Rose-Hulman Institute of Technology
Mechanical Engineering Department Program of Study

Freshman Year

Fall Term

			Credit
MA	111	Calculus I	5
PH	111	Physics I	4
CLSK	100	College & Life Skills	1
EM	104	Graphical Communications	2
RH	131	Rhetoric & Composition	
		split fall or winter with	
		Elective (HSS)	4
			16

Winter Term

MA	112	Calculus II	5
PH	112	Physics II	4
ME	123	Computer Applications I	4
		Elective (HSS)	
		split fall or winter with	
RH	131	Rhetoric & Composition	4
			17

Spring Term

MA	113	Calculus III	5
PH	113	Physics III	4
EM	103	Introduction to Design	2
EM	121	Statics & Mechanics of Mat'ls I	4
			15

Sophomore Year

Fall Term

			Credit
MA	211	Differential Equations	4
ES	201	Conservation & Accnt Principles	4
ES	203	Electrical Systems	4
		Elective (HSS)	4
			16

Winter Term

MA	212	Matrix Algebra & Sys of DE's	4
ES	202	Fluid & Thermal Systems	3
ES	204	Mechanical Systems	3
CM	105	Engineering Chemistry I	4
		Elective (HSS)	4
			18

Spring Term

MA	223	Statistics for Engineers	4
ES	205	Analysis & Design of Engrg Sys	4
CM	107	Engineering Chemistry II	4
		Elective (HSS)	4
			16

Junior Year

Fall Term

ME	301	Thermodynamics II	4
EM	204	Statics & Mechanics of Mat'ls II	4
ECE	207	Elements of Electrical Engrg II	4
		* Elective (free)	4
			16

Winter Term

ME	317	Design for Manufacturing	(3)	3
ME	321	Measurement Systems		4
		split winter or spring with		
ME	323	Computer Applications II	(2)	
ME	328	Materials Engineering	(4)	4
		Elective (Science)	(4)	
RH	330	Technical Communications	(4)	
		or		
		Elective (HSS)		4
			(17) or	15

Spring Term

ME	302	Heat Transfer	(4)	4
ME	323	Computer Applications II		2
		split winter or spring with		
ME	321	Measurement Systems	(4)	
ME	470	Engineering System Design		3
		split Jr. spring or Sr. fall with		
ME	480	Machine Component Design	(4)	
		Elective (Science)		4
		Elective (HSS)	(4)	
		or		
RH	330	Technical Communications		4
			(16) or	17

Senior Year

Fall Term

ME	430	Mechatronic Systems		4
		split fall or winter with		
ME	421	M.E.Lab **and** *Elective(Tech)	(2+4)	
ME	406	Control Systems		
		or		
EM	406	Vibration Analysis	(4)	4
ME	480	Machine Component Design		4
		split Jr. spring or Sr. fall with		
ME	470	Engineering System Design	(3)	
		* Elective (Tech)	(4)	4
			(17) or	16

Winter Term

ME	471	Capstone Design I	(3)	3
ME	421	M.E.Lab **and** *Elective(Tech		2+4
		split fall or winter with		
ME	430	Mechatronic Systems	(4)	
		* Elective (free)	(4)	4
		Elective (HSS)	(4)	4
			(15) or	17

Spring Term

ME	472	Capstone Design II	3
		* Elective (Tech)	4
		* Elective (Adv Tech)	4
		Elective (HSS)	4
			15

Total Credits Required: **194**

* 24 credit hours. in electives composed of 16 cr.hrs. in technical electives, of which at least 4 cr.hrs. must be in advanced level courses and 8 cr.hrs. in free elect. (i.e. 12cr. hrs. tech. elect., 4 cr. hrs. adv. tech. elect., 8 cr. hrs. free elect.)

An **advanced technical elective** is designated with an * in the undergraduate bulletin ME and EM course description section or any 500 level course and above in BE, ChE, CE, CPE, EE, ME, OE or SE progs. A **technical elective** is any course (at the 200 level or above) in chemistry, computer science, engineering, engineering management, geology, life science,mathematics, or physics that is not cross-listed with HSS or similar in content to a required course. A **science elective** is any course in applied biology, chemistry, geology or physics except those courses that are cross-referenced with an engineering course.

Updated: Aug 27, 2010