUR1220 Health Alterations I
Credit Hours: 3
Health Alterations I is a course designed to provide the student with knowledge of alterations of ingestion, digestion, metabolism, and elimination throughout the life cycle. The major focus is directed at meeting the health care needs of the adult and pediatric patient through utilization of the nursing process. The student will be expected to integrate principles of anatomy, physiology, and pathophysiology of the digestive and genito urinary systems into the nursing process. Components of pharmacology and nutrition will be included in this course. Consideration will also be given to the psychosocial aspects of the wellness/illness continuum.

NUR1220L Health Alterations I Clinical Lab
Credit Hours: 2
Health Alterations I Clinical Lab is a course designed to provide the student with the opportunity to utilize the nursing process in the care of patients with alterations of ingestion, digestion, metabolism, and elimination throughout the life cycle. The student will be expected to correlate theoretical knowledge and scientific principles with clinical situations, observational experiences, written assignments and performance exams may be included in this course.

NUR1304L Transition Pediatric Nursing Clinic Lab
Credit Hours: 1
This clinical course provides the LPN student with an understanding of growth and development through the stages of childhood and the application of the nursing process through these stages.

NUR1310 Pediatric Nursing
Credit Hours: 3
This pediatric course is designed to provide an understanding of growth and development through the stages of childhood and the application of the nursing process to these stages.

NUR1310L Pediatric Nursing Lab
Credit Hours: 2
This clinical course provides the student with an understanding of growth and development through the stages of childhood and the application of the nursing process to these stages.

NUR1400L TR Healthcare of Women Clinical Lab
Credit Hours: 1
This clinical course is for the LPN student and will enable students to apply the nursing process in providing nursing care to the maternity patient, her family, and the fetus/newborn during antepartal, intrapartal and postpartal periods. Consideration is given to the multiple factors which complicate the normal physiological or psychological process of the childbearing period.

NUR1421 Health Care of Women
Credit Hours: 3
Health Care of Women is a course designed to provide the student with the knowledge of the reproductive system and health care needs of women throughout the life cycle. The major focus is directed to the childbearing portion of the life cycle. The student is expected to utilize the nursing process in providing nursing care to the maternity patient, her family, and the fetus/newborn during antepartal, intrapartal and postpartal periods. Consideration is given to the multiple factors which complicate the normal physiological or psychological process of the childbearing period.

NUR1421L Health Care of Women Clinical Laboratory
Credit Hours: 2
Health Care of Women is a clinical course designed to provide the student with the knowledge of the reproductive system and health care needs of women throughout the life cycle. The major focus is directed to the childbearing portion of the life cycle. The student is expected to utilize the nursing process in providing nursing care to the maternity patient, her family, and the fetus/newborn during antepartal, intrapartal and postpartal periods. Consideration is given to the multiple factors which complicate the normal physiological or psychological process of the childbearing period.

NUR1500L Transition Psychiatric Nursing Clinical Lab
Credit Hours: 1
This clinical course provides the LPN student with a definition and understanding of the psychiatric patient.
The nursing process is utilized to present pathological condition. Therapeutic modalities are included.

NUR1520 Nursing Care of the Psychiatric Patient Credit Hours: 3
This course provides the student with a definition and understanding of psychiatric nursing. The nursing process is utilized to present pathological conditions. Therapeutic interventions are included.

NUR1520L Nursing Care of the Psychiatric Patient CL Lab Credit Hours: 2
This clinical course provides the student with a definition and understanding of the psychiatric nursing. The nursing process is utilized to present pathological conditions. Therapeutic modalities are included.

NUR2000 Transition Nursing I Credit Hours: 2
Transition to Nursing Process I or NUR2000 is a 2 semester hours course which is a theoretical course designed to introduce the student to the basic elements of the Associate Degree Nursing curriculum. Nursing Transition I provides the licensed practical nurse with the fundamental skills and knowledge of the Registered Nurse role including nursing process, health assessment, legalities, basic communication skills, and an understanding of the needs of the medical surgical patient. This course builds on previously learned concepts and introduces more sophisticated nursing interventions related to medication and blood administration; care of patients experiencing alterations in the basic needs of fluid and electrolyte balance, acid-base balance, oxygenation, aging patient, and patient with knowledge deficits.

NUR2000L Transition Nursing I Clinical Lab Credit Hours: 2
The student shall be responsible for providing care of a selected group of patients, being aware of legal and ethical issues pertinent to their care and effecting change as necessary. It will be essential for the student to examine his/her own values and methods of communication in attempting to problem-solve patient situations. Observational experiences, written assignments, and performance exams may be included in this course.

NUR2221 Health Alterations II Credit Hours: 3
This course will continue to build on previously learned concepts related to the care of the medical surgical patient. The student focus and responsibility will be the practice-oriented, person-centered collaborative care of the medical surgical patients, with alterations in mobility, skin integrity, and/or neurological and sensory functioning. Prevention, rehabilitation, and evidence-based considerations, factors that contribute to or threatened health, honor diversity, ethical and informed decision making, and human dignity are emphasized.

NUR2221L Health Alterations II Clinical Lab Credit Hours: 2
In this course the student will be responsible for applying the nursing process to assigned patients with alterations in mobility, skin integrity and neurological functions. This experience will require both clinical and written assignments. Evaluation will be based on their application of the nursing process to assigned patients.

NUR2222 Health Alterations III Credit Hours: 3
This course is designed to provide the student with the knowledge necessary to implement the nursing process on patients with cardiopulmonary dysfunction throughout the life cycle. The focus is the pathophysiology, common medical, diagnostic and treatment modes, nursing assessments and interventions necessary to treat those patients. The students will be responsible for reviewing anatomy and physiology, pharmacology, pediatric and psychiatric principles as they apply to this course.

NUR2222L Health Alterations III Clinical Lab Credit Hours: 2
In this course the student will be responsible for applying the nursing process to assigned patients with alterations in cardiopulmonary functioning. This experience will require both clinical and written assignments. Evaluation will be based on the application of the nursing process to assigned patients.

NUR2801 Transition Nursing IV Credit Hours: 3
This theoretical course for the LPN covers the following concepts: leadership, team management, legal ethical situations, problem solving techniques, interviewing techniques and emergency nursing.
NUR2801L Transition Nursing IV Clinical Lab
Credit Hours: 2
This course for the LPN provides clinical opportunities to develop leadership skills, team management skills, and legal, ethical responsibilities.

NUR2811 Trends, Practices, and Roles
Credit Hours: 3
This course is designed to provide the knowledge necessary to move from the role of a student to that of a graduate nurse. The focus is directed toward the legal, ethical and professional responsibilities of the nurse in managerial and coordinating roles.

NUR2811L Trends, Practices, & Roles Clinical Lab
Credit Hours: 2
This course is designed to provide the student with the knowledge necessary to implement the nursing process on patients with cardiopulmonary dysfunctions throughout the life cycle. The focus is the pathophysiology, common medical, diagnostic and treatment modes, nursing assessments and interventions necessary to treat those patients. The students will be responsible for reviewing anatomy and physiology, pharmacology, pediatric and psychiatric principles as they apply to this course.

NUR3069 Advanced Health Assessment
Credit Hours: 2
Advanced health assessment addresses the totality of the client including the spiritual aspects of health, disease/disability, and the individual client's perceptions of the health/illness spectrum. The determination of the health/illness status of the client within the context of the client's socio-cultural values is essential in providing the framework for planning, implementing, communicating, and evaluating the outcomes of care. This laboratory course provides the knowledge, skills, interviewing and interactive techniques needed to obtain and communicate a systematic, culturally-appropriate, comprehensive health history and physical examination.

NUR3069L Advanced Health Assessment Lab
Credit Hours: 1
The Advanced health Care Assessment addresses the totality of the client including the spiritual aspects of health, disease/disability, and the individual client's perceptions of the health/illness spectrum. The determination of the health/illness status of the client within the context of the client's socio-cultural values is essential in providing the framework for planning, implementing, communicating, and evaluating the outcomes of care. This laboratory course provides the knowledge, skills, interviewing and interactive techniques needed to obtain and communicate a systematic, culturally-appropriate, comprehensive health history and physical examination.

NUR3119 Nursing Concepts and Theories
Credit Hours: 3
The profession of nursing is the culmination of concepts and theories. Concepts and theories are the body of knowledge used to support nursing practice. Nursing recognizes that socialization into a discipline is guided by theories' use of language, identification of concepts and definition of relationships, structured ideas and facilitation of disciplined inquiry, practice and communication, as well as predicting outcomes of nursing practice. The Nursing Concepts and Theories course will explore the major constructs, theories, and models that form the foundation of nursing. The course will also investigate the history and evolution of nursing leaders, evolving issues, concepts, and theories, and their application to nursing practice.

NUR3167 Nurse as a Scholar
Credit Hours: 3
Present aspects of scholarship that support the values of the nursing profession committed to both social relevance and scientific advancement. The practice of nursing derives knowledge from a wide array of other fields and disciplines adapting and applying this knowledge as appropriate to professional practice. This course examines these interrelationships and allows the nurse to utilize scholarly evidence to design and implement nursing care that is high-quality and cost effective to address issues important to the profession of nursing to question assumptions, and to utilize clinical reasoning and judgment.

NUR3678 Nursing Care of Vulnerable Populations
Credit Hours: 3
Caring for the vulnerable is imperative for the compassionate, caring, effective and competent nurse. This course focuses on health issues affecting at-risk and vulnerable populations and how nurses can advocate reducing disparities in health care systems and health care delivery. The course emphasizes the inter-relationships of socio-cultural and public health care systems. Barriers to the navigation and utilization of health care systems are explored as related to the economical, legal, political and cultural aspects of health protection and health maintenance.
NUR3805  Nursing, Roles, Dimensions, & Perspectives  
Credit Hours: 3  
The discipline of Nursing has been identified as having the potential for making a major impact on the transformation of health care delivery to a safer, quality, and more cost effective system, thus improving healthcare outcomes across populations. This course facilitates the transition of the Registered Nurse with an Associate Degree in Nursing or diploma to the role of the BSN graduate. It encompasses the history, evaluation, ethical imperatives, trends and issues impacting the nursing profession in evolving and global health delivery environments. It explores the responsibilities and values of the nursing profession, communication theories and techniques, teaching learning concepts, critical thinking and clinical reasoning and judgment.

NUR4128 Pathophysiology/Pharmacology  
Credit Hours: 3  
This course provides the student with the basic understanding of pathophysiology related to human illness and pharmacotherapy related to the application of drugs for the purpose of disease prevention and treatment, within a systems framework. Emphasis is placed on biological theories and principles that provide a basis for understanding pathophysiology as an alteration in the normal physiology functioning of subsystems from conception to end of life and the chemical agents that are capable of producing biologic responses within the body. The course uses critical thinking processes to analyze diverse client presentations of selected illness for symptomatology, pathophysiology, and health care implications.

NUR4165 Nursing Research  
Credit Hours: 3  
This course explores the research process and allows the student to apply research methods relevant to nursing and nursing practice. Emphasis is placed in the legal, ethical, socio-cultural, economic and political implications of research in nursing and health care. Evidence-based practice is emphasized in guiding nursing practice.

NUR4195C End of Life Palliative Care  
Credit Hours: 3  
This course is designed to recognize death as the last stage of human growth and development. With a focus on the physical, emotional, psychosocial, spiritual, and cultural considerations at the end-of-life, the student will explore ethical and legal issues to enhance their skills and knowledge when working with patients and families at the end-of-life.

NUR4284 Dynamics & Contemporary Issues in Aging  
Credit Hours: 3  
The aging population will affect the skills and services the healthcare workforce must be equipped to provide and the settings in which the care is provided. This course will provide an in-depth understanding of the concepts in normal aging, issues related to the client in communities, and health care issues confronted by the elderly. The impact of the elderly on society, end-of-life issues, the application of current theories and evidence of elder, and available and potential health care systems and services are explored.

NUR4636 Community Health Nursing  
Credit Hours: 3  
The community based nurse cares for clients from many diverse cultures and must be prepared to give quality, effective, and culturally competent health care in a variety of settings and specialties. This course focuses on the role of the nurse in the community and emphasizes concepts and theories related to community health nursing. Community nursing addresses cultural, social, and epidemiological factors relative to health and illness, health promotion and disease prevention across the lifespan and families of diverse populations.

NUR4636L Community Health Nursing Practicum  
Credit Hours: 2  
This course presents clinical concepts of community health nursing focusing on the community as client and the multiple determinants of health in community health settings. The learner will participate in selected community based clinical activities and various community agencies as an interdisciplinary provider, designer and manager in the process to provide competent care, promote health protection, provide assistance with health maintenance and health restoration to a diverse population within the community.

NUR4667 Nursing Perspectives & Global Trends  
Credit Hours: 3  
This course examines the knowledge and skills of baccalaureate nursing students' perspectives on global health trends. This information helps to facilitate the awareness and knowledge of increased globalization affecting health care and its delivery. The incorporation of ethical considerations and cultural sensitivity into nursing practice has become a greater need as a result of
an increasingly diverse, multicultural, globally oriented world. Information covering the overall socio-political and economical health care environment changes occurring in the 21st century health care system is addressed.

NUR4826 Ethical & Legal Aspects of Nursing
Credit Hours: 3
This course focuses on the ethical and legal aspects of nursing; exploring ethical issues, ethical decision making, and legal accountability in various populations.

NUR4827 Principles of Nursing Leadership & Management
Credit Hours: 3
This course provides a forum for the examination and discussion of concepts, theories, and principles of leading and managing for the nurse manager to be effective in today's diverse and global health care environment. Grounded in evidence-based, best practices, the ethical, economic, legal and political context of contemporary health systems are examined in terms of role development, interpersonal skills, networking, facilitation of groups, provision of quality care and quality improvement, budgeting and resource allocation. Health care systems, outcomes management, clinical judgment as it pertains to nursing management, and health and safety goals are emphasized across practice settings.

NUR4870 Nursing Informatics
Credit Hours: 3
This course is designed to explore the use of informatics in nursing practice and its role in enhancing client care to provide quality patient outcomes. The course provides an overview of various operating systems, hardware, software and network configurations. With a focus on health information systems and the electronic health record; the course also examines issues related to the protection of the privacy, confidentiality and security of information in health care environments and the potential use of social networking tools used to communicate health related information.

NUR4945 Nursing Capstone
Credit Hours: 2
Professional practice of the Registered Nurse focuses on health promotion; risk reduction; direct and indirect care of clients, families, groups, and populations; and providing the human interface between health care systems and the client. Following the completion of all required RN-BSN, general education, state of Florida and program pre-requisite course requirements, the Nursing Capstone requires the student to demonstrate the competencies consistent with program outcomes and to synthesize the knowledge, skills, concepts and theories he/she has attained in a written and approved professional portfolio.

NUR4945L Nursing Capstone Practicum
Credit Hours: 2
Professional practice of the Registered Nurse focuses on health promotion; risk reduction; direct and indirect care of clients, families, groups, and populations; and providing the human interface between health care systems and the client. Following the completion of all required RN-BSN, general education, state of Florida and program pre-requisite course requirements, the Nursing Capstone Practicum requires the student to demonstrate the competencies consistent with program outcomes.

OCE1001 Introductory Oceanography
Credit Hours: 3
A survey of the four classic disciplines of the ocean sciences: geological oceanography, chemical oceanography, physical oceanography, and biological oceanography. Course will focus on the basic principles of the ocean sciences and stress the interdisciplinary nature of oceanography.

