

Mechanical Engineering Program 2007/2009 (132 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 - 15 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
Chemistry - 4 hours						
		CH 121	3	General Chemistry I	CH 101 or Placement, MA 113, Co-req: CH 125	FSM
		CH 125	1	General Chemistry Lab I	Prereq w/Con: CH 121	FSM
Physics - 8 hours						
		PH 111	3	General Physics w/Calculus I	MA 171, Coreq: PH 114	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, Coreq: PH 115	FSM
		PH 115	1	General Physics Lab II	Prereq w/Con: PH 112	FSM
Chemistry/Physics Elective - 4 hours						
			3		Choose from BYS 119, CH 123/126 or PH 113/116	FSM
			1			FSM
History, Social & Behavioral Sciences - 9 hours						
		HY	3	History	Must take a six hour sequence in a discipline. See Humanities & Fine Arts List at http://www.eng.uah.edu/StudentAffairs/forms.php . Also available at the Engineering Student Affairs office, EB 157.	FSM
			3			FSM
			3			FSM
Humanities & Fine Arts - 9 hours						
		EH	3	Literature	See History, Social & Behavioral Sciences list at http://www.eng.uah.edu/StudentAffairs/forms.php . Also available at the Engineering Student Affairs office, EB 157.	FSM
			3	Fine Arts		FSM
		PHL 202	3	Intro to Ethics		FSM
Engineering Core - 12 hours						
		MAE 271	3	Statics	PH 111, Prereq w/Con: MA 201	FSM
		MAE 341	3	Thermodynamics I	MA 201, CH 121, CH 125, PH 112	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
Mechanical Engineering Option - 57 hours						
**		MAE 100	2	Introduction to Mechanical & Aerospace Eng	Coreq: MAE 100L, Prereq w/Con: MA 112	FS
**		MAE 110	3	Intro to Engineering Computer Aided Design	Prereq w/Con: MA 112	FSM
		MAE 272	3	Dynamics	MAE/CE 271 & MAE 285 or CPE 112	FSM
**		MAE 285	3	Numerical Methods & Computation I	MA 171, Coreq: MAE 285L	FSM
**		MAE 310	3	Fluid Mechanics I	MA 238, MAE/CE 271 & MAE 285 or CPE 112 or CHE 197	FSM
**		MAE 311	3	Principles of Measurement & Instrumentation	EE 213, Coreq: MAE 311L	FSM
**		MAE 342	3	Thermodynamics II	MAE 341, Prereq w/Con: MAE 285	FSM
**		MAE 364	4	Kinematics & Dynamics of Machines	MAE 110, MAE 272, Coreq: MAE 364L	SM
**		MAE 370	4	Mechanics of Materials	MAE 271 & MAE 285 or CPE 112 or CHE 197, Coreq: MAE 370L	FSM
		MAE 378	3	Materials & Manufacturing Processes	MAE/CE 370	FSM
		MAE 385	2	Numerical Methods & Computation II	MAE 285, Prereq w/Con: MA 238	FSM
		MAE 410	2	Fluid Mechanics II	MAE 310, Prereq w/Con: MAE 311	FM
		MAE 411	1	Fluid Mechanics Lab	MAE 310	FM
**		MAE 450	4	Intro to Heat and Mass Transfer	MAE 310, MAE 385, Coreq: MAE 450L	FSM
		MAE 455	3	Design of Thermal Systems	MAE 342, MAE 450, Recommended: MAE 490	FSM
		MAE 466	3	Mechanics & Design of Machine Elements	MAE 364, MAE/CE 370	FM
		MAE 488	3	Analysis of Engineering Systems	EE 213, MAE 272, MAE 310, MAE 385	FSM
		MAE 489	3	Computer-Aided Engineering Analysis	MAE/CE 370, Prereq w/Con: MAE 385	SM
		MAE 490	2	Intro to Engineering Design	EE 213, ISE 321, MAE 272	FSM
		MAE 491	3	Mechanical Engineering Design	MAE 490 or equivalent, Senior Standing, Instructor Permission	SM
Technical Elective - 8 hours						
			3		MA 244 or MAE courses 300 level or above approved by the Department	
			3			
			2			

ENGINEERING APPROVALS:

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

Version 1
September 17, 2007

Advisor	Date	Department Chair	Date	Dean of Engineering	Date
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