



BS IE DEGREE PROGRAM

Department of Industrial Engineering and Management Systems



Dr. Waldemar Karwowski
Pegasus Professor and Chair

7th Annual Broward College Latin American Conference
International University of Santa Cruz
Santa Cruz, Bolivia
April 18, 2016



WHAT IS THE UNIVERSITY OF CENTRAL FLORIDA?

- The University of Central Florida just celebrated its 52st year in Orlando, the most visited city in USA (100 million visitors in 2016)
- Second largest university in the USA
 - ✓ Official 2015-2016 year enrollment: 63,000+
 - ✓ 2018 new UCF Downtown Campus: additional 10,000 students
- Over 90 baccalaureate degrees



UCF BACHELOR OF SCIENCE IN INDUSTRIAL ENGINEERING AT THE CENTER FOR GLOBAL EDUCATION, USIL IN LIMA PERU



UNIVERSITY OF CENTRAL FLORIDA



UCF BS IN INDUSTRIAL ENGINEERING THE CENTER FOR GLOBAL EDUCATION, USIL

UCF's first international dual Bachelor of Science in Industrial Engineering (BS IE) program at the Universidad San Ignacio de Loyola, Lima, Peru

1st UCF-UCF BS IE cohort will graduate on August 6th, 2016

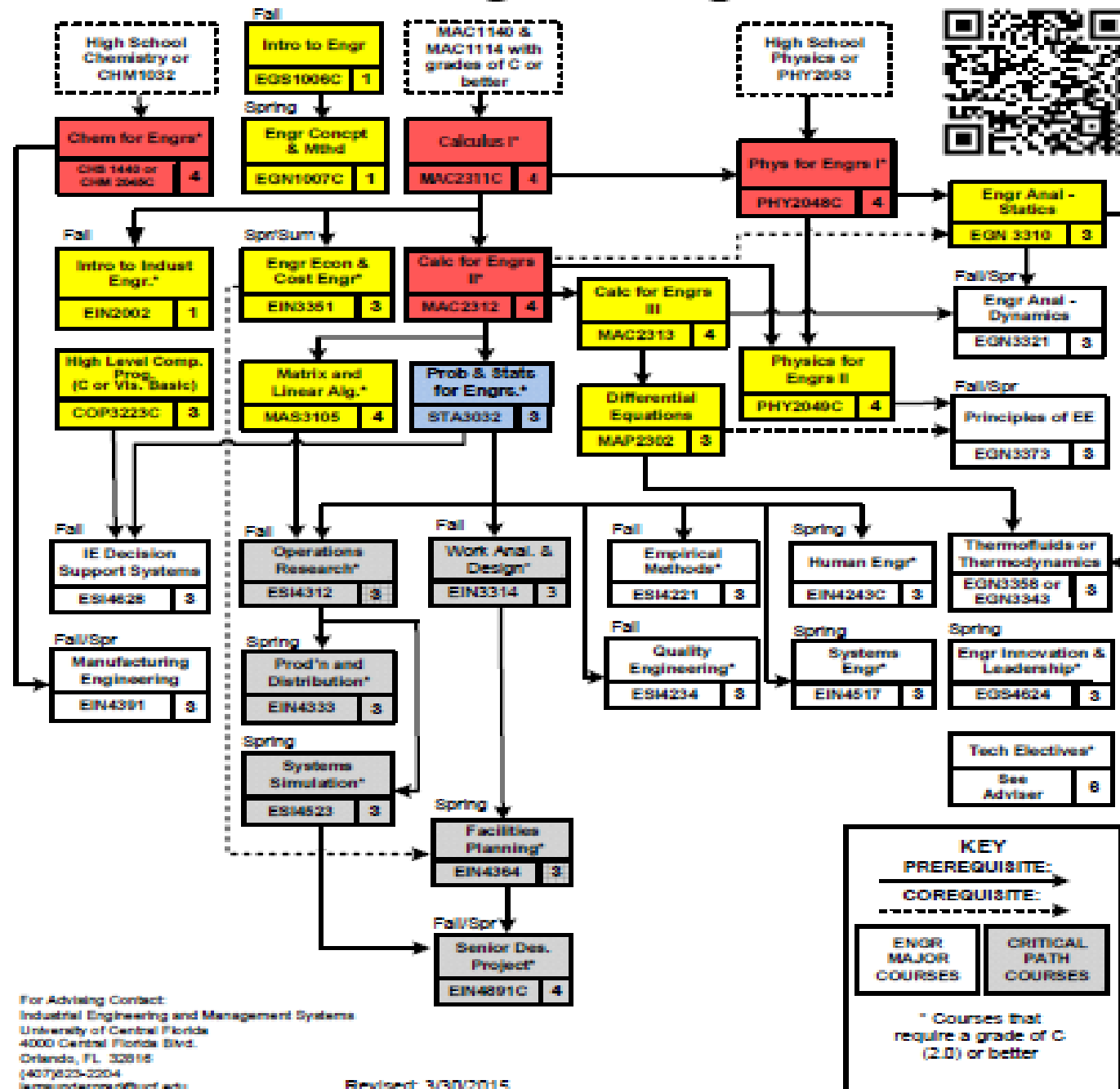