OCE1001L Oceanography Laboratory
Credit Hours: 1
Laboratory methods for the Ocean Sciences. The topics covered will include problem solving in all aspects of ocean science to understand how the hydrosphere, lithosphere, biosphere and atmosphere of our planet functions and interacts and demonstrate a basic understanding of the unifying principles and processes that link geology, chemistry, physics, meteorology and biology to the study of the world ocean.

OCE3008 Advanced Oceanography
Credit Hours: 3
Oceanography is an interdisciplinary science course which considers the biological, physical, and chemical components and processes within the earth's oceans. Topical sections include: the history and processes (plate tectonics) which have shaped ocean basins; the ocean constituents (seawater & sediments); physical processes which drive circulation processes (currents, waves, & tides); life in the oceans play in controlling global climate; and environmental concerns. The course
will emphasize oceanographic processes and their effects on the global system.

**OPT1110 Physical & Geometric Optics**  
Credit Hours: 3  
This course provides a review of light energy as it passes through air, plastic, glass and water with emphasis on how light is modified by prisms and curved lens surfaces. These principles relate to the effect these ophthalmic devices have in correcting the errors of human vision.

**OPT1110L Physical & Geometric Optics Lab**  
Credit Hours: 1  
This course provides the opportunity for students to demonstrate, measure and explore the behavior of light energy as it passes through prisms and curved lens surfaces. Students will demonstrate the principles of ophthalmic devices and how they correct the errors of human vision.

**OPT1150 Ophthalmic Lenses**  
Credit Hours: 2  
Characteristics of single vision and multifocal lens reference points for proper lens selection to meet visual needs of the patients. Emphasis is on accurate positioning of the optical centers and selected multifocal addition design. ANSI and F.D.A. standards; prescription ordering; verification procedures; and absorptive lenses are presented. Low vision devices and occupational specialty lenses will be discussed.

**OPT1150L Ophthalmic Lenses Lab**  
Credit Hours: 2  
This course provides the opportunity for students to gain hands on experience in the accurate positioning of the optical centers and selected multifocal addition designs. ANSI and F.D.A. standards, prescription ordering and verification procedures will be applied to patient jobs. Emphasis will be placed on the use of the manual and automated Lensometer. Fitting of low vision devices and occupational specialty lenses will be discussed.

**OPT1210 Anatomy & Physiology of the Eye**  
Credit Hours: 3  
This course provides a review of the structure and function of the systems of the human body, emphasizing the anatomy of the human eye. Visual recognition of common eye disorders and refractive disorders are discussed.

**OPT1330 Orientation to Vision Care**  
Credit Hours: 2  
This course reviews the techniques needed in a clinical environment for the collection of patient case history, entrance visual acuity, basic visual skills of ocular motility and accommodation, color discrimination, depth perception and binocular fusion. Emphasis is placed on medical terminology as it relates to the visual system.

**OPT1450 Ophthalmic Dispensing**  
Credit Hours: 2  
This course reviews the theory and terminology of ophthalmic frame materials, multifocal lenses, including progressive power and occupational bifocals and high index lenses. The process of analyzing the patient's prescription and identifying the patient's specific visual needs for the proper frame and lens selection is highlighted.

**OPT1450L Ophthalmic Dispensing Lab**  
Credit Hours: 2  
This course provides the opportunity for students to practice ophthalmic dispensing. Measurement and adjusting ophthalmic frame materials, multifocal lens, occupational bifocals, high index lenses and low vision devices will be emphasized. The process of analyzing the patient's prescription and identifying the patient's specific visual needs for the proper frame and lens selection is highlighted.

**OPT2060 Ophthalmic Management Policy & Procedures**  
Credit Hours: 3  
This course provides a review of procedures and terminology in correspondence, legal and ethical principles, inter-and intra-professional relationships, and retail office management. The history of opticianry, optometry and ophthalmology is traced. Special emphasis is on a comprehensive review of the curriculum. The student will be required to present oral and written reports.

**OPT2090 Orientation to Vision Care Clinic**  
Credit Hours: 1  
This course provides an introduction to the Broward College Vision Care Clinic. Students will apply technical skills acquired in previous course work. Recording of clinical date, administrative procedures and techniques in patient handling under the close supervision of clinic instructors and 5th semester students.
OPT2375 Refractometry
Credit Hours: 2
This course reviews the theory and terminology used in determining the powers of corrective lenses in relation to a patient's refractive error. Emphasis will be placed on the phoropter, retinoscope, and automated refraction instruments. Problems associated with the change in refractive powers will also be discussed.

OPT2420 Eyewear Fabrication I
Credit Hours: 1
This course presents a review of the theory of ophthalmic surfacing and finishing procedures. Students acquire knowledge to arrange single vision and multifocal lenses, use lensometers and lens clocks, operate project-o-markers for lens layout, select or fabricate frame patterns, and utilize several systems for surfacing and edging lenses for ophthalmic frames.

OPT2420L Eyewear Fabrication I Lab
Credit Hours: 2
In this laboratory course students will gain practical experience in ophthalmic surfacing and finishing procedures. Students will fabricate single vision and multifocal lenses: use lensometers and lens clocks: operate project-o-markers for lens layout: select or fabricate frame patterns: and utilize several systems for surfacing and edging lenses for ophthalmic frames.

OPT2421 Eyewear Fabrication II
Credit Hours: 1
Advanced techniques in measurement, fabrication and verification of single vision and multifocal lenses. Theory of ophthalmic surfacing and finishing procedures from written specifications ensuring that current ANSI and FDA standards are exceeded.

OPT2421L Eyewear Fabrication II Lab
Credit Hours: 3
Laboratory for OPT2421. Students will fabricate eyewear for the patients of the Vision Care Clinic using advanced techniques in measurement, fabrication and verification of single vision and multi-focal lenses. Advanced techniques in the operation and maintenance of manual and computerized equipment.

OPT2460 Ophthalmic Dispensing Clinic I
Credit Hours: 2
Development of skills in the fitting and dispensing of ophthalmic lenses. Students will work under the close supervision of clinical staff in dispensing glasses to patients of the Vision Care Clinic. Emphasis will be placed on techniques used to dispense new technology in ophthalmic frame materials; multifocal lenses including progressive power and occupational bifocals; and high index lenses. The process of analyzing the patient's prescription and identifying the patient's specific visual needs for proper frame and lens selection is highlighted.

OPT2461 Ophthalmic Dispensing Clinic II
Credit Hours: 3
This is a continuation of OPT2493L. It involves advanced skills in the fitting and dispensing of ophthalmic lenses. Students will work under the supervision of clinical staff in dispensing glasses to patients of the Vision Care Clinic. Students will practice advanced techniques used to dispense new technology in ophthalmic frame materials, multifocal lenses including progressive power and occupational bifocals, high index lenses, and low vision devices.

OPT2500 Contact Lens Theory
Credit Hours: 2
This course provides a review of the theory and terminology of contact lenses including fitting, application and removal procedures, care of soft and hard lenses, verification of contact lens prescription and "in-office" modification of contact lenses.

OPT2500L Contact Lens Theory Lab
Credit Hours: 2
This course provides a review of the practical procedures used to apply technical skills of contact fitting, application and removal procedures, care of soft and hard lenses, verification of contact lens prescription and "in-office" modification of contact lenses.

OPT2800L Vision Care Clinic I
Credit Hours: 2
This course provides a review of the practical procedures used to apply technical skills of contact fitting, application and removal procedures, care of soft and hard lenses, verification of contact lens prescription and "in-office" modification of contact lenses.

OPT2830L Contact Lens Clinic I
Credit Hours: 2
Assist eye care specialists in the fitting and follow-up care of rigid and soft contact lenses for patients referred from the Vision Care Clinic. Familiarization with over-refraction, instructions for lens handling, cleaning, care and storage, and basic contact lens pathology.
OPT2831L Contact Lens Clinic II
Credit Hours: 2
This course involves the use of contact lens instruments to confirm all parameters for replacement lenses. Particular attention is given to the patient who is having problems with contact lenses after long-term wear due to corneal changes and sensitivity to solutions. Advanced over-refraction and contact lens fitting procedures are practiced.

OPT2875 Ophthalmic Dispensing Practicum I
Credit Hours: 2
In this laboratory course students will fabricate eyewear for the patients of the Vision Care Clinic using advanced techniques in measurement, fabrication and verification of single vision and multifocal lenses. Advanced techniques in the operation and maintenance of manual and computerized equipment.

OPT2876 Ophthalmic Dispensing Practicum II
Credit Hours: 2
This is an externship in an approved retail ophthalmic dispensing establishment involving frame styling, ordering of appropriately designed lenses, adjustment, repair and dispensing of eyewear. The student will gain a working knowledge of administrative management procedures of the practice.

OPT2879 Refractometry Practicum
Credit Hours: 2
Practicum for OPT2375. Practical procedures used in determining the powers of corrective lenses in relation to a patient's refractive error. The student will learn to use the Phoropter, retinoscope, and automated refraction instruments in determining the patient's subjective and objective refraction. Problems associated with the change in refractive powers will be demonstrated.

ORH1523 Native Upland Plants
Credit Hours: 2
This course includes the identification of approximately 100 plants and plant groups native or naturalized in the higher ground habitats of South Florida. The application of these plants as in-situ and mitigation species in ecological, landscape and esthetic situations will be done in the field.

ORH2527 Florida Flora & Ecosystems Landscapes
Credit Hours: 3
This is an introductory environmental science course designed to teach students plant ID and environmental aspects of Florida's diverse ecosystems.

ORH4256 Nutritional Monitoring & Management
Credit Hours: 3
This course is designed to teach students the techniques for determining, interpreting, and managing the nutritional status of landscape and container grown greenhouse and nursery crops. Upon successful completion of this course, students will be able to determine, interpret, and adjust: Water quality; Substrate physical parameters; Substrate chemical parameters; Irrigation practices; Fertilization practices.

OST1100C Keyboarding & Document Processing I
Credit Hours: 3
This course offers an introduction to the keyboard with development of fundamental techniques, skill development, and business correspondence and document processing.

OST1103C Basic Keyboarding
Credit Hours: 1
This course offers an introduction to the keyboard with development of fundamental techniques.

OST1257C Medical Terminology for the Administrative
Credit Hours: 3
This course is designed to provide the student with an extensive study of medical terminology used in the various areas of the healthcare industry. Emphasis is placed on the building of medical terms from word parts.

OST1330 Business English
Credit Hours: 1
This course provides a refresher course in punctuation and capitalization.

OST1355 Records Management
Credit Hours: 3
Students will act as records managers in a simulated office utilizing computerized and paper management of records from planning, creation, filing, and retrieving to disposal according to ARMA principles. The student will learn and work with the basic legal requirements (such as Privacy Act and Freedom of Information Act) for the release and safekeeping of information and the laws and regulations regarding the management of such records.

**OST1795 Telecommunications**  
Credit Hours: 1  
A hands-on course utilizing the Internet. Course topics include telecommunications terminology, the use of the world wide web, bulletin boards, attachments, address books, bookmarks, search engines, history lists, browser programs and customizing the browser. E-mail etiquette, legal issues, and organizing and archiving e-mail are also investigated.

**OST1811C Desktop Publishing**  
Credit Hours: 3  
This course provides hands-on applications with a popular desktop publishing package. Through the application of desktop publishing techniques, students plan, design and create documents. Effective typeface and use of graphics and color in a publication's design and function are also covered.

**OST2053 Successful Job Search**  
Credit Hours: 1  
This course presents a hands-on, interactive study of interview and employability skills and focuses on the keys to career success.

**OST2335 Communications in the Workforce**  
Credit Hours: 3  
This course is designed to help students communicate more effectively. Students will practice analyzing, planning, managing, and executing both written and oral presentations. Special focus includes grammar and all types of business documents to ensure appropriate content and structure.

**OST2455C Medical Billing and Coding I**  
Credit Hours: 3  
This course provides advanced skills needed to work in a variety of medical billing and coding positions in the medical field. In-depth study of the various areas of medical billing/coding, workers' compensation, reimbursement, and appeal are presented.

**OST2456C Medical Billing & Coding II**  
Credit Hours: 3  
This course provides extended knowledge and skills needed to work in a variety of medical billing and coding positions in the medical field. Topics include medical coding, medical claims, medical billing, accounts receivable, and medical management software.

**OST2464C Medical Office Computer Application**  
Credit Hours: 3  
This course prepares a medical office assistant to work in a health care practice utilizing computerized medical office management software. It provides training for input of new patient entry, posting procedures and payments, insurance billing, appointment scheduling, file maintenance with support files, and generating the daily, end-of-month, and end-of-period reports which are performed in a medical office.

**OST2501 Office Management**  
Credit Hours: 3  
This course is a study of the skills needed by the office professional in the workforce. It includes technology, the global economy, increased diversity, teamwork, and the changing skills and nature of work demanded in the workforce. The efficient handling of office matters, such as scheduling appointments, customer/client relations, managing office operations, processing mail and correspondence, communication, e-mail etiquette and effectiveness, coordinating meetings/travel, planning and managing an event budget, and career planning and advancement are covered.

**OST2764C Advanced Word**  
Credit Hours: 3  
This course will provide specialized training on advanced word processing concepts and techniques. The major emphasis of this course will be the formatting of characters, paragraphs and documents, managing text flow, graphics, advanced table features, reference tools, mail merge and macros, and customizing Word. The skills developed by students completing this course will help prepare them for the Microsoft Certified Application Specialist (MCAS) exam.

**OST2949 Co-Op Work Exp**  
Credit Hours: 3  
A course designed to provide training in a student's field of study through work experience. Students are graded on the basis of learning objectives and employer evaluations.
PAD2002 Introduction to Public Administration
Credit Hours: 3
This introductory course examines the governmental context of public administration including political values, bureaucratic politics, leadership and intergovernmental relations; organizational theory including decision making and organizational structure; and the administrative process including public personnel administration, budgeting, policy making and governmental regulation. The objective of this course is to provide the student with an overview of public administration with an emphasis on the political context.

PCB3023 Molecular & Cellular Biology
Credit Hours: 3
A study of cell structure and function with emphasis on the properties of intracellular organelles and their molecular constituents. Includes photosynthesis.

PCB3063 Genetics
Credit Hours: 3
Fundamental properties of inheritance in eukaryotic organisms emphasizing examples in man. Basic concepts are developed for the nature, organization, transmission, expression, recombination, and function of genetic, materials, and principles are derived for genetically characterizing populations.

PCB3063L Genetics Lab
Credit Hours: 1
Fundamental properties of inheritance in eukaryotic organisms emphasizing examples in man. Basic concepts are developed for the nature, organization, transmission, expression, recombination, and function of genetic, materials, and principles are derived for genetically characterizing populations.

PCB4043 Introduction to Ecology
Credit Hours: 3
This course is an introduction to ecological principles covering physiological, behavioral, population, community, ecosystem, landscape and global ecology. This course examines the integrated working of nature at all levels, from atoms and molecules to global cycles that sustain life on earth. The ecology of individuals is examined, in the realm of physiological ecology and in the adaptations of organisms to the abiotic factors of the environment.

PCB4454C Biostatistics with Lab
Credit Hours: 4
Biostatistics instructs students in statistical procedures for analysis of biological data. Students will organize and summarize biological data, develop, and test appropriate hypotheses, explain and apply common statistical tests, and use statistical software to analyze data.

