

# SYSTEMS ENGINEERING

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The Systems Engineering program is designed for engineers and other professionals who are responsible for defining, planning, managing and supporting large integrated systems. The program consists of four graduate core courses and one graduate elective course.

The value of acquiring a systems engineering certificate includes:

- Formal recognition of the participant's systems engineering capabilities
- Career advancement assistance
- A portable systems engineering designation that is recognizable across industries
- Professional development as a systems engineer, in addition to demonstrating a commitment to personal development
- The Systems Engineering certificate program also provides students with a strong foundation to pursue Project Management Professional® (PMP®) certification and/or the International Council on Systems Engineering (INCOSE) multi-level professional certification program.

(15 credit hours)

*Certificate available on Campus and via Distance Learning*

**Admission Requirements:** An undergraduate degree in engineering, business, a physical science, computer science, or applied mathematics, with a GPA of 3.0 or higher. A probability & statistics course is a prerequisite for this certification program.

## Program Requirements

### Required Courses

Code	Title	Credit Hours
EMGT 505	Systems Engineering	3
IMSE 501	Human Factors & Ergonomics	3
or IMSE 577	Human-Computer Interaction	
IMSE 515	Fundamentals of Program Mgt	3
IMSE 561	Tot Qual Mgmt and Six Sigma	3

### Additional Coursework

Code	Title	Credit Hours
Complete 1 elective course from the following (3 credit hours):		
AENG 545	Vehicle Ergonomics I	3
AENG 598	Energy Sys for Auto Vehicles	3
CIS 553	Software Engineering	3
EMGT 580	Mgt of Prod and Proc Design	3
IMSE 516	Project Management and Control	3
IMSE 546	Safety Engineering	3
IMSE 5655	Supply Chain Management	3
IMSE 567	Reliability Analysis	3