Minor in Mechanical Engineering

The Mechanical Engineering minor requires 18-19 semester hours of coursework. Of these, 9 semester hours are required courses, and the remaining 9 or 10 are chosen from within one of three “tracks” selected by the student. The tracks: Thermal-Fluid Sciences, Mechanical Systems, and Structural Analysis and Materials, are intended to strengthen the particular area of interest of the student.

Admission Requirements
Admission requires approval of the ME program chair or associate chair. Approval is contingent upon completion of Calculus I, II and III or Accelerated Calculus I and II, and Introductory Mechanics, recommendation from major advisor, and space available in the program. A minimum GPA of 3.0 is required for admission into the ME Minor, but this minimum GPA may be raised as space limitations dictate.

To apply
Please complete the online form available at the following link: http://tinyurl.com/minor-engr. Applications are due by November 1 for Spring admission, and April 1 for Fall admission.

Graduation Requirements
Non-engineering majors enrolled in the ME minor must complete the following mathematics courses:

Calc I (MATH 01.130), Calc II (MATH 01.131), Calc III (MATH 01.230)
Linear Algebra (MATH 01.210), Ordinary Differential Equations (MATH 01.231).

Once admitted to the ME minor, the student must complete the required courses listed below, and select one of the three tracks (Thermal Sciences, Mechanical Systems or Structural Analysis and Materials).

Required Courses: 9 sch
2 sh ENGR 01.271 Statics¹
2 sh ENGR 01.291 Dynamics
3 sh ENGR 01.273 Strength of Materials
2 sh ENGR 01.301 Junior Engineering Clinic I²

Thermal Sciences Track: 9 sch
6 sh ME 10.321 Thermal-Fluid Sciences I³
3 sh ME 10.4xx Thermal-Fluid ME Senior Elective⁴

Mechanical Systems Track: 9 sch
3 sh ME 10.343 System Dynamics and Control I³
3 sh ME 10.344 System Dynamics and Control II
3 sh ME 10.4xx Mechanical Systems ME Senior Elective⁴

Structural Analysis and Materials Track: 10 sch
3 sh ENGR 01.283 Materials Science and Manufacturing
3 sh ME 10.301 Machine Design⁵
3 sh ME 10.4xx Mechanical Systems ME Senior Elective⁴

¹must be currently enrolled in or have completed Calculus II (MATH 01.131) or Accelerated Calculus II (MATH 01.141) and have completed Introductory Mechanics (PHYS 02.200)
²must have Junior status within major
³must be currently enrolled in or have completed Ordinary Differential Equations (MATH 01.231) or Math for Engineering Analysis I (MATH 01.235)
⁴must be taken in addition to Technical Electives required by the student’s major