PEL1041C Recreation Activities
Credit Hours: 2
An overview of outdoor and indoor games and activities for various age groups in a recreational setting.

PEM1116 Functional Wellness
Credit Hours: 2
Functional Wellness emphasizes the importance of knowledge, attitudes, and practices relating to personal wellness. It is a course designed to expose students to a broad range of issues and information relating to the various aspects of personal wellness including physical, social, emotional, intellectual, spiritual and environmental wellness. This course integrates personal wellness and fitness in both a classroom and exercise environment, and may include pilates, yoga, functional training, spinning and basic training. Evolving current topics such as nutrition, disease prevention, stress reduction, exercise prescription, and environmental responsibility are integrated to enable the student to understand the lifelong effects of healthy lifestyle choices.

PEM1121 Beginning Yoga Exercises
Credit Hours: 1
Students will learn proper exercise, relaxation and balance of both the body and mind. A holistic approach to health and stress management is emphasized. Coeducational.

PEM1131 Weight Training
Credit Hours: 2
A course primarily designed and organized for students of all ages to optimize their wellness in each of the following six interrelated dimensions: physical wellness; intellectual wellness; emotional wellness; spiritual wellness; interpersonal/social wellness; environmental/planetary wellness. Students will learn how to assess and apply this information to their lives in order to contribute to the welfare of the community and environment with a specific emphasis on resistance training methods and techniques.
PEM1141 Aerobic Wellness  
Credit Hours: 2  
Aerobic Wellness emphasizes the importance of knowledge, attitudes, and practices relating to personal wellness. It is a course designed to expose students to a broad range of issues and information relating to the various aspects of personal wellness including physical, social, emotional, intellectual, spiritual and environmental wellness. This course integrates personal wellness and fitness in both a classroom and exercise environment. Students will incorporate and apply concepts of aerobic exercise and healthy living in ways that will contribute to the welfare of the community and the environment.

PEN1121 Beginning Swimming  
Credit Hours: 1  
Coeducational.

PEN1171 Aquatic Wellness  
Credit Hours: 2  
Aquatic Wellness emphasizes the importance of knowledge, attitudes, and practices relating to personal wellness. It is a course designed to expose students to a broad range of issues and information relating to the various aspects of personal wellness including physical, social, emotional, intellectual, spiritual and environmental wellness. This course integrates personal wellness and fitness in both a classroom and exercise environment. Students will incorporate and apply concepts of aquatic exercise and healthy living in ways that will contribute to the welfare of the community and the environment.

PEN1231 Beginning Basic Sailing  
Credit Hours: 1  
The basic course includes certain fundamentals and techniques of Seamanship and Sail handling as would be necessary for the safe, enjoyable use of a sailboat. Coeducational.

PEN1241 Windsurfing  
Credit Hours: 1  
This basic course includes the fundamentals and techniques of handling a Windsurfing Board that are necessary for safe and enjoyable use in this activity. Coeducational.

PEN2122 Intermediate Swimming  
Credit Hours: 1  
Coeducational.

PET1303 Foundations of Exercise Science  
Credit Hours: 3  
This course is designed to provide a foundational knowledge base which is common to all the different areas of fitness leadership. The didactic instruction lays the groundwork required by the fitness professionals in order to be analytical in their approach to safe and effective exercise programming for the public. Course content is heavy in the areas of anatomy and physiology as well as kinesiology, the science of human movement.

PET2622C Care/Prevention/Athletic Injuries  
Credit Hours: 2  
Develops competence, knowledge and skill in the prevention and care of athletic injuries. Understands physical conditioning, nutrition and types of exercises. This course does not lead to certification of athletic training. It does not lead to any license nor does it lead to preparation of certification. This is a basic course in prevention of injuries.

PGY1801C Photoshop Design  
Credit Hours: 3  
This is a graphic design course formulated to develop skills in digital imaging. Students will learn through the use of the computer how to create, edit and manipulate digital images from scanned photographs and artwork. Students will utilize retouching technique to modify, enhance and reshape images, apply special effects, adjust color balance, manage files, and prepare their work for print output and web/electronic presentation.
The class is portfolio driven, training students to follow a business process for analyzing client needs, conducting research and developing a concept for production within a budget.

PGY1802C Digital Photography
Credit Hours: 3
This is a Graphic Design course formulated to develop skills with a digital camera. Students will learn through the use of a digital camera how to take photographs for use in the designs they create for print, web and multimedia. Students will learn to properly expose, compose, and use effective lighting in the making of photographs. The use of natural and artificial lighting will be used in portraiture, product and outdoor photography.

PGY2401C Photography I
Credit Hours: 3
Basic procedures of black and white still camera work, developing, and printing. There will be an emphasis on intensifying visual perception and analysis of photographs as an Art form. (Students will supply 35mm camera, film, and paper).

PGY2404C Photography II
Credit Hours: 3
This course is designed for the exploration of more advanced printing and shooting techniques. The students will be required to understand and apply techniques in medium format cameras, large focus cameras and studio lighting in order to achieve a cohesive body of work. (The use of 35mm is also included).

PGY2800C Fine Arts Digital Photography
Credit Hours: 3
This course has been designed for Visual Arts students, it will provide them with the necessary tools to understand the conceptual, visual, historical, and cognitive arguments needed to create a cohesive and personal body of work. The students will learn Fine Arts Digital Photography through the use of digital cameras, film scanners and photo editing software. It will be hands-on learning experience. Critiques will be the forum where students present their ideas and discuss/verbalize concepts dealing with content and form. Critiques are mandatory and will be a group experience.

PGY2905 Independent Study: Photography
Credit Hours: 3
A directed, independent study course available to both majors and non-majors who wish to investigate a particular problem. During this course students will be asked to produce a cohesive body of work, technically and conceptually resolved.

PHI1100 Introductory Logic
Credit Hours: 3
Study of the principles and evaluation of critical thinking including identification and analysis of fallacious, as well as valid reasoning. Traditional and symbolic logic will be considered and foundations will be laid for further study in each area.

PHI2010 Introduction to Philosophy
Credit Hours: 3
be examined ion to the nature of philosophy, philosophical thinking, major intellectual movements in the history of philosophy, and specific problems in philosophy. The relationship between philosophy, society, religion and culture will also be examined.

PHI2600 Introduction to Ethics
Credit Hours: 3
This course is an introduction to the nature of ethics, ethical thinking, major intellectual movements in the history of ethics, and specific problems in ethics. A study of the basic concepts and principles of morals, values, and judgments that govern human actions, as well as various ethical theories, will be conducted. The relationship between ethics, society, religion, and culture will also be examined.

PHI2930 Special Topics: Philosophy
Credit Hours: 3
Course centers around topics of current interest or of special interest to students or instructors. Topics or focus may vary from semester to semester. Topics will be identified by the PHI2930 course title published in the course schedules for each term that the course is offered. Special Topics credit hours are not automatically transferable.

PHT1010 Physical Principles for the PT Assistant
Credit Hours: 1
Course introduces the student to the basic physical principles that apply to commonly utilized therapeutic procedures in the field of physical therapy. Topics include but are not limited to body mechanics, ergonomics, the physiological effects of heat, cold, sound and electricity to facilitate heating.
PHT1020 Therapeutic Communication for the PT Assistant
Credit Hours: 2
An overview of effective communication skills and concepts regarding successful therapeutic interactions will be presented. Students will participate in several interactive sessions to become familiar with team building, verbal and non-verbal communication requirements, effective listening concepts, and conflict management to determine how to manage clinical situations as they arise. Cultural diversity is discussed. Students are responsible for developing an in-service presentation as a means of enhancing effectiveness of communication.

PHT1103 Anatomy for the PT Assistant
Credit Hours: 2
Course introduces basic human anatomy with an emphasis on the structure and function of the skeletal and muscular systems. Actions, origins, insertions and innervations of muscles are discussed. Surface anatomy is presented with an introduction to basic palpation.

PHT1103L Anatomy for Physical Therapist Assisting Lab
Credit Hours: 1
Laboratory sessions for Anatomy for PTA (PHT1103) are designed to provide the students with an opportunity to identify, with accuracy, a variety of bones, bony landmarks, muscles, ligaments and other soft tissue structures using graphics and various anatomical specimens/models. Basic palpation skills are developed. Practical examinations are completed.

PHT1200 Introduction to Physical Therapy
Credit Hours: 3
Course introduces the student to the historical background, philosophy and goals of physical therapy as a profession. It incorporates discussion on legal and ethical issues, educational requirements, supervisory relationships and current developments related to physical therapy. Health care delivery systems, the medical record and issues of reimbursement are discussed. Presents the basic theory of preparing the patient and the treatment area, positioning and transferring techniques, gait training, and wheelchair prescription. Professional behaviors are introduced.

PHT1200L Introduction to Physical Therapy Lab
Credit Hours: 1
Laboratory sessions for Introduction to Physical Therapy (PHT1200) are designed to allow the students an opportunity to familiarize themselves with the basic fundamentals of patient care. Emphasis is on body mechanics analysis, positioning procedures, transfer training, gait training, basic patient preparation skills, and other common physical therapy interventions. Case studies of various medical conditions with emphasis in these areas are completed. Data collection relative to the course content as well as patient and caregiver education are emphasized. Practical examinations are completed.

PHT1211 Disabilities & Therapeutic Procedures I
Credit Hours: 2
Course introduces the student to the theory and practical application of physical therapy modalities. The physiological effects of and the indications/contraindications of patient care interventions such as heat, cold, radiant therapy, electrotherapy, traction, intermittent compression and massage are presented. Principles of effective documentation and discharge planning are discussed. Problem-solving skills are detailed.

PHT1211L Disabilities & Therapeutic Procedures I Lab
Credit Hours: 2
Laboratory sessions for Disabilities & Therapeutic procedures (PHT1211) are designed to develop student skills in the actual performance of the patient care interventions presented. Skills in massage are developed. Practical application of each intervention is emphasized with patient simulations and case studies enhancing the ability to understand a plan of care for a patient. Professional behaviors, at the intermediate level, are assessed. Data collection relative to the course content as well as patient and caregiver education are emphasized. Skill checks as well as competency evaluations are completed. Students are expected to demonstrate competency in carrying out an appropriate therapeutic modality plan of care, including effective documentation.

PHT1300 Survey of Pathological Deficits
Credit Hours: 3
Course introduces the student to general pathological conditions with emphasis on those commonly seen in the field of physical therapy. Basic system anatomy is reviewed with an emphasis on the pathophysiology of disease. Descriptions of how diseases are classified and the natural course/prognosis of these diseases are presented. Implications of disease processes, etiology, signs and symptoms, diagnostic testing, contraindications/precautions and treatment are
discussed for each pathology presented in the course. When relevant, specific physical therapy plans are discussed. The effects of disease across the lifespan and in general are considered.

PHT1310 Survey of Musculoskeletal Deficits
Credit Hours: 2
Course introduces student to general pathological conditions with emphasis on those commonly seen in the field of physical therapy as they relate to the musculoskeletal systems. Descriptions of how musculoskeletal diseases are classified, diagnosed and treated, as well as the natural course/prognosis of these diseases are presented. Implications of disease processes, etiology, signs and symptoms, diagnostic testing, contraindications/precautions and treatment are discussed for each pathology presented in the course. The effects of aging upon disease and in general are considered.

PHT1350 Basic Pharmacology for PT Assistants
Credit Hours: 1
Course introduces concepts of basic pharmacology and presents pharmacological agents dispensed for conditions commonly seen in physical therapy. Drug responses and interactions as they relate to patient response are discussed.

PHT1801L Clinical Practice I
Credit Hours: 2
Course involves student assignment to a local clinical facility. Includes scheduled class meetings to discuss clinical performance objectives, the self-appraisal process, and overall requirements for this novice-level practicum. Discussions also include professionalism, attitudes, patient rapport, sexual harassment, etc. A journal report of clinical experiences and an article review are required. Weekly online discussion forums facilitate critical thinking, peer review, and managing clinical situations at the novice-level. Students attend a personal conference with the academic coordinator of clinical education to discuss progress and to identify areas of strength/weakness with appropriate target dates methods of amelioration, if needed. Students receive a satisfactory/fail grade.

PHT2120 Applied Kinesiology
Credit Hours: 3
This course is designed as part of a continuum in the application of anatomy to facilitate student analysis of functional movements with specific focus on the relationship between joint structure and function. Principles of biomechanics as it relates to human movement will be reviewed. Normal and pathological gait patterns are presented as well as normal and pathological movement patterns of the head, spine, pelvis, UE, and LE. Special tests which help identify specific deficits will be discussed. Case studies of various functional impairments with an emphasis on functional task analysis as well as therapeutic interventional approaches which help restore function are presented. Orthotic interventions for the spine and extremities are discussed with an emphasis on correcting pathological biomechanics.

PHT2120L Applied Kinesiology Lab
Credit Hours: 1
Laboratory sessions for Applied Kinesiology (PHT2120) are designed to provide opportunities for the students to practice the skills of analyzing normal and pathological gait, along with normal and abnormal movements of the head, spine, pelvis, UE and LE. Performance of special tests will be practiced. Palpation of surface anatomy and review of anatomical/bony landmarks occurs. Through completion of lab activities and case studies, the student correlates patient problems to various pathologies with their deficits in functional activities and gait. Therapeutic interventional approaches which include progression will be developed to address functional deficits. Orthotic interventions for the spine and extremities are applied with an emphasis on correcting pathological biomechanics.

PHT2162 Survey of Neurological Deficits
Credit Hours: 3
Course introduces the etiology, pathophysiology and symptoms of common neurological diseases/conditions. Neurodiagnostic procedures are presented. Course introduces the etiology, pathophysiology and clinical manifestations of common neurological diseases/conditions including but not limited to cerebrovascular accidents, traumatic brain injuries, and spinal cord injuries. Basic neuroanatomy of the central and peripheral nervous systems is reviewed. Reflex integration as well as normal growth and development are discussed. Online case studies in the form of Grand Rounds assignments of various neurological conditions are completed.

PHT2224 Disabilities & Therapeutic Procedures II
Credit Hours: 4
Course introduces concepts of therapeutic exercise with regards to its principles, and objectives. The theory of
and application of specific exercise regimes are presented. Principles of ROM, strengthening, and stretching techniques are presented. A basic introduction to goniometry and manual muscle training is presented as it pertains to the development of therapeutic exercise interventions. Professional behaviors, at the intermediate level, are assessed.

PHT2224L Disabilities & Therapeutic Procedures II Lab
Credit Hours: 2
Laboratory sessions for Disabilities and Therapeutic Procedures II (PHT2224) are designed to provide the student with observation and actual application of therapeutic exercise in the laboratory setting. ROM, strengthening, and stretching techniques are practiced. Goniometry and manual muscle testing procedures are practiced as they relate to the provision of therapeutic exercise. Data collection relative to the course content as well as patient and caregiver education are emphasized. Practical examinations are completed. Students are expected to demonstrate competency in developing and carrying out an appropriate therapeutic exercise program including effective documentation.

PHT2704 Rehabilitation Procedures
Credit Hours: 3
Advanced course designed to develop skill in and understanding of the underlying principles of advanced physical therapy plans of care including motor learning principles. Techniques presented include advanced therapeutic exercise programs (stroke, spinal cord injured, etc.) proprioceptive neuromuscular facilitation (PNF), Bobath and Brunnstrom. Amputations and principles of prosthetics are detailed with fitting and check-out procedures reviewed.

