MECHANICAL ENGINEERING

Requirements

The goal of the minor in Mechanical Engineering is to give students a broad understanding of mechanical engineering beyond what would normally be obtained in and denoted by their major. The minor consists of required and elective courses, totaling 26 or 28 credits depending on the student's major. The distribution of required and elective courses also depends on the student's major, as detailed in the lists below. Students with more than one major should consult the ME department head to create an appropriate ME minor.

Elective courses must be selected from approved required or elective courses with an ME/ES/EM prefix taught by the ME faculty. These elective courses must be listed explicitly on the minor declaration form for approval **before** completing the courses. Guidance on what might constitute acceptable and unacceptable courses for the minor is available on the ME advising resources page on https://my.rose-hulman.edu. There is no guarantee that courses completed before formal declaration and approval will count towards the minor.

Requirements by Major:

ME Minor for Electrical Engineering or Computer Engineering Students

(26 credits total)

Code	Title	Hours
Required		
EM 104	Graphical Communications	2
EM 121	Statics & Mechanics of Materials I	4
ES 201	Conservation & Accounting Principles	4
ES 312	Fluid Systems	4
or ES 214	Mechanical Systems	
ME 317	Design for Manufacturing	4
Electives		
Select eight credits		8
Total Hours		**26**

Not Allowed: ME 123 Computer Programming, EM 103 Introduction to Design, ME 230 Mechatronic Systems, ME 306 Control Systems

ME Minor for Mathematics, Biomathematics, Biology, Computer Science, or Software Engineering Students

(28 credits total)

Code	Title	Hours
Required		
EM 104	Graphical Communications	2
EM 103	Introduction to Design	2
EM 121	Statics & Mechanics of Materials I	4
ES 201	Conservation & Accounting Principles	4
ES 312	Fluid Systems	4
or ES 214	Mechanical Systems	
ME 317	Design for Manufacturing	4
Electives		
Select eight credits		8
Total Hours		**28**

Not Allowed: ME 123 Computer Programming

Note that Biology students must select "math sequence 2 – modeling focus" as their math sequence

ME Minor for Chemistry Students and Biochemistry and Molecular Biology Students

(28 credits total)

Code	Title	Hours
Required		
EM 104	Graphical Communications	2
EM 103	Introduction to Design	2
EM 121	Statics & Mechanics of Materials I	4
ME 123	Computer Programming	4
ES 201	Conservation & Accounting Principles	4
ES 312	Fluid Systems	4
or ES 214	Mechanical Systems	
ME 317	Design for Manufacturing	4
Electives		
Select four credits		4
Total Hours		**28**

Not allowed: None

ME Minor for Chemical Engineering Students

(26 credits total)

Code	Title	Hours
Required		
EM 104	Graphical Communications	2
EM 121	Statics & Mechanics of Materials I	4
ES 214	Mechanical Systems	4
ME 317	Design for Manufacturing	4
Electives		
Select 12 credits		12
Total Hours		**26**

Not Allowed: ME 123 Computer Programming, EM 103 Introduction to Design, ES 201 Conservation & Accounting Principles, ME 306 Control Systems

ME Minor for Civil Engineering Students

(26 credits total)

Code	Title	Hours
Required		
EM 104	Graphical Communications	2
ME 123	Computer Programming	4
ME 317	Design for Manufacturing	4
Electives		
Select 16 credits		16
Total Hours		**26**

Not Allowed: EM 121 Statics & Mechanics of Materials I, EM 103 Introduction to Design, ES 201 Conservation & Accounting Principles, ES 312 Fluid Systems, ES 214 Mechanical Systems, EM 204 Statics & Mechanics of Materials II

ME Minor for Engineering Design and Biomedical Engineering Students

(28 credits total)

Code	Title	Hours
Required		
ES 214	Mechanical Systems	4
ES 305	System Dynamics	4
ES 312	Fluid Systems	4
Electives		
Select 16 credits		16
Total Hours		**28**

Not Allowed: EM 104 Graphical Communications, EM 121 Statics & Mechanics of Materials I, ME 123 Computer Programming, EM 103 Introduction to Design, ES 201 Conservation & Accounting Principles, EM 204 Statics & Mechanics of Materials II,ME 317 Design for Manufacturing

ME Minor for Optical Engineering and NanoEngineering Students

(28 credits total)

Code	Title	Hours
Required		
EM 121	Statics & Mechanics of Materials I	4
ES 201	Conservation & Accounting Principles	4
ME 317	Design for Manufacturing	4
Electives		
Select 16 credits		16
Total Hours		**28**

Not Allowed: EM 104 Graphical Communications, ME 123 Computer Programming, EM 103 Introduction to Design

ME Minor for Physics Students

(26 credits total)

Code	Title	Hours
Required		
EM 103	Introduction to Design	2
EM 121	Statics & Mechanics of Materials I	4
ES 201	Conservation & Accounting Principles	4
ME 317	Design for Manufacturing	4
Electives		
Select 12 credits		12
Total Hours		**26**

Not Allowed: EM 104 Graphical Communications, ME 123 Computer Programming, EM 103 Introduction to Design

Physics students must choose BE 100 Problem Solving in the Biological Sciences & Engineering or CSSE 120 Introduction to Software Development or ME 123 Computer Programming for their computing elective