

Industrial and Manufacturing Engineering Department

Tentative Course Offerings (AY 2025 - 2026) (Subject to change)

Course No.	Units	IE Rq. (22-26)	MfgE Rq. (22-26)	Description	Fall 2025	Winter 2026	Spring 2026
IME 101	1	R	R	Introduction to Industrial and Manufacturing Engineering	4		
IME 141	1	R	R	Manufacturing Processes: Net Shape	6	8	9
IME 142	2		R	Manufacturing Processes: Materials Joining	7	8	9
IME 143	2		ME	Manufacturing Processes: Material Removal	4		3
IME 144	4	R	R	Introduction to Design and Manufacturing	8	5	4
IME 145	1		ME	Subtractive Manufacturing Processes for Mechanical Designs I		10	
IME 146	1		ME	Subtractive Manufacturing Processes for Mechanical Designs II			10
IME 156	2	R	R	Basic Electronics Manufacturing	2	2	2
IME 200				Special Problems for Undergraduates	X	X	X
IME 212	4	R		Introduction to Enterprise Analytics	X	X	
IME 223	4	R	R	Process Improvement Fundamentals	2	X	X
IME 244	2		R	Intermediate Design and Manufacturing		X	
IME 301	4	R		Operations Research I	X	X	
IME 303	4			Project Organization and Management	X		X
IME 305	4	R		Operations Research II	X	X	X
IME 312	4	R		Data Management and System Design	X	X	X
IME 314	3			Financial Decision Making for Engineers	X		X
IME 315	3	R	R	Financial Decision Making for Engineers	2	3	X
IME 319	3	R		Human Factors Engineering	X	X	X
IME 320	3			Human Factors and Technology			X
IME 326	4	R		Engineering Test Design and Analysis	X	X	
IME 327	4		R	Test Design and Analysis in Manufacturing Engineering	X	X	X
IME 330	4		R	Fundamentals of Manufacturing Engineering	X	2	
IME 331	4			Intermediate Metal Casting			
IME 335	4		R	Computer-Aided Manufacturing I	X	X	X
IME 336	4			Computer-Aided Manufacturing II			
IME 342	4		R	Manufacturing Systems Integration		X	
IME 356	4		R	Manufacturing Automation	2		X
IME 372	4	R		Applications of Enterprise Analytics	X	X	X
IME 400				Special Problems for Advanced Undergraduates	X	X	X
IME 401	1			Sales Engineering			X
IME 403	3			Software Product Management		X	
IME 408	3			Systems Engineering			
IME 409	3			Economic Decision Systems			

IME 410	4			Production Planning and Control Systems	X	X	X
IME 417	4			Supply Chain and Logistics Management		X	X
IME 418	4		R	Product and Process Development		X	
IME 420	4	R		Simulation		X	X
IME 424	4			Industrial Engineering in Healthcare		X	
IME 428	4			Engineering Metrology	X		
IME 429	1	R		Ergonomics Laboratory	X	X	X
IME 430	4	R	R	Quality Engineering	X	X	X
IME 432	4			Additive Manufacturing		X	X
IME 441	1			Engineering Supervision I	X	X	X
IME 442	1			Engineering Supervision II	X	X	X
IME 443	4	R		Facilities Planning and Design	X	X	X
IME 450	4		R	Manufacturing Process and Tool Engineering		X	X
IME 456	4			The Industrial Internet of Things		X	
IME 460	3			Introduction to Value Chain Analysis			X
IME 481	2	R	R	Senior Design Project I	4		
IME 482	2	R	R	Senior Design Project II		4	
IME 483	2	R	R	Senior Design Project III			4
IME 495				Cooperative Education Experience	X	X	X
Graduate		MS EMG	MS IE				
IME 500				Individual Study	X	X	X
IME 503	4	R	R	Applied Statistical Methods in Engineering	X		
IME 507	2	R	R	Graduate Seminar	X		
IME 510	4			Systems Engineering I			X
IME 520	4	R		Advanced Information Systems for Operations			X
IME 527	4			Design of Experiments			
IME 535	4			Change Management for Engineering Leaders			
IME 541	4			Advanced Operations Research			X
IME 543	4			Applied Human Factors			X
IME 544	4	R		Advanced Topics in Engineering Economy		X	
IME 545	4			Advanced Topics in Simulation			
IME 546	4			Large-Scale Optimization			
IME 549	4			Network Analysis and Optimization			
IME 556	4	R	R	Technological Project Management			X
IME 565	4			Predictive Data Analytics for Engineers	X		
IME 577	4	R		Engineering Entrepreneurship	X	X	
IME 580	4	R	R	Manufacturing Systems		X	
IME 596		R		Graduate Project/Internship	X	X	X
IME 599			R	Thesis	X	X	X