

## Approved Science Electives

In addition to University Physics II, all Mechanical Engineering students are required to complete six credits of General Education science electives to meet program requirements. One course must be a Scientific Principles course (indicated below with and X), and the other can be any course from the list below.

- *If a student is pursuing the Bioengineering option, one of the electives must be within the field of Biology, Human Biology, or Anatomy & Physiology. Approved courses are indicated below (\*\*).*

Course	Scientific Principles
BIOG(101)- Explorations in Cellular Biology and Evolution	X
BIOG(102)-Explorations in Animal and Plant Anatomy and Physiology**	X
BIOG(140)-Cell & Molecular Biology for Engineers I**	X
BIOG(240)-Cell & Molecular Biology for Engineers II**	X
BIOG(340)-Biocompatibility & the Immune System	X
BIOL(101)-General Biology I <b>Or</b> BIOL(121)-Introductory Biology I**	X
BIOL(102)-General Biology II**	X
BIOL(103)-General Biology I Lab	X
BIOL(104)-General Biology II Lab	X
BIOL(111)-Science in the Garden	X
BIOL(122)-Introductory Biology II	X
BIOL(130)-Introduction to Bioinformatics	
BIOL(201)-Cellular and Molecular Biology	
BIOL(204)-Introduction to Microbiology	
BIOL(240)-General Ecology	
BIOL(265)-Evolutionary Biology	
BIOL(313)-Comparative Animal Physiology	
BIOL(321)-Genetics	
BIOL(322)-Developmental Biology	
BIOL(425)-Ethics in Bioinformatics	
BIOL(575)-Conservation Biology	
CHMA(231)-Chemical Instrument Analysis for Engineers	X
CHMB(240)-Biochemistry for Health Sciences	X
CHMB(402)-Biochemistry I	
CHMB(403)-Biochemistry II	
CHMG(111)-General-Organic-Biochemistry I	X
CHMG(112)-Gen Organic Biochemistry II	X
CHMG(122)-Chemistry of Water & Wastewater	X

CHMG(123)-Chemistry of Materials	X
CHMG(131)-Gen Chemistry for Engineers <b>OR</b> CHMG(141)-Gen & Analytical Chemistry I	X
CHMG(142)-Gen & Analytical Chemistry II	X
CHMG(201)-Intro to Organic Polymer Technology	X
CHMI(351)-Inorganic Chemistry I	
CHMO(231)-Organic Chemistry I	
CHMO(232)-Organic Chemistry II	
CHMO(331)-Comprehensive Organic Chemistry I	
MEDG (101) Human Biology I**	X
MEDG (102) Human Biology II**	X
MEDS (250) Anatomy and Physiology I **	
PHYS (104) Stellar Astronomy + PHYS (105) Stellar Astronomy Lab	X
PHYS (106) Solar System Astronomy + PHYS (107) Solar System Astronomy Lab	X
PHYS(220)-University Astronomy	
PHYS(283)-Vibrations and Waves	
PHYS(320)-Math Methods in Physics	

\*\*Approved for Bioengineering Option