

IME Long Term Schedule and Concentrations

Course Number	Course Name	Prerequisites	Co-requisites	Conc	2013-2014			2014-2015			2015-2016			2016-2017			Schedule
					FL	SP	SU	FL	SP	SU	FL	SP	SU	FL	SP	SU	
IME 222	Engineering Graphics	Math 123 or equiv.			x	x	x	x	x	x	x	x	x	x	x	FL/SP/SU	
IME 254	Engineering Prob. Stat I	Math 243			x	x	x	x	x	x	x	x	x	x	x	FL/SP/SU	
IME 255	Engineering Economy	Math 242			x	x	x	x	x	x	x	x	x	x	x	FL/SP/SU	
IME 258	Mfg. Meth&Mat. I	Math 123			x			x			x			x		FL/SP	
IME 452	Work Systems	IME 254, IME 255 or Dept. Cons.				x			x					x		SP	
IME 524	Engineering Prob. Stat II	IME 254				x			x					x		SP	
IME 549	Industrial Ergonomics		IME 524 or Dept. Cons.			x			x					x		SP	
IME 550	Operations Research	Math 511	IME 254		x	x		x	x		x	x		x	x	FL/SP	
IME 553	Production Systems	IME 254	IME 255			x			x					x		SP	
IME 554	Stat. Quality Control		IME 524	M, S		x			x					x		SP	
IME 556	Information Systems	IME 452, ECE 138		S	x			x			x			x		FL	
IME 557	Safety Engineering	IME 254		E, M												As demanded	
IME 558	Mfg Methods and Materials II	IME 258, ME 250		M		x			x					x		SP	
IME 563	Facilities Planning and Design	IME550, IME452, IME258		M, S	x			X			X			X		FL	
IME 565	Systems Simulation	IME550, Programming	IME 524	M, S		x			x					x		SP	
IME 576	Composites Manufacturing	AE333 or D.C.		M	x			x			x			x		FL	
IME 590/690	Ind.&Mfg Engr. Design	IME 258 or D.C.			x	x		x	x		x	x		x	x	FL/SP	
IME 664	Engineering Management	IME254, IME255		S	x				x					x		3rd Semester	
IME 676	Aircraft Manufacturing and Assembly	IME 258		M			x			x				x		SU	
IME 724	Stat. Methods for Engineers	Math 243			x		x	x	x	x	x	x		x		FL/SU	
IME 731	Foundations of Optimization	IME 550		S												As demanded	
IME 740	Anal. of Decision Processes	IME 254, IME 255		S		x				X				X		3rd Semester	
IME 749	Ergonomics Assesment Methods	IME 549 or Inst. Cons.		E		x			X					X		SP	
IME 754	Reliability and Maintainability Engineering	IME524 or IME724		S		x			X					X		SP	

Concentrations

Engineering Systems (S), Ergonomics/human factors (E), or Manufacturing systems engineering (M).

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Course Number	Course Name	Prerequisites	Conc	Rotation												Schedule
				2013-2014			2014-2015			2015-2016			2016-2017			
				FL	SP	SU	FL	SP	SU	FL	SP	SU	FL	SP	SU	
IME 755	Design of Experiments	IME 524/IME 724 or Inst. Cons.	E, M, S		x			x			x			x		SP
IME 758	Anal. of Mfg Processes	AE 333	M				x				x					3rd Semester
IME 759	Intervention Strategies	IME 549 or Inst. Cons.	E													As demanded
IME 764	Systems Engineering and Analysis	IME 254, IME 255	S		x					x				x		3rd Semester
IME 767	Lean Manufacturing	IME 553	E, M, S	x			x			x				x		Alternate FL
IME 775	Computer Integrated Manufacturing	Programming, IME 558	M													As demanded
IME 778	Machining of Composites	AE 333 or Inst. Cons.	M													As demanded
IME 780U	Sustainable Life Cycle Thinking		S				x			x				x		FL
IME 783	Supply Chain Management	IME 550, IME 553, or Inst. Cons.	M, S		x			x			x			x		SP
IME 825	Enterprise Engineering	IME 553	S													As demanded
IME 835	Applied Forecasting Methods	IME 724, or Inst. Cons.	S													As demanded
IME 854	Quality Engineering	IME 554, or Inst. Cons.	S				x			x				x		Fall
IME 858	Non-linear Finite Element Analysis of Metal Forming	IME 758 or ME 639 or AE 722	M		x					x				x		3rd Semester
IME 864	Risk Analysis	IME 724	S													
IME 865	Modeling and Analysis of Discrete Systems	IME 724 and IME 553 or Inst. Cons.	M, S		x			x			x			x		SP
IME 877	Foundations of Neural Networks	IME 724 or Inst. Cons.	M, S				x			x				x		FL
IME 880K	Advanced Facilities Planning and Material Handling	IME 550 or Inst. Cons.	M, S													As demanded
IME 880O	System Dynamics		S													As demanded
IME 890	Independent Study	Inst. Cons.	E, S, M													As demanded
IME 930	Multiple Criteria Decision Making	IME 550	S													As demanded
IME 949	Work Physiology	IME 549	E													As demanded
IME 950	Occupational Biomechanics	IME 549, AE 223	E													As demanded
IME 960A	Logistics and Supply Chain Management	IME550, or IME 731 or Inst. Cons.	M, S													As demanded
IME 960B	Network Optimization	IME550, or IME 731 or Inst. Cons.	S													As demanded
IME 960C	Planning and Scheduling in Manuf. and Services	IME550, or IME 731 or Inst. Cons.	M, S													As demanded
IME 990	Advanced Independent Study	Inst. Cons.	E, S, M													As demanded

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