

Curriculum Structure

Department of Industrial Engineering and Management

	1 st grade		2 nd grade		3 rd grade		4 th grade		Master students and PhD students			
	Fall SEM	Spring SEM	Fall SEM	Spring SEM	Fall SEM	Spring SEM	Fall SEM	Spring SEM	Fall SEM		Spring SEM	
Management	Economics (I) /3	Economics (II) /3	Financial Management/3	Management /3	Service Learning I /0	Service Learning II /0	Industrial Practice /2	Lean Enterprise Management/3	Seminar(I) /1	New Product Design /3	Seminar(II) /1	Business Competitive Analysis/3
	Accounting (I) /3	Accounting (II) /3		Logistics Management /3		Independent Study (I) /3	Independent Study (II) /3					Business Intelligence/3
	Intro. to Industrial Engineering and Management /3	Mentor's Hours /0		Principles of Marketing /3		Human Resource Management /3	Global Logistics Management/3					Innovation and Business Process Reengineering /3
	Mentor's Hours /0											
Decision Science	Calculus I /4	Calculus II /4	Statistics (I) /3	Statistics (II) /3	Facility Planning /3	Engineering Economy/3		Conflicts and decisions in information society /3	Linear Programming /3	Fuzzy Sets and Its Applications /3	Multiple Criteria Decision Making /3	Reliability Analysis /3
		Linear Algebra /3	Operations Research (I) /3	Operations Research (II) /3								Stochastic Programming /3
												Stochastic Processes /3
												Statistical Inference /3
Manufacturing Engineering and Human Factors Engineering			Engineering Graphics/1	Work Study /3	Quality Management/3		Cognitive and Organizational Ergonomics /3	Ambient Intelligence /3	Process Capability Analysis /3	The Theory and Application of Scheduling /3	Supply Chain Management /3	Total Quality Management /3
			Manufacturing Processes /3									Queueing Theory with Applications /3
Computer Science	Intro. to Computer Science /3	Programming /3				Simulation /3		Genetic Algorithm and Applications in Management Science/3	Data Mining /3	Big Data Analytics /3	Data Science Applications /3	Special Topic on Algorithms in Management Science/3
						Database Management /3						Management Information Systems Analysis and Design/3

Required Elective Professional Core Course List for PhD Students