Bachelor of Science in Aerospace Sciences - S800

CAREER PATHWAY: INDUSTRY, MANUFACTURING, CONSTRUCTION & TRANSPORTATION (IMCT)

Location(s): Program-specific courses for this program are offered at the Judson A. Samuels South Campus.

Program Description: The Bachelor of Science (B.S.) in Aerospace Sciences degree is designed specifically for those students with a desire to work in various aviation-related careers. The program introduces students who are new to aviation to a wide-ranging sampling of the various sectors, but also allows students with a more focused approach the opportunity to concentrate on a particular area of interest. This program is intended to prepare graduates for a variety of supervisory, management, and leadership positions within the growing aviation industry at airlines, airports, aircraft maintenance, and repair and overhaul companies, etc. It is also designed to give current workers in the field advanced education to make them more competitive for promotion opportunities.

Students select from one of two tracks: Professional Pilot track or Aerospace Management track.

Graduates of the program who pursue the *Professional Pilot* track will be able to:

- 1. Interpret and assess large aircraft systems;
- 2. Discuss relevant topics related to law and ethics in the aerospace industry;
- 3. Predict and solve human factors challenges in the cockpit;
- 4. Compile, interpret, and draw conclusions from safety data related to flight;
- 5. Describe high speed, high altitude aerodynamics; and
- 6. Assess propulsion systems of large, complex aircraft.

Students who graduate from the Professional Pilot track who meet certain criteria may qualify for a restricted privileges airline transport pilot (R-ATP) certificate with reduced aeronautical experience of 1,000 hours or 1,250 hours, depending on degree and number of credits earned.

Graduates of the program who pursue the Aerospace Management track will be able to:

- 1. Compare varying methods of managing the airside and landside operations of a large airport;
- 2. Discuss various facets of airline operations;
- 3. Explain the environmental concerns related to airports and airline operations;
- 4. Determine aviation security measures to implement in various scenarios;
- 5. Evaluate and compare aviation maintenance tasks necessary for safe flight; and
- 6. Explain methods for designing modern airports.

Program Entrance Requirements: The Bachelor of Science degree in Aerospace Sciences uses a 2+2 model designed to provide individuals who have obtained an Associate of Science (A.S.) or Associate of Arts (A.A.) degree from a regionally accredited college or university the opportunity to further their education. The curriculum offers a learner-centered practical approach to understanding the aviation industry.

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 program application. Applicants for the B.S. program should have completed a minimum of 15 semester hours of general education requirements as part of their A.S. degree. The remaining general education semester hours (totaling 36) will be completed during the Bachelor of Science degree program. Students must meet all of the State of Florida Bachelor of Science general education requirements to be awarded the Bachelor of Science (B.S.) degree in Aerospace Sciences.

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 Broward College students applying to the B.S. program. As part of the admission process, students are required to complete an educational plan with their advisor.

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Students who are new to Broward College must first apply to the college by visiting the college's website at www.broward.edu. General admission to Broward College does not constitute admission to the B.S. program. Students must also submit a supplemental program application, which can be found at www.broward.edu/aviation. Students currently attending Broward College who wish to apply to the B.S. program are required to complete the supplemental program application which can be found at www.broward.edu/aviation. Graduates or previous Broward College students who have not been in attendance for more than two major terms are required to complete both the re-entry application and the supplemental program application. Please visit www.broward.edu for the re-entry application and then visit the department website at www.broward.edu/aviation for the supplemental program application. International students must first be admitted to the college. Please visit www.broward.edu/international for admissions requirements. Once admitted, student will complete the supplemental program application.

Graduation Requirements: The Bachelor of 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 Science degree. Coursework is comprised of both lower division (A.A. or A.S.) and upper division (B.S.) as specified by the program sheet.
- Demonstrated competency in a foreign language; in digital literacy; and in oral communications.
- Students must maintain an overall GPA of 2.0 to meet their graduation requirements.

Additional Program Information: Students interested in pursuing the Bachelor of Science in Aerospace Sciences degree who have an Associate of Arts degree or who do not have an Associate of Science degree in an aviation-related program from Broward College may have additional prerequisite coursework to complete. This coursework may fulfil the requirements of the upper division coursework. Students must meet with an academic advisor to determine specific requirements based on previously completed lower division courses. Visit program's website for additional information.