THE BS-IE PROGRAM AT UCF LARGE & OF HIGH QUALITY

- ❑ Accredited by ABET
- ❑ Under review by SACSCOC (2016)
- ❑ 9th largest full-time enrollment and 10th most degrees granted among all accredited BSIE programs (~120)
- ❑ Growth of ~ 200% since 2008 (500 BS IE students in 2016).
- ❑ Very strong internship program
(Lockheed-Martin, Siemens, Harris, Disney, Universal, Mitsubishi, Publix, Kennedy Space Center NASA, etc.) with many more opportunities every year
- ❑ All IE courses all require a “C” or better to pass
- ❑ Overall student GPA average approx. = 3.0

Industrial Engineering 2015-2016



BS IE PROGRAM REQUIREMENTS AT UCF

AA degree from Broward College satisfies all General Education requirements in state of Florida:

- Students should have at a minimum of “C” or better:
 - Chemistry for Engineers CHM 2045C (4hrs)
 - Calculus I MAC 2311C (4hrs)
 - Calculus II MAC 2312 (4 hrs)
 - Physics I PHY 2048C (4 hrs)

BS IE PROGRAM REQUIREMENTS AT UCF

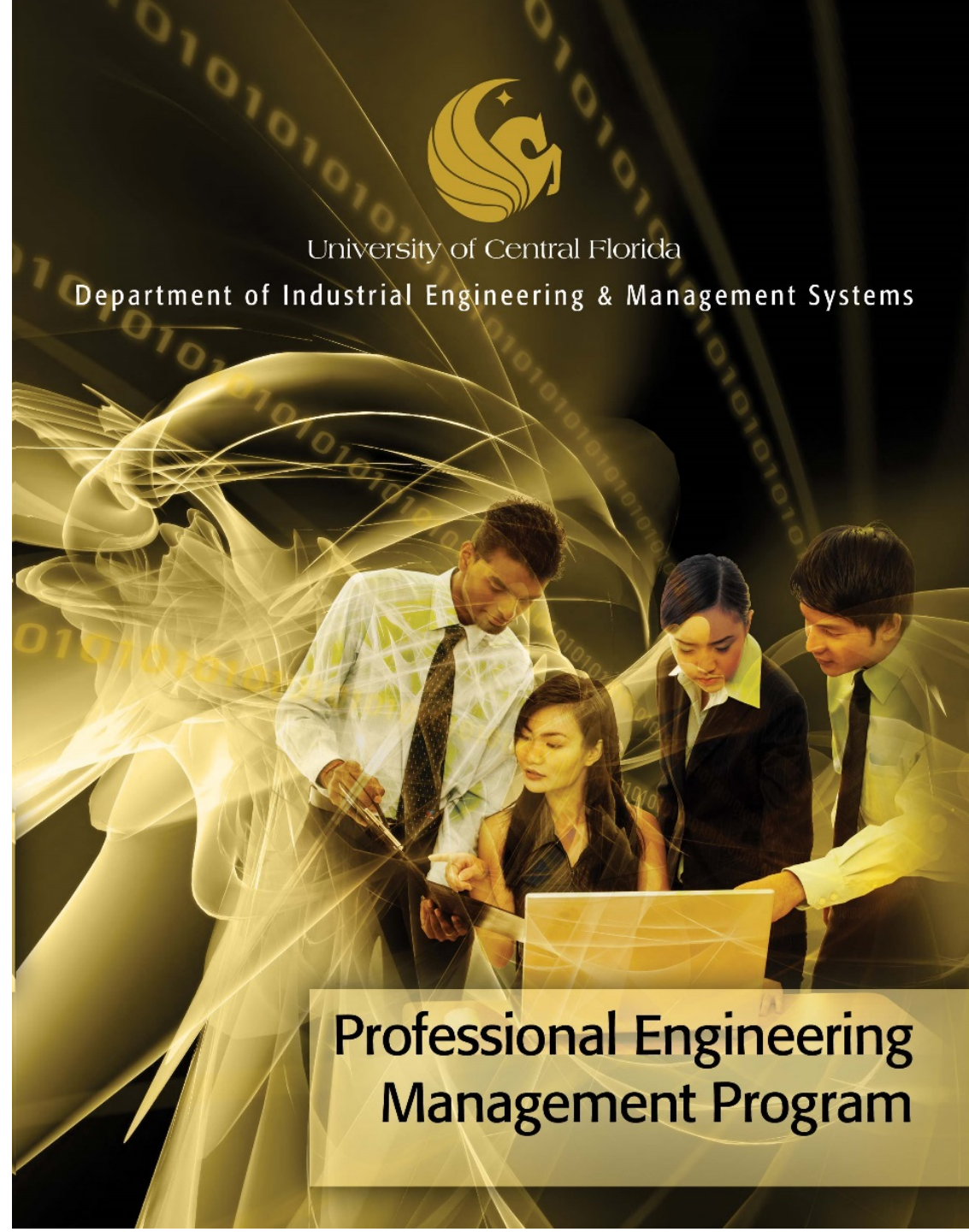
To transfer seamlessly into the UCF BSIE program at 3rd year, students also need:

- Calculus III MAC 2313 (4 hrs)
- Differential Equations MAP 2302 (3 hrs)
- Engineering Analysis / Statics EGN 3310 (3 hrs) with “C” or better
- Probability and Statistics STA 3032 (3 hrs), with “C” or better
- Matrix and Linear Algebra MAS 3105 (4 hrs) with “C” or better
- Programming (C , C++, Java, VBA or other significant programming course) (3hrs) with “C” or better
- Physics II PHY2049 (4 hrs)

Professional MS in Engineering Management Program: P-MSEM

New cohort of 36 students to start in Fall 2016

Dr. Tim Kotnour,
Professor and Program Director



UCF ON-LINE EDUCATION

Coming up in Fall 2016

New fully on-line MS Track in Healthcare Systems Engineering



Dr. Rick Biehl, Program Director

MASTER OF SCIENCE IN HEALTHCARE SYSTEMS ENGINEERING

Earn your MS degree online in two years

UCFOnline
ucfonline.com/HSE

COURSE OF STUDY

HSC 6636	Issues in the Health Professions
EIN 6551	Systems Engineering
EIN 6357	Advanced Engineering Economics
EIN 5117	Management Information Systems
ESI 5359	Risk Assessment & Management
ESI 5219	Engineering Statistics
ESI 5531	Discrete Systems Simulation
ESI 6nnn	IE Analytics in Healthcare
ESI 6224	Quality Management
EIN 5140	Project Engineering (Capstone)

QUICK FACTS

- Fully online degree
- 2 year completion
- 7½ week classes
- Admission three times per year
 - Fall – June 15
 - Spring – November 15
 - Summer – March 15
- Requires 30 credit hours (10 courses)
- No GRE requirement
- Wide range of professional and research opportunities



Our healthcare systems are changing – globally, nationally, regionally, and locally – and much of that change is happening without the support of systems engineers who understand the issues associated with massive systemic change involving a diversity of people and organizations. Many healthcare professionals have significant expertise in their respective healthcare occupations, but often lack expertise in continuously improving the design of systems, processes, or products. A May 2014 study¹ recommended that “the United States build a healthcare workforce that is equipped with essential systems engineering competencies that will enable system redesign.”

The deadline to apply for **Fall 2016** is **June 15**

FOR MORE INFORMATION:

CONTACT A SUCCESS COACH

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Program Director
Department of Industrial Engineering
& Management Systems
Richard.Biehl@ucf.edu



PROGRAM OVERVIEW

This web-based online masters program in Healthcare Systems Engineering is designed to attract students with a variety of educational backgrounds and keen interest in working in the healthcare field. It provides existing healthcare practitioners, and individuals with an engineering background who are interested in joining the rapidly expanding field of healthcare systems, with models and tools such as quantitative analysis, systems modeling, and computer simulation for effective decision-making in healthcare organizations and systems.

Translating a specific design into an organizational or physical reality in the most effective manner, and with highest possible quality, is the focus of the Industrial Engineering and Management Systems field. This program is tailored to meet the needs of a broad range of working professionals interested in leading healthcare systems engineering and management initiatives. It is the first program of its kind, with no other university currently offering a similar program fully online.

¹ Better Health Care And Lower Costs: Accelerating Improvement Through Systems Engineering, May 2014, President's Council of Advisors on Science and Technology (PCAST)

UCF BACHELOR OF SCIENCE IN INDUSTRIAL ENGINEERING

BE GLAD TO DISCUSS FUTURE OPPORTUNITIES



UNIVERSITY OF CENTRAL FLORIDA



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WHAT ARE UCF'S MAIN GOALS?

1. *Offer the best undergraduate education in Florida*
2. *Achieve international prominence in key areas of graduate study and research*
3. *Provide international focus to curricula and research*
4. *Become more inclusive and diverse*
5. *Be America's leading partnership university*



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