



Masters of Science in Industrial Engineering (MIENG)

First Year

Fall Semester

Code	Title	Credits	Prerequisites	Corequisites
ENGG550	Engineering Project Management and Control	3		
IENG515	Organizational Environments	3		
IENG510	Manufacturing Systems	3		
EENG500L	Industrial Systems Automation and Control Lab	1		EENG500
EENG500	Industrial Systems Automation and Control	3		EENG500L
Total		13		

Spring Semester

Code	Title	Credits	Prerequisites	Corequisites
IENG551L	Industrial and Manufacturing Workshop	1	IENG510	
IENG560	Infrastructure and Facilities Management	3	IENG510	
IENG570	Occupational Safety Engineering	3		
IENG555	Advanced Concepts in Quality Improvement	3		
IENG565	Industrial Waste Management	3	IENG515	
Total		13		

Second Year

Fall Semester

Code	Title	Credits	Prerequisites	Corequisites
	Elective	3		
	Elective	3		
IENG695A	Master Thesis Project (Part I)	3	IENG570 - IENG565 - IENG560 - IENG555 - IENG550L - IENG515 - IENG510	
IENG615	Operations Research	3		
IENG550L	Industrial Engineering Field Visit	1		
Total		13		

Spring Semester

Code	Title	Credits	Prerequisites	Corequisites
	Elective	3		
	Elective	3		
IENG695B	Master Thesis Project (Part II)	3	IENG695A	
IENG650L	Industrial Engineering Graduate Seminar	1		
ENGG650	Engineering Profession & Ethics	3		
Total		13		

Major Elective Courses

Code	Title	Credits	Prerequisites	Corequisites
EENG601	Advanced Systems Automation	3	EENG500	
ENGG500	Engineering Economics	3		
ENGG510	Methods of Optimization	3		IENG615
ENGG600	Engineering Entrepreneurship	3	IENG515	IENG695A
IENG610	Selected Topics in Industrial Engineering	3		

IENG625	Data Analysis and Decision Models	3	ENGG500	
IENG630	Financial Engineering	3		
IENG635	Food Engineering	3	IENG510	
IENG640	Fundamentals of Petroleum and Petrochemical Engineering	3	IENG570	
IENG655	Simulation of Production and Service Systems	3		
IENG665	Oil and Gas Production Logistics	3	IENG640	
IENG670	Advanced Engineering Economic Analysis	3		
IENG675	Computational Optimization	3		
IENG680	Food Manufacturing Processes	3	IENG635	