

Overview

Through the completion of the Systems Engineering Certification, students will understand how to define customer needs early in the development cycle; document requirements and proceed with design synthesis and system validation, while considering the complete problem. This specialized certificate consists of four online courses and a capstone experience offered by the department of industrial engineering at the Ira A. Fulton School of Engineering.

Processes for Students

Software Engineering Certification

During the MBA, you will take five courses in a lock-step (sequential) format as outlined below. These courses are applicable to the MEng degree, and also make up your MBA elective requirements. Each semester, the School of Engineering will determine which class you will register for.

Fall Year One	Spring- Year One	Summer- Year One
IEE 598 – Intro to Systems Engineering	IEE 530 Enterprise Modeling	IEE 552 Strategic Technology Planning
Fall- Year Two	Spring- Year Two	
IEE 545 – Simulation Stochastic Process	IEE 593 – Systems Applied Project	

*As these courses are offered through the Ira A. Fulton School of Engineering, please visit the [Systems Engineering Concurrent Degree web site](#) for the most current list of applicable classes. Your MBA Electives Coordinator will notify you before each semester as to what class you will register for.

Steps:

- Once admitted to the program, you should be contacted by the School of Engineering who will let you know who your Faculty Advisor will be.
 - Please make a note of it as you will reference your Advisor several times during the program.
 - If you do not hear from them by the start of your program, please contact your MBA Electives Coordinator who can obtain this information for you.
- Several weeks before each semester- remembering that these courses operate on a semester, rather than trimester basis- you will receive an e-mail from the MBA Electives Coordinator letting you know when it is time to register for your next certificate course, and also providing the course information.
 - The courses that are offered each semester may vary and are determined by the Fulton School of Engineering so you will need that e-mail to know which class to register for.
- Shortly after the e-mail from the Electives Coordinator, you will receive another e-mail what materials to collect from the ASU Bookstore (if any).

- Material costs are included in your W. P. Carey MBA program fees, so you do not incur out-of-pocket costs for materials.

For technical questions about certificate courses or to understand the offerings a little more in depth, please contact the School of Engineering directly:

Octavio Heredia

Global Outreach and Extended Education

Ira A. Fulton School of Engineering

PH: (480) 965-9273

Octavio.Heredia@asu.edu

MEng Degree

Once you have completed the five courses, you then only need an additional nine credit hours (three classes) to complete the MEng portion of the concurrent degree. From this point, you will work with the School of Engineering directly. Options for your courses may include**:

- IEE 505 - Database Structures
- IEE 530 - Enterprise Modeling
- IEE 545 - Simulating Stochastic Systems
- IEE 552 - Strategic Technology Management (management course meeting MEng requirements)
- IEE 572 - Design of Experiments (math course meeting MEng requirements)
- IEE 574 - Intro to Operations Research
- IEE 512 - Introduction to Financial Engineering
- IEE 598 - Rapid New Product Development
- IEE 598 - Introduction to Systems Engineering
- CSE 563 - Software Requirements and Specifications
- CSE 566 - Software Project, Process and Quality Management
- CSE 591 - Modeling and Simulation Theory and Application
- CSE 598 - Software Analysis and Design
- EEE 581 - Filtering of Stochastic Processes
- EEE 582 - Linear System Theory
- EEE 585 - Digital Control Systems
- EEE 586 - Nonlinear Control Systems
- EEE 587 - Optimal Control Systems

Costs for the Program

Certificate Courses

Generally speaking, you pay the same per class for the technical certificate program courses as you would for “regular” MBA electives. The one major difference, however, is that you will need to take a summer course in the lock-step program and those cost a bit more.

As you may know, you pay two sets of costs for courses: (1) W. P. Carey fees/tuition & (2) ASU fees/tuition. ASU Graduate tuition caps at 7 credit hours and you are registered for 9 hours of core each semester. So, when you take electives in fall/spring you only pay W. P. Carey tuition/fees: \$625/credit hour is the W. P. Carey tuition/fee, hence each elective costs \$1875 in fall/spring. In the summer, however, you are not registered for core classes and are thus subject to paying the ASU tuition as well as the W.P. Carey tuition. For summer 2010, a three credit class incurred roughly \$1624 in graduate summer ASU tuition. ASU [Tuition and Fees Schedule](#)

MEng Courses

Once you complete the MBA, you are no longer charged W. P. Carey tuition/fees for courses, but will be charged program fees by the Fulton School of Engineering. Program fees for 2009-2010 academic year are \$1206 per course (three credits). You would also be subject to ASU tuition.