PHT2704L Rehabilitative Procedures Lab
Credit Hours: 1
Laboratory sessions for Rehabilitative Procedures are designed for the students to practice the utilization of developmental postures in patient interventions as well as PNF, facilitation/inhibition techniques and other forms of advanced therapeutic exercise approaches. Stump wrapping and therapeutic management of prosthetic patients are practiced. Case studies of various medical conditions with emphasis on advanced therapeutic exercise approaches as well as application of prosthetic principles are completed. Data collection relative to the course content as well as patient and caregiver education are emphasized. Skill checks are completed. Students are expected to demonstrate competency in developing and carrying out appropriate interventions for a patient with neurological deficits. Professional behaviors, at the entry level, are assessed.

PHT2810L Clinical Practice II
Credit Hours: 5
Course involves student assignment to local clinical facility. Includes scheduled class meetings to review clinical performance objectives, the self-appraisal process, and overall requirements for this intermediate level practicum. Class discussions are held to share and discuss experiences, patient care problems, learning styles, cooperative group participation, acceptance and implementation of constructive criticism, etc. A clinical journal and an in-service are required. Weekly online discussion forums facilitate critical thinking, peer review, and managing clinical situations at the intermediate level. Students attend a personal conference with the academic coordinator of clinical education to discuss progress and to identify areas of strength/weakness with appropriate target dates and methods of amelioration, if needed.

PHT2820L Clinical Practice III
Credit Hours: 5
Course involves full time student assignment to a local clinical facility. Includes scheduled class meetings to discuss clinical performance objectives, the self-appraisal process, and overall requirements for this entry-level practicum. A clinical journal, a case study report and a research project are required. Class discussions are held to share and discuss experiences, patient care problems, readiness for the workplace, leadership responsibilities, professional growth, etc. Weekly online discussion forums facilitate critical thinking, peer review, and managing clinical situations at entry level. Students attend a personal conference with the academic coordinator of clinical education to discuss progress and to identify area of strength/weaknesses with appropriate target dates and methods of amelioration where necessary.

PHT2931 Transition Seminar
Credit Hours: 2
A project-based seminar course that utilizes discussion and presentation to address content such as legal and ethical issues, interpersonal skill refinement, employment techniques, quality assurance, and career development. Discharge planning concepts are reviewed. Empathy for patients and enhanced understanding of the PT Assistant's responsibility to the community are explored through a community advocacy
A capstone project is completed to assess entry-level preparation. The course also provides a comprehensive curriculum review and presents details on applying for licensure as students prepare for the transition to the work place. Professional behaviors, at entry-level, are assessed.

**PHY1001 Applied Physics**  
**Credit Hours: 3**  
An introductory course in general physics outlining topics in mechanics, matter, magnetism, electricity, heat and wave phenomena. The course is intended for students in technical or vocational fields. The student will learn to analyze and solve problems using analysis in algebra and written composition projects.

**PHY1001L Applied Physics Lab**  
**Credit Hours: 1**  
A laboratory which allows students to collect and analyze data in a variety of experiments covering topics covered in its companion course PHY1001L. Students will create experiment reports using analysis in algebra.

**PHY2048 General Physics with Calculus I**  
**Credit Hours: 4**  
Part one of a comprehensive course in physics outlining mechanics, heat, wave motion and sound using analysis in calculus.

**PHY2048L General Physics with Calculus I Lab**  
**Credit Hours: 1**  
A laboratory which allows students to collect and analyze data in a variety of experiments covering topics covered in its companion course PHY2048. Students will create experiment reports using analysis in calculus.

**PHY2049 General Physics with Calculus II**  
**Credit Hours: 4**  
PHY 2049 is part two of a comprehensive physics course outlining electricity, magnetism and optics using analysis in calculus.

**PHY2049L General Physics with Calculus II Lab**  
**Credit Hours: 1**  
A series of physics laboratory experiments chosen to coincide with the lecture course PHY2049. The course will include topics in electricity, magnetism, and optics.

**PHY2053 General Physics I**  
**Credit Hours: 3**  
PHY2053 is the first course in a two semester sequence outlining mechanics, properties of matter, heat and sound. Algebra, trigonometry, geometry and vector methods will be used in the quantitative description of these topics.

**PHY2053L General Physics I LAB**  
**Credit Hours: 1**  
PHY 2053L is a laboratory which allows students to collect and analyze data in a variety of experiments covering topics covered in its companion course PHY 2053. Students will create experiment reports using analysis in algebra.

**PHY2054 General Physics II**  
**Credit Hours: 3**  
PHY2054 is the second course in a two semester sequence, PHY2053 and PHY2054. The topics covered in PHY2054 include: electricity, magnetism and optics. Algebra, trigonometry, geometry and vector methods will be used in the quantitative description of these topics.

**PHY2054L General Physics II LAB**  
**Credit Hours: 1**  
Laboratory experiences designed to accompany the topics under study in PHY2054.

**PHY2420 Elementary Wave Theory**  
**Credit Hours: 3**  
A survey of the basic topics in the properties of physical and electromagnetic waves, including the study of intensity and motion waves.

**PLA1003 Introduction to Paralegal Studies**  
**Credit Hours: 3**  
This course provides an overview of the training and duties of the paralegal. Also included is a discussion of legal terminology, research techniques, and pertinent litigation documents.

**PLA1104 Law Library/Research**  
**Credit Hours: 3**  
This course provides information on how to research using both traditional and computer-assisted methodologies. An in-depth examination of the law library and legal research techniques are emphasized.
PLA1201 Civil Litigation  
Credit Hours: 3  
This course covers the basic concepts of Civil Litigation. Discussions involve individual and entity liability in relation to the specific acts committed.

PLA1303 Criminal Litigation  
Credit Hours: 3  
This course provides students with a survey of the criminal justice system. Substantive and procedural aspects of criminal law are studied. Course content includes the nature of different crimes, the potential charges, and penalties involved; also covered are pre-trial procedures, discovery, plea-bargaining process, and the problems involved in the conduct of trial proceedings.

PLA1435 Corporations  
Credit Hours: 3  
This course provides an in-depth study of Corporate Law. Topics covered include types of corporations, articles of incorporation, bylaws, shareholders' agreements, voting rights, management structure, directors' powers, and voluntary/involuntary dissolutions. Non-profit corporations and professional associations are also discussed.

PLA1600 Probate Practice  
Credit Hours: 3  
This course prepares legal assistants to work effectively under the supervision of a lawyer in the probate and administration of an estate. The Florida Probate Code, trusts and taxes are studied. Preparation of pleadings is included.

PLA1610 Procedures for Real Estate Title Closing  
Credit Hours: 3  
This course surveys the basic concepts of Real Property Law. The students study how to handle a real estate transaction from the drafting of a contract to its closing. The nature of property, the consequences of its possession, and the mechanics of the title examination are also studied.

PLA1800 Domestic Relations  
Credit Hours: 3  
This course surveys domestic relations, and includes topics such as marriage, dissolution of marriage, separation agreements, time-sharing, legitimacy, adoption, name changes, support, court procedures, and property disposition.

PLA1841 Immigration Law  
Credit Hours: 3  
This course provides an in-depth study of Immigration Law. Topics covered include a historical overview of immigration law, types of immigration law practices, agencies involved with immigration laws, the drafting of documents and forms associated with immigration law, the Immigration and Nationality Act and the administrative system covering the practice of immigration law.

PLA2114 Legal Writing & Drafting  
Credit Hours: 3  
This course concentrates on developing skills in the grammar, language, and format of legal documents. Documents drafted include legal correspondence, legal memoranda, deposition summaries, persuasive documents, and contracts.

PLA2466 Debtor/Creditor Relations  
Credit Hours: 3  
This course provides an in-depth study of Debtor/Creditor Law. Topics covered include collection of debts through court processes, post-judgment collection practices, bankruptcy law, landlord/tenant debt law, collection of debts based upon negotiable instruments, federal consumer collection acts, and foreclosure actions.

PLA2762C Paralegal Office Systems  
Credit Hours: 3  
This course covers a wide range of knowledge, skills, and tasks in order to enable the paralegal to function effectively in a legal office. Technology, management skills, and general office procedures and systems are covered, including but not limited to legal time-keeping and billing, document assembly, e-filing, client trust accounts, the cloud, social media and ethics.

PLA2930 Selected Topics in Paralegal Studies  
Credit Hours: 3  
This course will explore a selection of topics and trends of special interest in the legal field.

PLA2940 PLA Practicum  
Credit Hours: 3  
This course is designed to apply the knowledge and skills developed in the required courses through practical work experience. The student will perform legal work for 144 hours under the supervision of an attorney.
POS2041 National Government
Credit Hours: 3
This course provides a systematic introduction to the political system of the United States of America through the study of theory, principles, policy outcomes, and responsible institutions involved in the formation and operation of American National Government. The course will be organized along four broad fronts: Credit Hours: 1 the political founding; Credit Hours: 2 political parties and elections; Credit Hours: 3 political institutions (e.g., president, Congress, etc.); and Credit Hours: 4 policy (e.g., domestic and foreign).

POS2112 State & Local Gov't
Credit Hours: 3
This course provides a systematic introduction to the principles and institutions of American state and local government, with some emphasis on Florida politics. It delves into the structure, functions, and decision-making processes of the 50 states and the more than 85,000 localities (governments) within those states.

POS2601 The American Constitution
Credit Hours: 3
A study of the basic elements of the U.S. Constitution as they impact society and the individual. Emphasis is placed upon the document's theoretical, as well as, pragmatic applications. Course is taught from perspectives which are primarily historical and cultural.

PSC1121 Physical Sciences Survey
Credit Hours: 3
PSC 1121 is a survey course outlining topics in astronomy, chemistry, geology, meteorology and physics. The course is intended for the non-major student. The student will compose writing projects and analyze problems using analysis in algebra.

PSC1121L Physical Sciences Laboratory
Credit Hours: 1
PSC 1121L is a laboratory which allows students to able to collect and analyze data in a variety of experiments covering topics covered in its companion course PSC 1121L. Students will create experiment reports using analysis in algebra.

PSC2910 Directed Independent Research
Variable Credit Course (1-3 Credit Hours)
Students (individually or in a group) will conduct research projects or certain aspects of research projects under the supervision of the instructor. This course is intended to help students acquire skills in applying research principles and obtaining practice in rigorous data collection and reporting in physical sciences.

PSC2914 Independent Research in the Physical Sciences
Variable Credit Course (1-3 Credit Hours)
Students (individually or in a group) will conduct research projects or certain aspects of research projects under the supervision of the instructor. This course is intended to help students acquire skills in applying research principles and obtaining practice in rigorous data collection and reporting.

PSC4912 Independent Research in the Physical Sciences
Variable Credit Course (1-3 Credit Hours)
Students (individually or in a group) will conduct research projects or certain aspects of research projects under the supervision of the instructor. This course is intended to help students acquire skills in applying research principles and obtaining practice in rigorous data collection and reporting.

PSC4948 Senior Internship
Credit Hours: 3
A course designed to provide training in a student's field of study through work experience. Students are graded on the basis of documentation of learning acquired as reported by student and intern host.

PSY2012 General Psychology
Credit Hours: 3
General Psychology reviews the scientific principles related to human behavior and mental processes. Topics include the scientific method, neuroscience, learning, memory, and thinking, emotions, motivation, and health, life span development, personality, psychological disorders, and therapies, and social psychology.

PSY2012L General Psychology Lab
Credit Hours: 1
This laboratory course parallels and supplements the instruction given in General Psychology (PSY2012). Illustrated in this course are a variety of experimental and behavioral activities that demonstrate the scientific basis of psychology.

PSY2043 Advanced General Psychology
Credit Hours: 3
The rationale, methods, and application of the scientific analysis of behavior. Emphasis is placed on the
lawfulness of behavior, how behavioral laws are found and used in the modification of behavior.

PSY2905 Independent Study in Psychology
Credit Hours: 3
Directed study course in the Behavioral Sciences. The course will be available to both majors and non-majors who wish to investigate a particular problem. The student will make application for the course to the Head of the Behavioral Science Department via an Instructor.

PSY2930 Special Topics: Psychology
Credit Hours: 3
Course centers around topics of current interest or of special interest to students or instructors. Topics or focus may vary from semester to semester. Topics will be identified by the PSY2930 title published in the course schedules for each term that the course is offered. Special Topics credit hours are not automatically transferable. Transfer credit is the prerogative of the receiving institution.

PTN0003 Introduction to Pharmacy Practice & Medical Term
Clock Hours: 90.00
This course is an orientation to the overall functions and services of a hospital pharmacy. Students will learn medical abbreviations, terminology, chemical symbols, formulas, and incompatibilities.

PTN0004 Pharmacy Practitioner Applications
Clock Hours: 90.00
This course focuses on pharmacy practitioner applications. Students will learn to develop skills relating to the specific, technical, manipulative and clerical tasks involved with the preparations and distribution of medications under the supervision of Licensed Pharmacists.

PTN0006 Pharmacy Calculations
Clock Hours: 90.00
This course covers the definitions of systems of measurement, the conversion of one system to another and how to calculate pharmacology problems.

PTN0021 Drug Classifications
Clock Hours: 90.00
This course covers the major classifications of systems of measurement, the conversion of pharmaceuticals, standards for quality and purity of drugs, and authoritative information on dosage and administration.

Students will learn about poisons, placebos, and sources from which medications are produced.

PTN0041 Pharmacy Technician Hospital Field Experience
Clock Hours: 245.00
This course covers clinical hospital training to develop the student's knowledge and skills on the job. Students will learn how to properly prepare doses of medication and intravenous admixtures.

PTN0049 Pharmacy Technician Retail Store Field Experience
Clock Hours: 275.50
This course covers the clinical field experiences in a retail establishment. Students will learn about pharmaceutical chemistry, proper medication, and how to deliver medications correctly.

PTN0093 Pharmacy Technician Review Course
Clock Hours: 90.00
This course reviews topics related to the field of pharmacy to students enrolled in the Pharmacy Technician program to prepare them to sit for the nationally recognized pharmacy technician certification examination. Participants receive a comprehensive review based on the certification exam content identified by the Pharmacy Technician Certification Board.

QMB1001 Business Mathematics
Credit Hours: 3
This course emphasizes the application of mathematics to selected business topics and problems. In addition, it includes material in linear equations and descriptive statistics.

QMB2100 Quantitative Methods in Business
Credit Hours: 3
This course applies quantitative methods to business problems with emphasis on learning to select the appropriate problem solving method, applying the chosen method, and interpreting the solution. The use of quantitative methods in managerial decision making is a continuous focus of this course. Management problems are used and written managerial recommendations are required.

QMB2302C Applied Business Analytics
Credit Hours: 3
This course provides a foundation for students to understand and apply the core principles and tools of a
relational database. This combination of knowledge and skills will allow students to create tables, manage data within those tables, and create customized reports derived from data stored in relational databases.

RAT1001 Introduction to Radiation Therapy
Credit Hours: 1
This course will provide the students with an introduction to the radiation therapy program and the role and responsibilities of a student radiation therapist. This course will also define the different personnel required for a radiation therapy department to function, and define the structure and organization of hospitals. This course will also provide an introduction into cancer and cancer management with an overview of the psychological, sociological and economical aspects of cancer.

