Engineering Management

Engineering Management

#1 Undergraduate EM Program (ASEM 2005-2010)

All Systems Go!
Mahan Hall
West Point, NY 10996
www.dean.usma.edu/se

Department of Systems Engineering

Engineering Management: *#1 Undergraduate EM Program in the Nation (ASEM 2005-2010)*

Engineering management is a specialized form of management that applies management science to the unique and technical nature of engineering.

EM focuses on the convergence of engineering, technology and business and requires individuals to work in a multidisciplinary arena with a broad background that bridges the technical aspects of engineering with the art of management.

The EM program is accredited by the Engineering Accreditation Commission of ABET: www.abet.org.

The EM Program. A sample EM 8TAP:

Yearling Year	Cow Year		Firstie Year	
Spring	Fall	Spring	Fall	Spring
SE301 Intro to SE	EM384 Analytical Methods for EM	SM421 Systems Acquisition Mgt.	EM402 Capstone Design I	EM403 Capstone Design II
	EM381 Eng. Economy	SE375 Statistics for Engineers	EM411 Project Mgt.	EM420 Production Operations Mgt.
	Eng. Track Course (I)	Eng. Track Course (II)	Eng. Track Course (III)	Approved Breadth Elective
	AE Elective I	AE Elective II	AE Elective III	AE Elective IV
				SE400 Professional Eng. Seminar*

Engineering Tracks - choose one:

Civil	Electrical	Environmental
MC300 Fund. of Eng. Mech. & Design	EE302 Intro to Electrical Eng. I	EV301 Env. Science for Engrs. & Scientists
MC364 Mechanics of Materials	EE360 Digital Computer Logic	EV385 Intro to Env. Eng.
MC311 Thermal-Fluid Systems I	EE362 Intro to Electronics	EV481 Water Resources Plan & Design

Mechanical	Nuclear	General
MC300 Fund. of Eng. Mech. & Design	NE300 Nuclear Reactor Analysis	MC300 Fund. of Eng. Mech. & Design
MC306 Dynamics	MC311 Thermal-Fluid Systems I	EE301 Fund. of Electrical Eng.
MC311 Thermal-Fluid Systems I	NE355 Advanced Nuclear Reactor Design	MC311 Thermal-Fluid Systems I

*SE400 Professional Eng. Seminar (1 credit) is taken second semester of Firstie Year to prepare for the Fundamentals of Engineering Exam.

Areas of Emphasis (AE) - choose one from each:

Information & Decision Systems	Simulation Elective	Personnel & Org. Mgt.	Finance
SE370 Computer Aided SE	EM481 Systems Simulation	MG382 Human Resource Mgt.	SS394 Financial Accounting
SE385 Decision Analysis	SM484 System Dynamics Simulation	PL479 Leading Organizations Through Change	SS494 Principles of Finance
EM482 Supply Chain Eng. & Info Mgt.	SE485 Combat Modeling		

What Our Alumni Say...

"EM provided me with a versatile skill set that I have relied upon in my military and civilian careers. What sets it apart, is its emphasis on 'thinking big picture'. The ability to make decisions based on an understanding of how multiple technologies, organizations, or social groups interact is invaluable whether leading combined arms operations in Iraq and Afghanistan, gaining an appreciation for the local complexities in the midst of a counterinsurgency, or directing interdisciplinary research programs at a civilian university."

-**Nicholas Armstrong EM '00**, *National Security Research Fellow, Institute for National Security and Counterterrorism, Maxwell School of Syracuse University*

REAL WORLD PROBLEMS. REAL WORLD CLIENTS. REAL WORLD APPLICATION.

Establish Your Professional Qualifications.

- Earn an ABET accredited degree
- Earn your degree with honors from the top EM program in the nation
- Earn your Project Management Professional (PMP) certification
- Earn your Fundamentals of Engineering (FE) license
- Earn your Lean Six Sigma Green Belt

Make a Decision.

Join Systems. Contact us today to learn more:

EM Program Director
LTC Kenny McDonald - kenneth.mcdonald@usma.edu
2014 Academic Advisor
CPT Christy Licklider - christy.licklider@usma.edu

www.dean.usma.edu/se