

Industrial & Systems Engineering Program 2009/2011 (130 Hours)

Offered:
F=Fall
S=Spring
M=Summer

Semester, Transfer or AP	Grade	Course Number	Cr Hrs	Course Title	Prerequisites, Corequisites and/or Prerequisites with Concurrency	Offered:
English - 6 hours						
		EH 101	3	Freshman Composition I	Placement	FSM
		EH 102	3	Freshman Composition II	EH 101	FSM
Mathematics - 18 hours						
		MA 171	4	Calculus A	MA 113 or MA 115 or Level III Placement	FSM
		MA 172	4	Calculus B	MA 171	FSM
		MA 201	4	Calculus C	MA 172	FSM
		MA 238	3	Applied Differential Equations	Prereq w/Con: MA 201	FSM
		MA 244	3	Introduction to Linear Algebra	MA 172	FSM
Chemistry - 4 hours						
		CH 121	3	General Chemistry I	CH 101 or Plcmt, MA 112, Prereq w/Con: MA 113 or 115, Coreq: CH 125	FSM
		CH 125	1	General Chemistry Lab I	Coreq: CH 121	FSM
Science Elective - 3 hours						
			3		BYS 119 or CH 123 or 300/400 level MA course	
Physics - 8 hours						
		PH 111	3	General Physics w/Calculus I	MA 171	FSM
		PH 114	1	General Physics Lab I	Prereq w/Con: PH 111	FSM
		PH 112	3	General Physics w/Calculus II	MA 172, PH 111	FSM
		PH 115	1	General Physics Lab II	Prereq w/Con: PH 112	FSM
History, Social & Behavioral Sciences - 9 hours						
		HY	3	History	Must take a six hour sequence in a discipline.	FSM
			3		See Humanities & Fine Arts List at	FSM
			3		http://www.uah.edu/engineering/StudentAffairs/forms.php .	FSM
Humanities & Fine Arts - 9 hours						
		EH	3	Literature	See History, Social & Behavioral Sciences list at	FSM
			3	Fine Arts	http://www.uah.edu/engineering/StudentAffairs/forms.php .	FSM
		PHL 202	3	Introduction to Ethics		FSM
Engineering Core - 12 hours						
		MAE 271	3	Statics	PH 111, Prereq w/Con: MA 201	FSM
		EE 213	3	Electrical Circuit Analysis I	PH 112, Prereq w/Con: MA 238 & (MA 244 or CHE 244 or MAE 285)	FSM
		ISE 321	3	Engineering Economy	MA 172, Sophomore Standing	FSM
		MAE 341	3	Thermodynamics I	MA 201, CH 121, CH 125, PH 112	FSM
** Class has required lab section Industrial & Systems Engineering Option - 49 hours						
**		CPE 112	3	Intro to Computer Programming in Engineering	MA 113, MA 115 or Level III Placement, Coreq: CPE 112L	FSM
**		MAE 110	3	Intro to Engineering Computer Aided Design	Prereq w/Con: MA 112 or Level II Placement	FSM
		ISE 124	3	Intro to Industrial & Systems Engineering	Prereq w/Con: MA 113	F
		ISE 340	3	Operations Research	Prereq w/Con: ISE 390	F
**		MAE 370	4	Mechanics of Materials	MAE 271 & (MAE 285 or CPE 112 or CHE 197), Coreq: MAE 370L	FSM
		ISE 378	3	Materials & Manufacturing Processes	CE/MAE 370	FS
		ISE 390	3	Probability & Engineering Statistics I	Prereq w/Con: MA 201	FSM
		ISE 391	3	Probability & Engineering Statistics II	ISE 390	S
		ISE 423	3	Statistical Quality Control	Prereq w/Con: ISE 391	S
		ISE 324	3	Work Design	ISE 390	F
		ISE 327	3	Management Systems Analysis	ISE 390	S
		ISE 428	3	Systems Analysis & Design I	ISE 124, ISE 321, ISE 340, ISE 391, Senior Standing	F
		ISE 429	3	Systems Analysis & Design II	ISE 428	S
		ISE 430	3	Manufacturing Systems and Facilities Design	Senior Standing	F
		ISE 433	3	Production & Inventory Control Systems	ISE 390	S
		ISE 447	3	Intro to Systems Simulation	CPE 112, ISE 391	F
Industrial & Systems Engineering Electives - 9 hours						
			3	Choose from MA 385, ISE 402, ISE 403, ISE 426, ISE 437, or other upper-level courses approved by the Department. May select a maximum of 3 hours from the following: EH 301, ACC 211, MTK 301, MGT 363, or MGT 462.		
			3			
Technical Elective - 3 hours						
			3	200 - level or above Science or Engineering Course		

All prerequisite classes must be completed with a "C" or higher grade.
The Catalog is the final authority for all degree requirements.

ENGINEERING APPROVALS:

Advisor	Date	Department Chair	Date	Dean of Engineering	Date
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