RAT1002 Introduction to Radiation Therapy Clinical
Credit Hours: 2
A course designed to provide knowledge and instruction in the application of radiation therapy procedures with a detailed study of instrumentation, radiation therapy equipment, patient charting and radiation procedures during the early phases of patient contact. This course will also cover radiation safety, treatment tolerance doses of critical structures, treatment procedures, basic patient positioning, operation of the equipment and patient accessories.

RAT1002L Introduction to Radiation Therapy Clinical
Credit Hours: 1
A course designed to provide knowledge and hands-on instruction in the application of radiation therapy procedures with a detailed study of instrumentation. This lab corresponds to the information and objectives of RAT1002 Specific radiation therapy terminology, basic procedures, specific patient positioning and accessories will also be covered.

RAT1112 Radiation Therapy Medical Imaging
Credit Hours: 1
An introductory study to radiographic processes. Included will be the processes behind computed tomography, magnetic resonance imaging, nuclear medicine, positron emitting tomography, and ultrasound as it pertains to simulation, detection, and diagnosis of cancer.

RAT1123 Patient Care & Ethics
Credit Hours: 2
This course is designed to give an incoming student an overview of patient care and ethics. Topics that will be covered include communication, patient safety, patient transfers, immobilization of patient and body parts, infection control, vital signs, caring for patient who have special needs, pharmacology, drug administration, case history, universal precautions, isolation techniques and medical legal issues in radiation therapy.

RAT1210 Introduction to Radiation Therapy Anatomy
Credit Hours: 1
This course is designed to present anatomy and its importance to the radiation therapist. A survey of the structure of human body as it pertains to radiation therapy will consider the following: the cell, tissues, glands, skeletal system, the spine, pelvis, lower limb, abdomen, thorax, upper limb, the neck, and the head.

RAT1212 Radiation Therapy Imaging Anatomy
Credit Hours: 2
A study of radiographic human anatomy as it pertains to identifying organs at risk and treatment considerations for radiation therapy. Students will study the anatomy of the human skeleton and organ systems in both two dimensional and three dimensional views.

RAT1515 Radiation Pharmacology
Credit Hours: 1
This course is designed to discuss the pharmacology concepts as it pertains to imaging practices of the radiation therapist. This course will introduce to the students essential practices and guidelines of pharmaceutical administration essential for imaging and patient diagnosis. It will also discuss medical oncology drugs and how they are metabolized by the systems.

RAT1614 Intro to Radiation Therapy Physics
Credit Hours: 2
An introductory study of radiation therapy physics to include mathematical principles & measurement, atomic structure, electromagnetic radiation, magnetism, electrostatics, electrodynamics, electromagnetism, x-ray production & interactions.

RAT1804 Clinic Education I
Credit Hours: 1
Familiarization with the equipment utilized in the treatment of patients begins along with assisting the therapist in the clinical environment, simulation area, patient care nursing areas and the mold room.
Demonstrations of patient leveling skills and beginning basic treatments and simulations competencies.

RAT2021 Principles of Radiation Therapy I
Credit Hours: 2
Content is designed to provide an overview of cancer and the specialty of radiation therapy. The historic and current aspects of cancer treatment will be covered. The roles and responsibilities of the radiation therapist will be discussed. In addition, treatment prescription, techniques and delivery will be covered.

RAT2022 Principles of Radiation Therapy II
Credit Hours: 2
A continuation of the fundamentals of technologic applications in simulation and patient treatment.

RAT2023 Radiation Oncology 1
Credit Hours: 3
A study of the fundamentals of clinical radiation oncology stressing the following: etiology, epidemiology, histopathology, symptoms, diagnosis, staging, prognosis, treatment set up and guidelines, and the therapeutic aim of malignant conditions.

RAT2024 Radiation Oncology II
Credit Hours: 3
A study of the fundamentals of clinical radiation oncology stressing the following: etiology, epidemiology, histopathology, symptoms, diagnosis, staging, prognosis, treatment set up and guidelines, and the therapeutic aim of malignant conditions.

RAT2040 Radiation Oncology Health Care Law
Credit Hours: 1
The course is a description the major legal structure and function of the United States health care system, as well as the principles and policies of that health care system. This course also provides the legal principles and rationale used for decisions made upon the health care industry and how it pertains to radiation oncology.

RAT2041 Radiation Therapy Ethics
Credit Hours: 1
This course is designed to discuss ethical thinking in regards to health care. This course will introduce to the student essential vocabulary and thought process that will enable them to participate, evaluate, and understand ethical decision making.

RAT2241 Radiobiology
Credit Hours: 2
A study of the sequence of events following the absorption of energy from ionizing radiation. Factors influencing radiation effects, tissue sensitivity, tolerance, and clinical applications are considered.

RAT2243 Radiation Oncology Sectional Anatomy
Credit Hours: 4
This course is designed to present sectional anatomy and its importance to radiation therapist in the Radiation Therapy Field. This course will include 3-D imaging identification of anatomical structures in various imaging methods and planes. Location of internal organs and critical structures by topographical anatomy will also be included. The pathophysiology of normal tissues as well as malignant tissues will also be discussed and visualized in 3-D Imaging. An emphasis on etiological considerations, neoplasia, and associated diseases in the radiation therapy patient will also be presented.

RAT2617 Advanced Radiation Physics I
Credit Hours: 3
The fundamentals of x-ray, gamma, and corpuscular radiation as applied to radiation therapy. Teletherapy units and nuclear reactors are also discussed.

RAT2618 Radiation Physics II
Credit Hours: 2
Advanced physics of ionizing radiation including measurements, dosages, absorption, isodose curves, filters, radioactive materials treatment planning, properties of radionuclides, radiation safety and health physics.

RAT2619 Dosimetry & Computer Treatment Planning
Credit Hours: 3
This course will introduce the students to the advanced physics and math calculations they will be required to perform as radiation Therapist. The course will also describe the physical and geometric factors affecting the applied beam energy and how to correct for these factors. The course will also describe how to modify an applied beam to avoid critical structures while delivering the required dose of radiation. The course will also deal with radioisotopes, how they are utilized to treat cancer patients and their specific energies and decay schemes.
RAT2657 Quality Assurance Quality Management & Quality Improvement in Radiation Oncology
Credit Hours: 2
Content is designed to focus on the components of quality improvement (QI) programs in radiation oncology. Topics will include quality control and assurance checks for the clinical aspects of patient care, medical records, treatment delivery and localization equipment and treatment planning equipment. The role of the various radiation therapy team members in continuous quality improvement will be discussed as well as the legal and regulatory implications for maintaining appropriate quality care.

RAT2814 Clinic Education II
Credit Hours: 3
Patient treatment competency assignments continue in radiation therapy departments. The student's responsibilities increase as more complex competencies in patient treatment are mastered, and additional competencies are performed in simulation and the dosimetry area are performed. Student is also introduced into a variety of patient care areas.

RAT2824 Clinic Education III
Credit Hours: 3
Advanced clinical education stressing practical application of dosimetry competencies under the direct supervision of a medical physicist or dosimetrist. Continuation of advanced patient treatment competencies under the supervision of a registered radiation therapist, continuation of simulation procedures and quality assurance testing.

RAT2834 Clinic Education IV
Credit Hours: 3
The most advanced clinical education as evidenced by the level of competency demonstrated by terminal competency skills. The student will also demonstrate their didactic knowledge, technical understanding of treatment planning and basic calculations required of an entry level radiation therapist. Completion of this course will ensure that the student is competent upon graduation to assume all the responsibilities required of an entry level Registered Radiation Therapy Technologists.

RAT2905 Independent Study in Radiation Therapy
Credit Hours: 1
A direct study course in Radiation Therapy. This course is available only for majors who wish to investigate a particular clinical education situation. The student will create an application for the course to the head of the Medical Imaging Department via an instructor with whom he/she wants to work with.

REA0007C College Preparatory Reading I
Credit Hours: 4
This course teaches basic reading skills, vocabulary, word recognition skills, and work-study skills. Placement in REA0007C is determined by PERT test scores.

REA0017C College Preparatory Reading II
Credit Hours: 4
College Preparatory Reading II teaches basic reading and study skills to prepare students for college course work.

REA0055 Developmental Reading Module
Credit Hours: 1
This course is for students who score between 93 and 103 on the PERT placement test. Students will then be given the PERT Diagnostic to identify skills in the developmental reading sequence that have not yet been mastered. An individual learning plan will be established and students will be assigned to the module(s) containing those competencies not yet mastered. Topics for study will be determined by student's P.E.R.T. Diagnostic test results. This course will teach students basic reading and study skills to prepare them for college level course work.

REA0056 Developmental Reading Module
Credit Hours: 2
This course is for students who score between 93 and 103 on the PERT placement test. Students will then be given the PERT Diagnostic to identify skills in the developmental reading sequence that have not yet been mastered. An individual learning plan will be established and students will be assigned to the module(s) containing those competencies not yet mastered. Topics for study will be determined by student's P.E.R.T. Diagnostic test results. This course will teach students basic reading and study skills to prepare them for college level course work.

REA1105 College Reading Strategies
Credit Hours: 3
Teaches efficient reading abilities, comprehension, vocabulary, speed, study techniques, and reading skills necessary to conduct investigative research. REA1105 includes all CLAST skills.
RED3342 Found of Research Prac. in Read Ed & App. of Inst.
Credit Hours: 3
This course provides an understanding of the principles of scientifically based reading research as the foundation of comprehensive instruction that synchronizes and scaffolds each of the major components of the reading process to assist students in mastering this process. This course will address effective research-based instruction methodology to prevent reading difficulties and promote acceleration of reading progress for struggling students, including students with disabilities, and students from diverse populations. Guided field experience provides pre-professional educators with the experience of observation and interaction with K-12 students.

RED3352 Reading in the Content Area
Credit Hours: 3
This course is designed to prepare pre-service teachers of subject matter content to acquire the knowledge, skills, and techniques necessary to guide middle and secondary level students to be successful learners by addressing issues in reading instruction as an integral part of comprehending content. This course will provide classroom instructional strategies for teaching reading across the curriculum with emphasis on content areas such as science, mathematics, and social sciences. Emphasis will be given to the importance of language and cognition as well as scientifically based reading research as the basis of comprehensive instruction.

RED4519 Diagnostic & Instructional Interventions in Reading
Credit Hours: 3
This course provides an understanding of the role of assessments in guiding instruction and decision making for reading progress of striving readers. It also provides extensive knowledge of differentiated instruction with appropriate scientifically based strategies and materials for students from differing backgrounds and diverse learners.

RED4844 Reading Practicum
Credit Hours: 3
Students will, through this culminating practicum experience, demonstrate knowledge of the components of reading, as well as assessments and data analysis, to implement a comprehensive research-based reading plan of instruction for all learners. Students will engage in the systematic problem solving process. Students are to complete a minimum of 30 hours of field experience in a K-12 setting.

REE1040 Florida Real Estate Commission I
Credit Hours: 4
The Real Estate Commission Course I. It provides an introduction to the basic principles and theories of real property, its economic value, and the legal aspects of real estate law affecting salespersons. Successful completion qualifies a candidate to apply for the State of Florida Salesperson's License Exam.

REL1210 Old Testament History
Credit Hours: 3
Reading the English Bible in various documents, and examining selected source material, with emphasis on its cultural importance today.

REL1240 New Testament History
Credit Hours: 3
A study of the social, historical, cultural, and religious environment of the New Testament as well as of the dynamics of the beginnings and spread of the Christian Faith during the First Century A.D. and into the Second Century A.D.

REL2000 Introduction to the Study of Religion
Credit Hours: 3
An introduction to the study of religion as an academic discipline. The focus of this course is religion, not religions; an attempt is made to acquaint students with problems and issues ever present in the understanding of religious phenomena. Upon successful completion of this course, students should be able to recognize, describe, and appreciate the complex phenomena of religion.

REL2300 World Religions
Credit Hours: 3
This course is a descriptive examination of the world's most popular religions. College-level reading skills are recommended.

REL2930 Special Topics: Religion
Credit Hours: 3
This course centers around topics of current interest or of special interest to students or instructors. Topics or focus may vary from semester to semester. Topics will be identified by the REL2930 course title published in the course schedules for each term that the course is
offered. Special Topics credit hours are not automatically transferable.

RET1024 Introduction to Respiratory Care
Credit Hours: 1
This course offers the student an overview of a career in respiratory care, the critical thinking methodology necessary for applying academic knowledge to problem based learning, and exposure to the level of comprehension needed for understanding the concepts in respiratory care.

RET1026 Respiratory Therapy Equipment
Credit Hours: 3
This course reviews all of the equipment normally used for respiratory therapy with the exception of mechanical ventilation. Especially emphasized are methods used in manufacturing, storing and administering oxygen; humidity and aerosol therapy, airway management and airway clearance techniques.

RET1026L Respiratory Therapy Equipment Lab
Credit Hours: 1
This course allows the student to work with and master the manipulative skills required to utilize respiratory therapy equipment. Emphasis is on oxygen, humidity and aerosol therapy, and airway management.

RET1264 Mechanical Ventilation
Credit Hours: 3
This course describes the concepts of mechanical ventilation, current modes of ventilation, tailoring of the ventilator settings to meet patient needs, and patient assessment on mechanical ventilation. The student will learn the concepts of noninvasive ventilation. The principles and operation of commonly used ventilators are emphasized.

RET1264L Mechanical Ventilation Lab
Credit Hours: 1
This course allows the student to work with all facets of mechanical ventilation to gain hands on experience prior to entering their adult critical care rotation.

RET1484 Cardio Pulmonary Pathophysiology
Credit Hours: 3
This course is designed to introduce the students to the basic concepts of cardiopulmonary disease. Included are the mechanism of altered lung structure, airway caliber, neurogenic control and pulmonary vascular function.

RET1485 Respiratory Physiology
Credit Hours: 3
This course provides an in-depth study of the anatomy and physiology of the cardiopulmonary system. Included is a review of the physiology of respiration, ventilatory mechanics, neurogenic control, internal and external respiration and gas exchange.

RET1832L Respiratory Therapy Clinic I
Credit Hours: 3
In this first clinical course, the students are oriented to, and work at, tasks of a non-critical nature. Included are oxygen and aerosol administration, chest physiotherapy, IPPB administration, and incentive spirometry.

RET1833L Respiratory Therapy Clinic II
Credit Hours: 3
This clinic course represents continuation of the activities in Clinic I. By the end of this term the student must have mastered all non-critical care duties normally performed by respiratory therapists and the fundamentals of adult critical care.

RET2265 Advanced Respiratory Equipment
Credit Hours: 2
This course introduces students to more advanced monitoring techniques in the areas of ventilation and oxygenation for the adult, pediatric and neonatal patient.

RET2265L Advanced Respiratory Equipment Lab
Credit Hours: 1
This course provides hands on interaction for students to learn the techniques of more advanced monitoring in the areas of ventilation and oxygenation for the adult, pediatric and neonatal patient.

RET2286C Management of the Intensive Care Patient
Credit Hours: 2
This course provides an in depth discussion of several disease processes of the lung as well as other issues concerning the respiratory intensive care patient. This course fosters the physician to student relationship by providing physician lectures and clinical rounds with physicians.

RET2414 Respiratory Therapy Pulmonary Function
Credit Hours: 1
This course reviews techniques used for pulmonary function testing, blood gas analysis and the basic principles of cardiopulmonary stress testing. Techniques used in the diagnosis of cardiopulmonary disease are covered.
RET2414L Pulmonary Function Lab  
Credit Hours: 1  
This course provides the opportunity to practice the techniques used for spirometric determination of lung volumes and flow rates and the basic principles of cardiopulmonary stress testing.