Associate of Arts or Associate of Science

Bachelor of Science

PROFESSIONAL PILOT TRACK A

Full Time	Part Time	Course ID	Description	Credits	
Term 1	Term 1	ENC1102	Composition II	3	
		GE Course*	General Education Mathematics	3	
	Term 2	ASC3215	Advanced Aviation Weather	3	
		ASC3321	Advanced Aviation Law	3	
Term 2	Term 3	AVM3522	Airline Operations I	3	
		GE Course	General Education Social/Behavioral Science	3	
	Term 4	GE Course	General Education Humanities	3	
		ASC3478	Advanced Aviation Human Factors I	3	
Term 3		GE Course	General Education Science	3	
	Term 5	GE Course	General Education Science Lab	1	
		GE Course	General Education Wellness	2	
Term 4	Term 6	AVM3443	Aviation Contingency Planning & Emergency	3	
			Management	3	
		AVM4523	Airline Operations II	3	
	Term 7	ASC4476	Advanced Human Factors II	3	
		ASC4200	Advanced Flight Planning	3	
Term 5	Term 8	AVM4516	Domestic Aviation Operations	3	
		ASC4671	Transport Category Aircraft Operations	3	
	Term 9	AVM4700	International Aviation Operations	3	
		ASC4551	Advanced High-Altitude Aerodynamics	3	
Transferred from AS			Electives	4	

Total Program Credit Hours

60

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Associate of Arts or Associate of Science

Bachelor of Science

AEROSPACE MANAGEMENT TRACK B

Full Time	Part Time	Course ID	Description	Credits
Term 1	Term 1	ENC1102	Composition II	3
		GE Course*	General Education Mathematics	3
	Term 2	ASC3215	Advanced Aviation Weather	3
		ASC3478	Advanced Aviation Human Factors I	3
Term 2	Term 3	ASC3321	Advanced Aviation Law	3
		AVM3443	Aviation Contingency Planning & Emergency	3
			Management	
	Term 4	AVM3522	Airline Operations I	3
		AVM3302	Aviation Sales & Marketing	3
Term 3	Term 5	GE Course	General Education Social/Behavioral Science	3
		GE Course	General Education Humanities	3
Term 4	Term 6	AVM4180	Quality Assurance in Aviation	3
		AVM4540	Aviation Finance	3
		AVM4516	Domestic Aviation Operations	3
	Term 7	AVM3030	Customer Relations in Aviation	3
Term 5	Term 8	AVM3600	Aviation Human Resource Management	3
		AVM4160	Aviation Planning	3
	Term 9	AVM4170	Aviation Project Management	3
		AVM3630	Employee Relations in Aviation	3
Term 6	Term 10	GE Course	General Education Science	3
		GE Course	General Education Science Lab	1
		GE Course	General Education Wellness	2

Total Program Credit Hours

60

Notes: Many courses have 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. *MAC1105C is a 5-credit course. Students who register for this course must see an advisor to discuss their academic plan.

This is only a <u>recommended</u> course sequence. Students are strongly encouraged to meet with an <u>advisor</u> to create a personalized educational plan.

CHOOSE YOUR COURSES

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PROGRAM HIGHLIGHTS



CREDIT FOR PRIOR LEARNING

Accelerate your path to completion with these options:

- Credit by exam
- Earned industry certifications
- **Prior Learning Assessment**
- And much more...



RELATED INDUSTRY CERTIFICATIONS

Upon completing this program, graduates will be eligible to sit for the following industry certifications/licenses:

Federal Aviation Administration Restricted Privileges Airline Transport Pilot (R-ATP).



GET AN INTERNSHIP

After completing your first year of coursework make sure to visit the Career Center for internship opportunities that help you take your career to the next level! Also, explore hundreds of career videos and career profiles through Virtual Job Shadow!

Get an Internship Virtual Job Shadow Tool



MEDIAN WAGE AND JOB GROWTH OUTLOOK

Broward College has Career Insight. It is designed to help you find a good career by providing the most current local data on wages, employment, job postings, and associated education and training.



FUND YOUR EDUCATION

This program is Financial Aid eligible. Scholarships may be available.

GET STARTED TODAY!

START APPLICATION











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