

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

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

Junior Year

<i>Fall Term</i>			
ME	301	Thermodynamics II	4
ME	303	Kinematics of Machinery	3
EM	204	Statics and Mechanics of Materials II	4
ECE	207	Elements of Electrical Engineering II	4
			15

<i>Winter Term</i>			
ME	317	Design for Manufacturing	3
ME	323	Computer Applications II	
		split winter or spring with	
ME	311	Mechanical Measurements	2
ME	328	Materials Engineering	4
RH	330	Technical Communications	
		or	
		Elective (HSS)	4
		Elective (Science)	4
			17

<i>Spring Term</i>			
ME	311	Mechanical Measurements	
		split winter or spring with	
ME	323	Computer Applications II	2
ME	302	Heat Transfer	4
		** Elective (Tech)	4
		Elective (HSS)	
		or	
RH	330	Technical Communications	4
		** Elective (free)	4
			18

Senior Year

<i>Fall Term</i>			
ME	470	Engineering Systems Design	4
ME	406	Control Systems	
		or	
EM	406	Vibration Analysis	4
ME	421	M.E. Lab	2
		split fall or winter with	
		Mechatronic Systems	(4)
		Elective (HSS)	4
			16 or 14

<i>Winter Term</i>			
ME	450	Engineering Design	4
ME	430	Mechatronic Systems	4
		split fall or winter with	
ME	421	M.E. Lab	(2)
		** Elective (Tech)	
		* ME 461 Aero Design	} Select One
		* ME 462 Thermal Design	
		Elective (HSS)	4
			14 or 16

<i>Spring Term</i>			
		* ME 460 Machine Design	} Select Two
		* ME 462 Thermal Design	
		** Elective (Tech)	
		** Elective (Adv Tech)	4
		** Elective (free)	4
			16

Total Credits Required: **194**

* Must take any two of: ME 460 Machine Design, ME 461 Aerospace Design, or ME 462 Thermal Design.

** 20 credit hours. in electives composed of 12 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. 8 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.