

Mechanical Engineering

Minor in Biomedical Engineering

Minimum credit hours required – 19

The following courses are required:

BIOL 111, 111L, General Biology, 4 cr, 3 cl hrs, 2 lab hrs

BIOL 331, Cell Biology, 3 cr, 3 cl hrs

BIOL 351, Physiology I, 3 cr, 3 cl hrs

BIOL 352, Physiology II, 3 cr, 3 cl hrs

Two courses from:

- MATE 351, Introduction to Polymeric Materials, 3 cr, 3 cl hrs
- MENG 460, Introduction to Biomedical Engineering, 3 cr, 3 cl hrs
- MENG 465, Biorheology, 3 cr, 2 cl hrs, 3 lab hrs
- MATE 516, Biomimetic Materials, 3 cr, 3 cl hrs
- CHE 473, Polymer Materials Engineering, 3 cr, 3 cl hrs
- MENG 576, Biomedical Mechatronics, 3 cr, 3 cl hrs
- MENG ~~489~~ 486, Special Topics in Biomedical Engineering, 3 cr, 3 cl hrs

Explosives Engineering Courses:

EXPL ~~189~~ 101 - Beginning Explosives Engineering, 2 cr, 2 cl hrs

Prerequisites: none

This course will introduce the student to the subjects of pyrotechnics and explosives and encompasses subjects including basic combustion chemistry, the physical chemistry of energetic materials, and some test instrumentation. This course also will include a design project.

EXPL ~~189~~ 101L - Beginning Explosives Engineering Lab, 1 cr, 3 lab hrs

Prerequisites: none

This course is based primarily in the laboratory, however, two days will be spent at the Energetic Materials Research and Testing Center working with high explosives

Mechanical Engineering Courses:

MENG ~~489~~ 486, ~~489D~~ 486D, Special Topics in Biomedical Engineering, 3 cr, 3 cl hrs

MENG 489, 489D, Special Topics in Mechanical Engineering, 3 cr, 3 cl hrs