RET2418 Cardiopulmonary Diagnostics & Techniques  
Credit Hours: 2  
This course is designed to prepare the student to be a competent member of the resuscitation team, to assess cardiac function via EKG's and hemodynamic monitoring, and to prepare the student for advanced cardiac life support training.

RET2601 Respiratory Therapy Management  
Credit Hours: 1  
This course is designed to assist the student in successfully making the transition from the role of a student to that of a competent member of the health care team. Objectives include advanced cardiac life support certification and becoming a member of the national and state organization for respiratory care. Emphasis is placed on preparation and application for the national credential examinations and for the Florida state license.

RET2714 Pediatric & Neonatal Respiratory Care  
Credit Hours: 3  
This course emphasizes neonatal and pediatric diseases, their etiology and treatment. It encompasses the newest equipment and latest techniques used in monitoring and maintaining the respiratory compromised infant and pediatric patient.

RET2834L Respiratory Therapy Clinic III  
Credit Hours: 3  
This clinical course is designed to introduce the student to all aspects of respiratory therapy critical care. The students will work primarily with patients requiring continuous ventilatory support.

RET2835L Respiratory Therapy Clinic IV  
Credit Hours: 3  
This is a continuation of the activities in Clinic III. The student's responsibility will increase as his clinical skills become more sophisticated. By the end of this term the student will assume all of the responsibilities required of critical care therapists with patients requiring ventilatory management or support.

RET2934 Selected Topics in Respiratory Care  
Credit Hours: 1  
This course will present information on recent changes in technology and therapeutic modalities used in Respiratory Care. The student will participate in literature review activities to enable them to remain knowledgeable of ongoing changes in the profession after they become Respiratory Care practitioners.

RTE1000 Introduction to Radiologic Technology  
Credit Hours: 3  
The organization and operation of a radiology department; radiologic topics include: x-ray equipment operation, historical aspects of radiography, department organizational structure, safety, radiation protection, imaging media and receptors, image processing techniques, basic exposure factors, and accreditation and professional development.

RTE1111 Patient Care, Law, & Ethics  
Credit Hours: 2  
An introduction to the principles and practices of patient care during radiographic examinations. Topics include medical ethics, legal issues, patient assessment & communication, patient care & safety, infection control, surgical asepsis, vital signs & oxygen administration, electrocardiography, medical emergencies, trauma & mobile considerations, the care of pediatric & geriatric patients, patient care during urologic & GI exams, & care of patients needing alternative treatments.

RTE1418 Imaging I  
Credit Hours: 2  
A study of the production and properties of X-radiation, primary exposure factors as they relate to the formulation of radiographic technique, the properties and characteristics of imaging media and the primary factors of radiographic quality.

RTE1418L Imaging I Lab  
Credit Hours: 1  
Practical application of theory taught in RTE1418. Students perform laboratory experiments to demonstrate concepts taught in lecture.

RTE1503 Radiographic Procedures I  
Credit Hours: 3  
A study of radiographic procedures of the chest, abdomen, gastrointestinal tract, and biliary and urinary systems. Students will study the anatomy, the radiographic positions/projections, along with the
trauma, mobile and pediatric considerations relating to each area covered.

**RTE1503L Radiographic Procedures I Lab**
Credit Hours: 1
Practical application of Radiographic Procedures I class, to include radiography of the chest, abdomen, biliary system and gastrointestinal tract, urinary system, and related trauma and mobile examinations of adults and pediatric patients.

**RTE1513 Radiographic Procedures II**
Credit Hours: 3
A study of radiographic procedures of the upper limb, humerus & shoulder girdle, lower limb, femur & pelvic girdle, bony thorax, and related trauma, mobile, and pediatric examinations. Students will study the radiographic positions/projections for each body part and its associated anatomy.

**RTE1513L Radiographic Procedures II Lab**
Credit Hours: 1
Practical application of radiographic procedures & positioning to include the upper limb, humerus & shoulder girdle, lower limb, femur & pelvic girdle, bony thorax, & related trauma & mobile examinations.

**RTE1523 Radiographic Procedures III**
Credit Hours: 2
A study of radiographic procedures of the cervical spine, thoracic spine, lumbar spine, sacrum & coccyx, skull & cranial bones, facial bones & sinuses, and related trauma, mobile, and pediatric examinations. Students will study the radiographic positions/projections for each body part and its associated anatomy.

**RTE1523L Radiographic Procedures III Lab**
Credit Hours: 1
Practical application of radiographic procedures & positioning to include the cervical spine, thoracic spine, lumbar spine, sacrum & coccyx, skull & cranial bones, facial bones & sinuses, & related trauma & mobile examinations.

**RTE1613 Radiographic Physics**
Credit Hours: 2
Introduction to the fundamentals of physics involved in the operation of radiographic equipment to include: units of measurement, matter, energy, mechanics, magnetism, electrostatics, and electrodynamics.

**RTE1804 Clinical Education I**
Credit Hours: 2
Provides the student with clinical experience for practical application of concepts & skills taught in lecture & laboratory. Clinical rotations include an orientation to the hospital & imaging department, patient transportation & clerical functions, image processing, the main department, portables, the emergency room, & other ancillary imaging areas. Students will perform radiographic exams of the chest, abdomen, biliary tract & upper gastrointestinal system, lower gastrointestinal system, & urinary system.

**RTE1814 Clinical Education II**
Credit Hours: 2
Provides the student with continuing clinical experience for practical application of concepts & skills taught in lecture & laboratory. Clinical rotations include the main department, portables, the emergency room, & other ancillary imaging areas. Students will perform radiographic exams of the upper limb, humerus & shoulder girdle, lower limb, femur & pelvic girdle, bony thorax, & procedures previously learned.

**RTE1824 Clinical Education III**
Credit Hours: 2
Provides the student with continuing clinical experience for practical application of concepts & skills taught in lecture & laboratory. Clinical rotations include the main department, portables, the emergency room, & other ancillary imaging areas. Students will perform radiographic exams of the cervical, thoracic, & lumbar spines, sacrum & coccyx, skull & cranial bones, facial bones & sinuses, & procedures previously learned.

**RTE2061 Radiography Seminar**
Credit Hours: 1
A review of the topics studied during the Radiography Program to help students prepare for the American Registry of Radiologic Technologists (ARRT) Certification Exam and to transition to the role of professional caregiver. Topics include radiation protection, equipment operation & quality control, image production & evaluation, radiographic procedures, and patient care & education.

**RTE2130 Pharmacology & Venipuncture for Radiography**
Credit Hours: 1
A study of pharmacology & venipuncture related to the administration of drugs & contrast media for radiographic examinations. Topics include
pharmacology principles, parenteral contrast media, drug administration, & venipuncture technique.

RTE2130L Pharmacology & Venipuncture for Radiography Lab
Credit Hours: 1
Practical application of the principles of pharmacology & venipuncture related to the administration of drugs & contrast media for radiographic examinations.

RTE2385 Radiation Biology & Protection
Credit Hours: 2
Study of the biological effects associated with exposure to ionizing radiation and the accepted radiation protection principles and practices. Topics will include: radiation sources, radiation/matter interaction modes, cellular, tissue and total body biological response patterns, radiation detection and measurement and Federal and State radiation protection guidelines relating to equipment and personnel.

RTE2457 Imaging II
Credit Hours: 2
A study of the factors that affect radiographic image quality, solving technique problems, automatic exposure control, & development of technique charts.

RTE2457L Imaging II Lab
Credit Hours: 1
Practical application of theory taught in RTE2457 class. Students perform laboratory experiments to demonstrate factors affecting radiographic quality.

RTE2533 Radiographic Procedures IV
Credit Hours: 2
A study of radiographic procedures to include computed tomography (CT), surgical radiography, arthrography, hysterosalpingography, myelography, sialography, orthoroentgenography, mammography, bone densitometry, angiography & interventional examinations, magnetic resonance imaging (MRI), sonography, nuclear medicine, & radiation therapy. Students will study the radiographic positions/projections for each body part/procedure and its associated anatomy.

RTE2623 Radiographic Equipment & Quality Assurance
Credit Hours: 3
A study of the physical basis of operation of radiographic equipment. Emphasis includes x-ray equipment components, x-ray tubes, image tubes, intensifiers, TV monitors and video recorders, serial imaging, generators, image subtraction techniques, digital equipment, non-film imaging equipment, accessory equipment, x-ray production and interaction processes, Quality Assurance and CT equipment.

RTE2782 Radiographic Pathology
Credit Hours: 1
An introduction to the study of human disease and the radiographic appearances of specific diseases. Topics will include: Pathogenesis, disease classification systems, and the study of specific diseases of the respiratory, skeletal, gastrointestinal, hepatobiliary, urinary, cardiovascular & hematopoietic, nervous, endocrine and reproductive systems with radiologic imaging considerations.

RTE2834 Clinical Education IV
Credit Hours: 3
Provides the student with continuing clinical experience for practical application of concepts & skills taught in lecture & laboratory. Clinical rotations include the main department, portables, the emergency room, the operating room, computed tomography (CT), angiography/interventional, cardiac catheterization lab, other ancillary imaging areas, & evenings. Students will perform, assist with, and/or observe CT scans, surgical exams, arthograms, myelograms, hysterosalpingograms, sialograms, orthoroentgenograms, mammograms, bone density studies, angiograms, & procedures previously learned.

RTE2844 Clinical Education V
Credit Hours: 3
Provides the student with continuing clinical experience for practical application of concepts & skills taught in lecture & laboratory. Clinical rotations include the main department, portables, the emergency room, the operating room, computed tomography (CT), magnetic resonance imaging (MRI), sonography, nuclear medicine & PET, radiation therapy, other ancillary imaging areas, & evenings. Students will perform, assist with, and/or observe MRI scans, sonograms, nuclear medicine scans, radiation therapy, & procedures previously learned.

RTE2854 Clinical Education VI
Credit Hours: 1
Provides the student with terminal clinical experience for practical application of concepts & skills taught in the program. Clinical rotations include the main department, portables, the emergency room, the
operating room, & other ancillary imaging areas.
Students will perform all radiographic exams previously
learned to include the chest & bony thorax, abdomen,
upper & lower extremities, spine, cranium, contrast
media studies, & surgical procedures.

RTV2000 Introduction to Radio & Television
Credit Hours: 3
An introduction to the broadcast media through which
the students should gain an understanding of the
historical, technical, legal, and critical aspects of radio
and television media.

RTV2102 Broadcast Writing
Credit Hours: 3
Designed to give students an opportunity to
learn the style of presentation for different
types of media/broadcast scripts. The course
will emphasize practical broadcast writing
skills, radio and television copy techniques and forms of
commercial copy, as well as learning the special rules
and regulations governing the presentation of materials
"over the air."

RTV2241C Television Production I
Credit Hours: 3
In this course the student will acquire understanding of
the theory and practice of television program production
and directing with emphasis on studio production.

RTV2949 Co-Op Work Exp
Credit Hours: 3
A course designed to provide training in a student field
of study through work experience. Students are graded
on the basis of documentation of learning acquired as
reported by students and employer. Prerequisite: Co-Op
department approval. Student will be assigned specific
course prefixes related to their academic major prior to
registration.

RUS1120 Beginning Russian I
Credit Hours: 4
Fundamentals of speaking, understanding, reading and
writing. Classroom practice and exercises
supplemented by language laboratory.

RUS1121 Beginning Russian II
Credit Hours: 4
Continuation of RUS1120. Further development of the
basic skills. Selected readings.

SCE3320 Integrative Teaching Methods in Middle
Grades
Credit Hours: 3
This inquiry-based course involves active participation
and reflection of the learning process which will
promote the growth and development of equitable
middle school science constructs. The Pre-service
educator will apply knowledge previously acquired in
individual content science courses and communicate
them by designing an integrated and lab-based science
curriculum unit. Students will be required to spend 2
non-credit hours per week for a mandatory 20 hours as
part of a field experience component. Course
completers will teach integrated science concepts using
the inquiry processes as the basis for teaching and
learning Science in middle schools.

SCE3420 Methods of Teaching Physical Sciences in
the Middle School
Credit Hours: 4
This course is a study of the fundamental
concepts of physical science as part of teaching science
in grades 5-9. This course focuses on three elements:
content knowledge, inquiry and other teaching
strategies, and use of multimedia and visualization tools
in teaching and learning about physical science. This
course incorporates methods and metacognitive
strategies for learning and teaching, including scientific
reasoning, prediction, and abstract and critical thinking,
and helps educators optimize their science teaching
experiences. Through the readings, videos, discussions,
assignments, and other interactive experiences, learners
in this course will have multiple opportunities to
develop content knowledge about transfer of energy;
light, sound, and waves; mechanisms of heat transfer;
and solubility and density.

SCE3941 Teaching Middle & Secondary School
Sciences
Credit Hours: 4
Science educators are faced with many unique sets of
circumstances that are not encountered in other
disciplines. These include unique legal and safety
considerations, equipment acquisition and organization,
and participation in programs that provide key
resources. This course shall prepare the pre-professional
science educator with some of the key tools and
strategies that are utilized in the science class room.
Each unit focuses on one of the major areas that science
educators will experience. The course is presented as a
series of hands on experiences in which the student is
involved in graded planning or concept exercises,
followed by observed and graded application or execution of those plans.

SCE4310 Science in the Elementary School
Credit Hours: 1
This course introduces conceptually and developmentally appropriate Science content based on the five content areas identified by the Florida Sunshine State Standard. These are knowledge of the nature of matter, knowledge of forces, motion, and energy, knowledge of Earth and space, knowledge of life science, knowledge of the nature of science, knowledge of the relationship of science and technology. Within these content areas, preprofessional educators will learn techniques consistent with the national process standards and research-based procedural strategies. This course addresses specific Sunshine State Standards, subject matter competencies, and pedagogy pertinent to the discipline and required for teacher certification.

SCE4330 Methods & Strategies of Teaching Biological Credit Hours: 3
This course is designed to introduce methods and strategies that have been proven to be effective for teaching secondary biology. This course will include topics in appropriate instructional techniques and selection of appropriate resources for diverse classroom activities. Students will learn principles of effective curriculum design and assessment and how to apply these principles by designing and developing interactive biology projects for secondary school students including real world applications.

SCE4945 Student Teaching in Science
Credit Hours: 10
This course is designed to provide students with multiple opportunities to practice implementing the 12 Florida Educators Accomplished Practices including effective planning, instruction, management and assessment techniques in a real world middle and high school classroom setting under the supervision of a certified teacher.

SLS1001 Strategies for Success
Credit Hours: 3
This course is tailored for First Time in College students and provides opportunities to: learn about Broward College and higher education; acquire and practice learning strategies; explore personal learning styles; identify career options; and develop life-long skills for responsible citizenship.

SLS1103 Foundation Course
Credit Hours: 3
This course is tailored for First Time in College students and provides opportunities to learn about professional behaviors that lead to academic and "knowledge work" career success such as developing self-discipline, leading self-managed teams, and creating effective teams composed of individuals with different working styles.

SLS1261 Leadership
Credit Hours: 3
The purpose of this course is to provide effective leadership skills for student leaders to help them develop an ethical, value grounded leadership style for future educational, organizational and community leadership roles.

