

ENGINEERING SYSTEMS MANAGEMENT - CERTIFICATE

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	
Select two of the following:		6
ACCT 209	Survey of Accounting Principles	
AERO 426	Space System Design	
CHEN 461	Process Dynamics and Control	
CVEN 402/ EVEN 402	Engineered Environmental Systems	
ECEN 420	Linear Control Systems	
ECEN 460	Power System Operation and Control	
ISEN 414	Total Quality Engineering	
ISTM 209	Business Information Systems Concepts	
MEEN 441	Design of Mechanical Components and Systems	
MGMT 209	Principles of Business Regulations and Law	
MGMT 309	Survey of Management	
PETE 325	Petroleum Production Systems	
Total Semester Credit Hours		12

Students must make a grade of C or better in all courses.