

IE Program Electives (Choose 5)

IE Courses in Advanced Manufacturing, Human Factors and Ergonomics, or Operations Research (pick at least 2 courses)		IE Courses in Systems Engineering and Engineering Management (pick at least 1 course)		Non-IE STEM courses from other engineering majors or STEM fields relevant to engineering (pick at least 1 course)		Business and professional courses from non-STEM fields that support professional practice in IE careers	
Advanced Manufacturing		IE 4300	Entrepreneurial Product Development Engineering	Economics	only 2070, 3710, 5000, 5090	ACCT 2150	Legal Environment of Business
IE 4440/5440	Micro/Nano Scale Additive Printing	IE 4500	Technical Sales for Engineers I	Engineering	All 2000+ level courses in Engineering Except: ABE 2010; AER E 2650,2940,3010; CE 2060, 3060; CH E 2020,2040,2050,2900,3910,3920; EE 2010,2320,2850,2940,3940,4420; ME	ACCT 2840	Financial Accounting
IE 4450/5450	Additive Manufacturing and Rapid Production Methods	IE 4520	Introduction to Systems Engineering & Analysis			ACCT 2850	Managerial Accounting
IE 4460/5460	Geometric Variability in Manufacturing	IE 4700/5700	Systems Engineering and Project Management			AFAS 3410	Air Force Leadership Studies I
IE 4470/5470	Biomedical Materials Manufacturing and Design	IE 4810/5810	e-Commerce Systems Engineering			ECON 2070	Applied Economic Optimization
IE 4490/5490	Computer Aided Design and Manufacturing	IE 5600	Engineering Risk Analysis			ECON 2300	Farm Business Management
IE 5880	Information Systems for Manufacturing	IE 5610	Total Quality Management	Biology	All 2000+ level courses	ECON 2340	Small Business Management
Human Factors and Ergonomics		IE 5630	Engineering and Systems Management			ECON 3200	Labor Economics
IE 4370/5370	Reliability and Safety Engineering	IE 5640	Decision Analysis	Physics	All 2000+ level courses Except: 2310 & 2310L, 2320 &2320L, 2410	ECON 3300	Advanced Farm Business Management
IE 4720/5720	Design and Evaluation of Human-Computer Interaction	IE 5820	Enterprise Modeling and Integration			ECON 3340	Entrepreneurship in Agriculture
IE 5710	Occupational Biomechanics	IE 5850	Requirements and Architecture Engineering	Chemistry	All 2000+ level courses Except: 5550	ECON 3360	Agricultural Selling
IE 5760	Human Factors in Product Design					Math	All 2000+ level courses Except: 5550
IE 5770	Human Factors			ECON 3440	Public Finance		
IE 5780X	Human-Centered Design and Manufacturing			Math	All Math at 2010 or above except: 2020, 2650, 2900, 2900H, 2970, 3970, 3980, 4900, 4900H, 4910, 4920, 4950, 4970, 5900, 5910, 5920, 5950, 5990. Conditions: only one of 2070 or 3170, or one of 2660,2670,2690 may be applied to graduation. Experimental courses approved: 2020Y	ECON 3550	International Trade and Finance
Operations Research and Analytics						ECON 3710	Introductory Econometrics
IE 4030/5030	Introduction to Sustainable Production Systems					ECON 4160	Industrial Organization
IE 4050/5050	Advanced Engr Economy for Complex Engr Projects					ECON 4310	Managerial Economics
IE 4200/5200	Engineering Problem Solving with R			ECON 4370	Commodity Marketing and Risk Management		
IE 4830/5830	Data Mining			Statistics	All 2000+ level courses Except: 2020,2260,2310, 3050,3360	ECON 4550	International Trade
IE 4870/5870	Big Data Optimization					ECON 4570	International Finance
IE 5080	Design and Analysis of Allocation Mechanisms			Computer Science	All 2000+ level courses	ECON 5320	Managerial Economics for the Global Organization
IE 5100	Network Analysis					ECON 5710	Intermediate Econometrics
IE 5130	Analysis of Stochastic Systems					FIN 4500	Analytical Methods in Finance
IE 5140	Production Scheduling					MGMT 3100	Entrepreneurship and Innovation
IE 5190	Simulation Modeling and Analysis					MGMT 3130	Feasibility Analysis and Business Planning
IE 5330	Reliability					MGMT 3700	Management of Organizations
IE 5340	Linear Programming					MGMT 3710	Organizational Behavior
IE 5410	Inventory Control and Production Planning					MGMT 4140	International Management
						MGMT 4710	Personnel and Human Resource Management
						MGMT 4720	Management of Diversity
						MIS 3010	Management Information Systems
						MKT 3400	Principles of Marketing
						MKT 4420	Sales Management
						SCM 3010	Supply Chain Management
						SCM/MIS 4500	Enterprise Resource Planning Systems in Supply Chain
						SCM 4610	Principles of Transportation
						SCM 4660	Global Trade Management

All courses must be at least 3 credits

An experimental course not on these

Independent study, undergraduate

All courses must be at least 3 credits

An experimental course not on these

Independent study, undergraduate