

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

**Freshman Year**

<i>Fall Term</i>			<i>Credit</i>
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

<i>Winter Term</i>			
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

<i>Spring Term</i>			
MA	113	Calculus III	5
PH	113	Physics III	4
EM	103	Introduction to Design	2
EM	121	Statics and Mechanics of Materials I	4
			15

**Junior Year**

<i>Fall Term</i>			
ME	301	Thermodynamics II	4
EM	204	Statics and Mechanics of Materials II	4
ECE	207	Elements of Electrical Engineering II	4
		* Elective (free)	4
			16

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

<i>Spring Term</i>			
ME	302	Heat Transfer	4
ME	323	Computer Applications II	2
		split winter or spring with	
ME	321	Measurement Systems	(4)
ME	470	Engineering Systems Design	4
		split Jr. spring or Sr. fall with	
ME	480	Machine Component Design	(4)
		Elective (Science)	4
		Elective (HSS)	
		or	
RH	330	Technical Communications	4
			16 o
			18

**Sophomore Year**

<i>Fall Term</i>			<i>Credit</i>
MA	221	Differential Eqns. & Matrix Algebra I	4
ES	201	Conservation & Accounting Principles	4
ES	203	Electrical Systems	4
		Elective (HSS)	4
			16

<i>Winter Term</i>			
MA	222	Differential Eqns. & Matrix Algebra II	4
ES	202	Fluid & Thermal Systems	3
ES	204	Mechanical Systems	3
CM	105	Engineering Chemistry I	4
		Elective (HSS)	4
			18

<i>Spring Term</i>			
MA	223	Statistics for Engineers	4
ES	205	Analysis & Design of Engineering Systems	4
CM	107	Engineering Chemistry II	4
		Elective (HSS)	4
			16

**Senior Year**

<i>Fall Term</i>			
ME	430	Mechatronic Systems	4
		split fall or winter with	
ME	421	M.E. Lab	(2)
ME	406	Control Systems	
		or	
EM	406	Vibration Analysis	4
ME	480	Machine Component Design	4
		split Jr. spring or Sr. fall with	
ME	470	Engineering Systems Design	(4)
		* Elective (Tech)	4
			14 or
			16

<i>Winter Term</i>			
ME	471	Capstone Design I	2
ME	421	M.E. Lab	2
		split fall or winter with	
ME	430	Mechatronic Systems	(4)
		* Elective (Tech)	4
		* Elective (free)	4
		Elective (HSS)	4
			18 o
			16

<i>Spring Term</i>			
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 electives. (i.e. 12 cr. hrs. tech. electives, 4 cr. hrs. adv. tech elective, 8 cr. hrs. free electives)

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 programs. A **technical elective** is any course (at the 200 level or above) in chemistry, computer science, engineering, engineering management, 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.