SLS1272 Team Self-management & Career Exploration
Credit Hours: 3
This course provides an introduction to Team Self-Management (TSM) theory and practice of team self-management and its application in work organizations: explores the connections between one's purpose and intentions and one's behaviors, and develops the self-management skills to successfully attain one's goals. The course provides an introduction to career exploration and planning.

SLS1501 College Success Skills
Credit Hours: 1
This course is designed primarily for freshman students. It serves as an introduction to Broward College and: assists students in coping with challenges of college life, clarifying their goals, learning strategies and skills that will help them succeed in college and life. Topics covered include: test-taking, note-taking, listening skills, memory techniques, academic regulations, ideas for wellness, understanding of diversity and career issues that face college students.

SLS2271 Team Self-management with Social Justice Topics
Credit Hours: 3
This course provides students with the theory and practice of team self-management. It includes leading and working on a self-managing team, and developing project management skills. This course will also help students develop awareness of social justice topics so that they may gain an in-depth understanding of a social justice issue through utilizing primary based research, and scenario planning methodologies.
SLS2715 Student Leadership Development  
Credit Hours: 1  
The purpose of this course is to provide effective leadership skills for student leaders to help them develop an ethical, value grounded leadership style for their role as peer mentors and advocates.

SON1003L Fundamentals of Sonography Lab I  
Credit Hours: 1  
This course incorporates an introduction to ultrasound scanning techniques using ultrasound equipment to practice the principles and protocols to the performance of adequate diagnostic sonographic imaging and Doppler procedures in a supervised setting.

SON1100L Principles & Protocols of Sonographic Imaging  
Credit Hours: 2  
An introduction to the basic approaches to sonographic scanning and scanning protocols for the abdomen and pelvis.

SON1111 Abdominal Sonography I  
Credit Hours: 2  
An introduction to the cross-sectional anatomy of the abdominal area and its recognition on sonographic visualization systems.

SON1112 Abdominal Sonography II  
Credit Hours: 2  
An in-depth presentation of sonographs of the abdominal area stressing deviations from the norm and the studies to make a diagnostically acceptable study.

SON1121 Sonographic OB/GYN I  
Credit Hours: 2  
An introduction to the cross-sectional anatomy of the female reproductive system with and without an existing pregnancy. The sonographic recognition of the normal throughout all terms of pregnancy is presented.

SON1122 Sonographic OB/GYN II  
Credit Hours: 2  
The detection of anomalies, pathology, deviation from normal and the planes which must be sonographically imaged for accurate diagnosis is stressed.

SON1141 Small Parts Sonography  
Credit Hours: 2  
A general introduction to the areas of carotid, eye, thyroid, prostate, scrotum, breast and other superficial structures.

SON1170 Sonography of the Circulatory System  
Credit Hours: 2  
An introduction to the hemodynamics of the circulatory systems and the sonographic imaging and Doppler assessment of the cardiac and vascular structures.

SON1170 Sonography of the Circulatory System II  
Credit Hours: 2  
A continuation of the study of the properties of diagnostic ultrasound stressing the operation of diagnostic equipment, the display systems, biological effects and quality assurance methods. Current developments in ultrasound are reviewed, discussed, and evaluated.

SON1211 Medical Sonographic Physics I  
Credit Hours: 3  
A study of the principles of diagnostic ultrasound, the fundamental properties of ultrasonic physics, stressing tissue interactions, and interfaces. Focusing characteristics, methods, intensity, and power considerations are introduced along with system resolution considerations.

SON1212 Medical Sonographic Physics II  
Credit Hours: 3  
A study of the principles of diagnostic ultrasound and practical aspects of scanning techniques, film critique, film identification and patient care and handling as related to sonographic examination. Stressing the operation of diagnostic ultrasound equipment and routine images obtained.

SON1214 Practical Aspects of Sonography I  
Credit Hours: 2  
Offering more advanced principles of diagnostic ultrasound, adding knowledge of pathological processes. Further presenting the practical aspects of scanning techniques, film critique, film identification and patient care and handling as related to sonographic examination. Stressing the correlation of all patient data, including sonographic images obtained to assist in the differential diagnosis process.

SON1215 Practical Aspects of Sonography II  
Credit Hours: 2  
Clinical education requiring application of the knowledge learned. Professionalism and personal interaction are stressed along with technical abilities. As the student progresses he or she will be performing examinations with less and less supervision.

SON1804 Clinic A  
Credit Hours: 2  
Clinical education requiring application of the knowledge learned. Professionalism and personal interaction are stressed along with technical abilities. As the student progresses he or she will be performing examinations with less and less supervision.
SON1814 Clinic B
Credit Hours: 2
A continuation of the learning by doing process where more responsibility in the form of decision making regarding anatomical areas and resultant imaging is assumed by the student being supervised.

SON1824 Clinic C
Credit Hours: 3
This clinical course is designed to provide students the opportunity to make judgmental decisions regarding technical aspects, to interact in a professional manner with those with whom he/she comes in contact with, and to generally progress to the point where, after successful testing, he/she may be accepted as a competent sonographer for general sonographic exams.

SON2013L Fundamentals of Sonography Lab II
Credit Hours: 1
This course incorporates ultrasound scanning techniques using ultrasound equipment to practice the principles and protocols to the performance of adequate diagnostic sonographic imaging and Doppler procedures in a supervised setting.

SON2061 Seminar in Sonography
Credit Hours: 1
A discussion and presentation seminar course on interpersonal skill refinement, employment techniques, and career development. The course also provides a comprehensive curriculum review of all aspects of Sonography and presents details on applying for licensure as students prepare for the transition to the work place.

SON2171 Vascular Sonography
Credit Hours: 3
Venous and arterial anatomy and hemodynamic functions, both normal and abnormal are stressed. Sonographic imaging techniques for vascular structures and Doppler spectral analysis of normal and pathological patterns are also studied. Student must be an American Registry for Diagnostic Medical Sonography (ARDMS) Registered Sonographer. Special Fee Charged.

SON2175 Vascular Sonography II
Credit Hours: 3
Arterial anatomy below the neck and head, and it's hemodynamic functions, both normal and abnormal, are stressed, along with sonographic imaging techniques for arterial vascular structures, non-imaging testing modalities, and Doppler analysis of normal and abnormal flow patterns.

SON2176 Vascular Sonography III
Credit Hours: 3
Venous and arterial anatomy and hemodynamic functions of the circulatory system of the neck and head, both normal and abnormal, are stressed, along with sonographic imaging techniques for vascular structures and Doppler analysis of normal and abnormal flow patterns. An understanding of the process of test validation and interpretation of test results will be covered.

SON2400 Introduction to Echocardiography
Credit Hours: 2
Anatomy of the heart and the procedures used in screening are introduced stressing recognition of the normal verses abnormal.

SON2400L Introduction to Echocardiography Lab
Credit Hours: 1
Laboratory sessions for Introduction to Echocardiography Lab (SON 2401L) are designed to provide opportunities for the students to practice basic skills of sonographic scanning techniques of normal cardiac structures including real-time and Doppler scanning techniques. Performance of special tests will be practiced on a cardiac simulator. This course incorporates basic ultrasound scanning techniques using ultrasound equipment to practice the principles and protocols to the performance of basic Cardiac diagnostic sonographic imaging and Doppler procedures in a supervised setting.

SON2401 Echocardiography II
Credit Hours: 2
An in-depth presentation of the intricacies of diagnostic ultrasound as it applies to the heart and the chest stressing its capabilities and its limitations.

SON2401L Echocardiography II Lab
Credit Hours: 1
Laboratory sessions for Echocardiography II Lab (SON 2401L) are designed to provide opportunities for the students to practice advanced skills of sonographic scanning techniques of normal and abnormal cardiac structures including real-time and Doppler scanning techniques. Performance of special tests will be practiced on a cardiac simulator. This course incorporates advanced ultrasound scanning techniques using ultrasound equipment to practice the principles
and protocols to the performance of entry-level Cardiac diagnostic sonographic imaging and Doppler procedures in a supervised setting.

SON2834 Clinic D
Credit Hours: 3
A course designed to add additional clinical competencies to those gained in the specialties mastered in the first year. Emphasis on specialty of echocardiography with clinical application of classroom material presented. To continue to make judgment decisions regarding the technical aspects of diagnostic sonographic exams.

SON2844 Clinic E
Credit Hours: 3
Application of all the materials presented requiring the student to interact in a professional manner, to make judgment decisions regarding the technical aspects, and to generally progress to the point where he/she may be accepted as a competent sonographer. Further mastering of all skills gained, emphasizing echocardiography and cardiovascular examination techniques. Clinical application of classroom material presented.

SOP2002 Social Psychology
Credit Hours: 3
This course provides scientifically based constructs used in understanding social phenomena and their impact on the individual. Identification of the social and psychological variables that give human behavior a predictable base is stressed. Topics considered include human nature, psychological development, sex role identification love, affiliation, aggression, image management, attitudes, opinion manipulation, morality, leadership, group dynamics, attribution and construct theory.

SOW2020 Introduction to Social Welfare
Credit Hours: 3
This is a beginning course in the behavioral science based field of social work. It aims at introducing the student to the historical, political policy and methodological systems that have interacted to produce the institutions of welfare services and the profession of social work.

SOW2054 Social Service Field Experience I
Credit Hours: 3
A survey and orientation to organization, and operations of the social service setting. Contact with and participation in social service agencies to make students aware of community resources is a goal of this course. Part of the course's activities can include volunteer participation in an agency or a supervised review of an agency in which a person is employed.

SPC1024 Introduction to Speech Communications
Credit Hours: 3
This course is designed to provide students with the fundamentals of speech communication including speaking and listening. Topics include: intrapersonal, interpersonal, verbal, nonverbal, small group communication, and public speaking in various cultural contexts.

SPC1511 Argumentation & Debate
Credit Hours: 3
The student, upon completion of this course, should achieve proficiency in the principles of argumentation including analysis, evidence, inference, and refutation as they pertain to the debate situation in democratic society.

SPC1608 Introduction to Public Speaking
Credit Hours: 3
This course is designed to provide students with fundamental training and practical experience for speaking in public, business, and professional situations. Topics include: audience analysis, speech anxiety, critical listening, and preparation and delivery of speeches in various cultural contexts.

SPN1000 Elementary Spanish Conversation
Credit Hours: 3
This course concentrates on the development of oral and conversational skills and is designed for the everyday use of the Spanish language. One hour language laboratory practice recommended per week. Special fee charged.

SPN1120 Beginning Spanish I
Credit Hours: 4
Fundamentals of speaking, listening-comprehension, reading, writing, and Hispanic culture. Classroom practice and exercises supplemented by laboratory and/or multi-media designed to develop communicative competence and cultural sensitivity. Student expected to continue further implementation and expansion of their proficiencies in SPN1121 and SPN2220. Students are encouraged to study abroad.
SPN1121 Beginning Spanish II
Credit Hours: 4
Continuation of SPN 1120. Further development of the basic skills in speaking, listening-comprehension, reading, writing, and appreciation of culture. Classroom practice and exercises supplemented by laboratory and/or multi-media activities designed to develop and enhance communicative competence and cultural sensitivity. Skills and concepts are further polished in SPN 2220. Students are encouraged to study abroad.

SPN1170 Spanish Study Travel
Credit Hours: 3
A course designed for students who wish to combine the study of Spanish with subsequent travel to a Spanish speaking region.

SPN2201 Intermediate Spanish II
Credit Hours: 3
Emphasis on composition, reading comprehension and conversation. A more in depth review of the history, geography, literature, and current issues of Spain and Spanish America. Students will acquire a greater knowledge of these diverse two cultures and gain more fluency in oral and written communication. This course completes the intermediate level. Students are encouraged to study abroad.

SPN2220 Intermediate Spanish I
Credit Hours: 4
Continuation of SPN1121. Polishing of skills in speaking, listening comprehension, reading, writing and appreciation of culture and an introduction of new grammatical and idiomatic material. Classroom practice and exercises supplemented by laboratory and multi-media activities designed to develop and enhance communicative competence and cultural sensitivity. Compositions and readings in Hispanic prose and culture. Students are encouraged to study abroad.

SPN2240 Intermediate Spanish Conversation
Credit Hours: 3
Course may be taken in conjunction with SPN2220 or SPN2201 but cannot displace either one of those courses as a college parallel requirement. The purpose of this course is to permit that student who wishes to increase his comprehension and speaking facility in Spanish to be in a class where the emphasis is totally on the oral approach and where a greater variety of topics will be discussed at a faster pace than the required SPN2201 course would allow.

SPN2340 Beginning Spanish for Spanish Speakers I
Credit Hours: 4
This course is designed for Spanish Speakers who have an oral command of the language but whose knowledge of written and/or formal Spanish is incomplete. Class is conducted in Spanish with emphasis on improvement of spelling, grammar, vocabulary, reading, writing, and oral skills. Emphasis will be placed on the correction of typical errors created by the influence of the English language. Every unit will cover important cultural aspects of the Hispanic world. Prerequisite: To be a heritage or native speaker of Spanish.

SPN2955 Study Abroad: Advanced Composition & Convers. I
Credit Hours: 3
For students wishing to attain greater proficiency in spoken and written Spanish. Conversation and composition based on selected readings and a variety of contemporary topics. This course is used only in BC Study Abroad Programs.

STA1001 Pathway to Statistics
Credit Hours: 3
STA1001 will lay the foundation for further statistical study. This course introduces basic statistical concepts and focuses on data analysis and quantitative reasoning. This course emphasizes both written and verbal communication of statistical concepts and helps prepare the student for inferential statistics courses. STA1001 is designed for students who do not intend to major in math, science, computer science, business, etc.

STA2023 Statistics
Credit Hours: 3
A first course in statistical methods including such topics as collecting, grouping, and presenting data; measures of central tendency, position, and variation; theoretical distributions; probability; test of hypotheses; estimation of parameters; and regression and correlation. Use of statistical computer software and/or a scientific calculator (capable of performing 2-variable statistics) will be required.

SWS2242C Wetlands Management I
Credit Hours: 3
This course provides the background to define a wetland using indigenous plant forms, aquatic conditions, geology and applicable laws and regulations. The strategies and techniques needed to maintain natural habitats are outlined. Course consists of classroom and extensive field work. Completion of any of the
horticultural biology, zoology, or native plant courses would be helpful and is suggested.

SWS3022 Intro to Soil Science
Credit Hours: 3
The course will cover the fundamentals of soil science; the physical, chemical and biological properties of soils in relation to plant growth and environmental problems.

SYG2000 Principles of Sociology
Credit Hours: 3
This course is designed to introduce students to the basic terminology, theories, research and topics sociologists study. More specifically, students will be introduced to the relationship between the individual and society; how social structures, such as organizations, family, the mass media, etc., shape views, perceptions, and behaviors; and to society's issues and problems.

SYG2010 Social Problems
Credit Hours: 3
This course is an examination of the major social problems found in our changing social environment. More specifically, students will be introduced to a variety of topics which may include inequality based on class, race, ethnicity, education, age; violence in society; the changing family; social problems related to gender and sexual behavior; global social problems.

SYG2230 Contemporary Race & Ethnic Studies
Credit Hours: 3
A study of minority dominant relations with emphasis on ethnic, racial, and religious minorities.

SYG2322 Juvenile Delinquency
Credit Hours: 3
A study of juvenile and delinquent behavior and its development which focuses on the social structure of society to find patterns of delinquent activity and its causations.

