

ENGINEERING SYSTEMS MANAGEMENT - CERTIFICATE

This program provides engineers with essential systems management skills, addressing the industry's demand for expertise in complex engineered systems and management principles.

In many areas of government and industry there is a significant need for undergraduate engineering students that possess the requisite knowledge and skill sets pertaining to engineering systems management in addition to their basic engineering discipline. With the rapid acceleration of technology through innovation on a global basis, industries recognize the need for young engineers who possess base line knowledge in areas of management and an understanding of the system level of complex engineered systems. This certificate program includes a set of courses to assure students develop this knowledge and skill set.

Program Requirements

Code	Title	Semester Credit Hours
ISEN 440	Systems Thinking	3
ISEN 442	Organizational Systems	3
or ISEN 411	or Engineering Management Techniques	
Technical Elective		
Select one of the following:		3
AERO 426	Space System Design	
CHEN 461	Process Dynamics and Control	
CVEN 402/	Engineered Environmental Systems	
EVEN 402		
ECEN 420	Linear Control Systems	
ECEN 460	Power System Operation and Control	
ISEN 414	Total Quality Engineering	
MEEN 441	Design of Mechanical Components and Systems	
PETE 325	Petroleum Production Systems	
Business Elective		
Select one of the following:		3
ACCT 209	Survey of Accounting Principles	
ISTM 209	Business Information Systems Concepts	
MGMT 209	Principles of Business Regulations and Law	
MGMT 309	Survey of Management	
Total Semester Credit Hours		12

Must make a grade of C or better in each course used towards certificate.