SYG2323 Introduction to Criminology
Credit Hours: 3
A study of crime and criminal behavior, and its cause and related effects on society, with an emphasis given to criminal theory, and the sociological implications of criminal behavior.

SYG2340 Sociology of Human Sexuality
Credit Hours: 3
The Sociology of Human Sexuality is a general review of the scientific principles related to the study of human sexuality. Topics include: the cultural context of sexuality, theoretical perspectives of sexuality, research methods, gender/sex roles, sexual orientation, sexual coercion, sexual anatomy, sexual arousal, pregnancy, STDs, love and human intimacy, and human sexuality through the life course.

SYG2421 Marriage & Families: Intercultural Comparison
Credit Hours: 3
A study of the institution of the family utilizing historical, cross cultural and sub-cultural comparisons to understand the background evolution and current familiar structures of the world.

SYG2441 Social Institutions
Credit Hours: 3
A study of the institutions of pre-industrial, industrial, and post-industrial societies. Special emphasis is on theories of social organization, social change, and the exploration of each institution in world societies.

SYG2905 Independent Study in Sociology
Credit Hours: 3
A direct course of study in Sociology. This course will be available to both majors and non-majors who wish to investigate a particular problem. Students will apply for the course and submit an application to the Head of the Behavioral Sciences Department via an instructor with whom he wants to work.

SYG2940 Sociology Field School
Credit Hours: 1
This course is designed to provide an on-scene study of sociological topics from the various perspectives provided in a field school setting. Laboratory research and observational techniques are used in providing the learning experiences of this course.

SYG2942 Sociology Field School
Credit Hours: 3
This course is designed to provide an on-scene study of sociological topics from the various perspectives provided in a field school setting. Laboratory research and observational techniques are used in providing the learning experiences of this course in domestic and foreign social settings.
TAX2000 Income Tax I
Credit Hours: 3
This course covers principles of federal income taxation applicable to individuals. The course is designed for students to acquire the basic knowledge necessary in the preparation of individual tax returns. Sample tax returns will be prepared.

TAX2010 Income Tax II
Credit Hours: 3
This course is a continuation of TAX2000 with emphasis on income tax laws applicable to partnerships and corporations. A brief survey of estate and gift taxes will be undertaken. Sample tax returns will be prepared.

THE2000 Theatre Appreciation
Credit Hours: 3
A course designed to acquaint the student with the elements of theatre and how they combine and interact to create the live theatre experience. Lecture and discussion will investigate the nature and art of theatre, while the viewing of videotaped and live stage plays will furnish examples of the various dramatic genres, including tragedy, comedy and musical theatre.

THE2051L Children's Theatre Production
Credit Hours: 3
Participation in the rehearsal and production of the Children's Theatre Program, which continues during the entire term.

THE2052L Children's Theatre Technical
Credit Hours: 3
Participation in the technical aspects of the Children's Technical Theatre Program.

THE2300 Survey of Dramatic Literature
Credit Hours: 3
A study of dramatic literature from the time of the early Greek dramatists to recent dramatists in light of the historic, socio-political milieu of the era that promulgates the particular genre. Plays will be analyzed from a dramaturgical point of view.

TPA1290 Technical Theatre Lab I
Credit Hours: 1
Participation as technician in the dramatic and musical productions of the college.

TPA1291 Technical Theatre Lab II
Credit Hours: 2
Participation as technician in the Dramatic and Musical productions of the college.

TPA1292 Technical Theatre Lab III
Credit Hours: 3
Participation as technician in the Dramatic and Musical productions of the college.

TPA2000C Introduction to Theatre Design
Credit Hours: 3
An introduction to the techniques, practices, and processes in scenic, lighting, costume, and sound design. The course includes a period styles overview, script analysis, and a survey of appropriate paperwork required by each area.

TPA2192L Summer Theatre/Technical Production
Credit Hours: 3
Participation in the technical aspects of a theatrical production including but not limited to stagecraft, stage management, properties, costuming, wardrobe, lighting, sound, stage makeup and house management.

TPA2200 Stagecraft
Credit Hours: 3
An investigation of the principles of stagecraft, lighting, props and set construction.

TPA2220 Introduction to Stage Lighting
Credit Hours: 3
An historical background of theatrical lighting technology and design and an introduction to the tools and concepts used by the lighting technician from primitive equipment to the modern computer system.

TPA2248 Makeup for Stage & Television
Credit Hours: 3
The theoretical and practical application of all types of straight and character make-up for the stage and television.

TPP1190L Performance Lab I
Credit Hours: 1
Upon successful completion of this course, students will be able to analyze and create a dramatic character on stage in a theatrical production of the college. For each production, students will learn to understand the genre of the play and adopt appropriate acting styles and techniques. They will learn how to uncover clues in the script which will reveal character objectives and tactics.
Additionally, students will create characters through analysis, improvisation, and the development of psychophysical actions grounded in the given circumstances of the play. This information will guide the student actor to make distinct choices regarding the physical and vocal qualities of each character being portrayed.

TPP1191L Performance Lab II
Credit Hours: 2
Upon successful completion of this course, students will be able to analyze and create a dramatic character on stage in a theatrical production of the college. For each production, students will learn to understand the genre of the play and adopt appropriate acting styles and techniques. They will learn how to uncover clues in the script which will reveal character objectives and tactics. Additionally, students will create characters through analysis, improvisation, and the development of psychophysical actions grounded in the given circumstances of the play. This information will guide the student actor to make distinct choices regarding the physical and vocal qualities of each character being portrayed.

TPP1192L Performance Lab III
Credit Hours: 3
Upon successful completion of this course, students will be able to analyze and create a dramatic character on stage in a theatrical production of the college. For each production, students will learn to understand the genre of the play and adopt appropriate acting styles and techniques. They will learn how to uncover clues in the script which will reveal character objectives and tactics. Additionally, students will create characters through analysis, improvisation, and the development of psychophysical actions grounded in the given circumstances of the play. This information will guide the student actor to make distinct choices regarding the physical and vocal qualities of each character being portrayed.

TPP2110C Acting I
Credit Hours: 3
Study and development of acting skills concentrating on the student's ability to believe and exist in imaginary circumstances as if they were real, and to transmit those beliefs clearly and artfully to an audience.

TPP2111C Acting II
Credit Hours: 3
Building on the foundations established in Acting I, Acting II focuses on a close examination of the dramatic text which becomes the basis for character development and scene work. Students will analyze and perform two scenes during the term. Additional experience is also gained with the monologue by analyzing and performing two longer speeches.

TPP2190L Rehearsal & Performance I
Credit Hours: 3
Participation in the audition, rehearsal and performance process of a theatrical stage production.

TPP2260C Performance in Film
Credit Hours: 3
Introduction to the various approaches to acting on film and television. A number of genres will be examined including film acting, commercial acting, and various styles of television acting. Students will also learn about Audition techniques for the medium as well as how to prepare for professional employment through studio work and marketing materials.

TPP2500C Movement for the Actor
Credit Hours: 3
An academic study and practical application of body movement technique for the actor. Students will extend their own range of movement through vocal and physical effort training and free themselves from any personal movement habits.

TPP2700C Intro to Voice
Credit Hours: 3
An academic study and practical application of the efficient and effective use of the speaking voice, particularly in meeting the special demands of acting for the stage. The theories and principles of the course will be applied in written assignments, oral performances before the class, and through vocal exercises.

TPP2701C Voice & Articulation II
Credit Hours: 3
Application of techniques studied in Intro to Voice, with emphasis on the study of vocal posture and the International phonetic Alphabet. Students will continue to apply differentiation of sounds and adjustment of vocal posture to achieve appropriate dialects for acting assignments. Students will also develop vocal skills needed to embody intention and character in Shakespearean texts. The theories and principles of the
course will be applied in written assignments, oral performances before the class, and through vocal exercises done in class.

TPP2900L Directed Independent Study (Capstone)
Credit Hours: 3
Individual study in performance under supervision and direction of a Faculty member. Topics selected on an individual basis as a Capstone project for theatre majors.

TRA1010 Introduction to Transportation & Logistics
Credit Hours: 3
This course deals with the role of logistics in the economy and the organization. Topics explored are customer service, logistics information systems, inventory management, material management and supply chain management. The objective is to explore the full scope of the transportation plant and its services as a necessary preparation to efficient use of the transportation system.

TRA1154 Supply Chain Management
Credit Hours: 3
This course presents an integrated approach to the management of activities involved in moving goods and services from suppliers to customers. The course will focus on what employees and managers must do to ensure an effective supply chain exists in their organization. Students will learn about SCM functions, warehousing, purchasing and inventory, e-commerce, information flow and customer service.

TRA1156 Operations Management for Transportation
Credit Hours: 3
This course covers the skills necessary for a supervisory role in logistics. It includes roles and responsibilities in managing different types of operations and general managerial functions and skills. Topics include the design and management of production operations, productivity, strategy, capacity planning, location, layout, resource management, just-in-time systems, materials requirement planning and project management.

TRA2098 Warehouse Operations
Credit Hours: 3
This course will enable students to understand the various functions involved in the operation of a warehouse. Key elements include: the role of warehousing in the supply chain, storage and handling techniques, performance metrics, customer service considerations, and safety concerns across various types of distribution facilities.

TRA2930 Seminar in Global Trade & Logistics
Credit Hours: 1
This course focuses on current and emerging issues in global trade and logistics. Its format and topic will vary, but will include a full day or a half day seminar conducted by one or more industry experts who will address specific global trade and logistic topics such as, but not limited to: Functions comprising logistics; How logistics affects customer service, corporate performance and competitive advantage; Key logistics processes of supply chain management; Effective strategies for logistics managers; Key differences between domestic and international logistics; Developing strategies to effectively manage logistics; Recognizing the role played key logistics intermediaries that facilitate global trade.

TRA3132 Procurement Management
Credit Hours: 3
This course presents current and thorough coverage in the critical area of procurement for logistics managers. Students gain insight and knowledge into the strategies, processes, and practices of procurement, including demands placed on procurement managers, the ethical, contractual and legal issues faced by procurement professionals, and the impact of procurement and supply chain management on the competitive success and profitability of the organization.

TRA3155 Supply Chain Management II
Credit Hours: 3
This course is an overview of logistics' functions within a firm and in the context of integrated vertical systems. Topics include customer service, information flow inventory control, materials management, order processing, packaging, and physical distribution.

TRA3163 Supply Chain Quality Management
Credit Hours: 3
This course focuses on quality enhancement methodologies within the supply chain. Students will learn how to assess the current position of a firm and identify an effective strategy for improvement based on a profound understanding of the company, market, processes, and customers.
TRA3936 Seminar/Special Topics  
Credit Hours: 3  
This course focuses on current and emerging issues in supply chain management. Its format and topic will vary, but will include a full day or a half day seminar conducted by one or more industry experts who will address specific supply chain management topics such as customer service, logistics information systems, inventory management, material management, warehousing, purchasing and inventory, e-commerce, global trade, order processing, physical distribution, transportation, import-export compliance, or other supply chain management issues. Specific requirements will vary based on topic assignments.

TRA4153 Applied Production/Operations Management  
Credit Hours: 3  
This course provides management and analytical concepts/tools for the management of operations and the decision-making process within the scope of the supply chain. Recently, operations strategy has provided companies with a competitive advantage in supply chains and transportation. Decision-making regarding operational issues is one of the most common tasks within organizations. This course will enable the student to perform the quantitative analysis necessary and understand the management issues in order to make good operational decisions within the supply chain.

TRA4721 Global Logistics/Import & Export  
Credit Hours: 3  
This course encompasses logistics activities of multinational firms, international transportation systems, global sourcing, customer service, facility location, inventory management, customs issues, export-import activities, and the role of governments.

TRA4910 Directed Independent Research in Supply Credit Hours: 3  
This course is intended to help students acquire skills in applying research principles and obtaining practice in rigorous data collection and reporting.

TRA4945 Supply Chain Management Option (1) Internship or Option (2) Practicum  
Credit Hours: 3  
This course is a practical application in a clinical setting of knowledge acquired in the classroom.

TSL3080 ESOL Issues & Strategies I  
Credit Hours: 3  
This course is designed to introduce the underlying issues, theories and practices of the teaching of ESOL (English for Speakers of Other Languages). The goal of this course is to develop the foundations of knowledge necessary to prepare educational professionals to understand the concepts upon which second language acquisition and instruction are based. Course emphasizes the Florida/LULAC Consent Degree and language/literacy development. 10 school-based hours are required.

TSL4081 ESOL Issues & Strategies II  
Credit Hours: 3  
This course is designed to build on the foundation course in TESOL for students in integrated pre-service teacher education programs. The goal of this course is to link the theory and practice for effective teaching of ESOL students. The course will focus primarily on methods, curriculum and assessment of ESOL students in the areas of language development, and content areas. Effective strategies regarding reading instruction for ELL students will be emphasized.

WOH2040 World in the 20th Century  
Credit Hours: 3  
An examination of the major political, social, economic, intellectual, diplomatic, and military developments and events of the 20th century. A chronological approach to several major themes which frame the history of the contemporary world; the decline of European hegemony in the course of two major wars and a world depression; the concomitant challenge to western supremacy from Asia; a half-century of superpower hostility following the outbreak of the Cold War; and the transformation of global politics in light of the collapse of the U.S.S.R. and the end of the Cold War.

ZOO2010 General Zoology  
Credit Hours: 3  
Basic course pertaining to the development, anatomy, physiology, genetics, ecology and evolutionary relationships of the animal kingdom. Upon successful completion of this course, the students will be able to comprehend the basic zoological principles and processes of phylogeny, physiology, genetics and ecology.
ZOO2010L General Zoology Laboratory  
Credit Hours: 1  
Upon successful completion of this course, the students should be able to demonstrate a knowledge of the animal kingdom through prescribed activities that focus on the morphology, anatomy, and physiology of selected representative specimens. Laboratory experiments and activities to accompany ZOO2010. Dissection of animals is a component of this course.

ZOO4234 General Parasitology  
Credit Hours: 3  
General Parasitology covers the biology of eukaryotic parasites with emphasis on species of medical and veterinary importance. Students will learn about basic principles and concepts in parasitology and will examine the systematics, morphology, life histories, pathogenesis, epidemiology, and control of parasitic protozoa, flatworms, nematodes, and arthropods.

ZOO4234L General Parasitology Lab  
Credit Hours: 1  
General Parasitology Lab is designed to accompany General Parasitology. Students will learn to recognize parasitic protozoa, flatworms, roundworms, and arthropods and be able to describe their morphology. They also learn techniques for the collection and preservation of eukaryotic parasites.

ZOO4713 Comparative Vertebrate Anatomy & Physiology  
Credit Hours: 3  
This course is designed to familiarize the student with morphological and anatomical features of vertebrates from a comparative evolutionary perspective. The course starts with an introduction to the comparative method, including evolutionary concepts such as homology and homoplasy. The underlying biology of tissue-organ systems and evolutionary perspectives on the origin, maintenance, and diversification of form among the vertebrates will be discussed. The remainder of the course will be an overview of major organ systems, interspersed with discussion of particular vertebrate phenomenon that highlight the development, function and/or evolution of these organ systems.

ZOO4713L Comparative Vertebrate Morphology & Physiology  
Credit Hours: 1  
The 3 hours of laboratory per week complements the lecture topics which include evolutionary relationships among the vertebrate groups, and a comparison of major physiological systems; nerve, muscle, respiration, circulation, osmoregulation, excretion, temperature regulation and energy metabolism.