Engineering Program
Science Elective I and II Requirements & Options
(normally taken in second and fourth semesters)

Biomedical Engineering
Science 1: CH 116 Chemistry II and CH 118 Chemistry Lab II
Science 2: BIO 281 Biology without BIO 282 Biology Lab

Chemical Engineering
Science 1: CH 116 and CH 118
Science 2: BIO 281 Biology without BIO 282 Biology Lab

Civil Engineering
Science 1: CH 116 Chemistry II with or without CH 118 Chemistry Lab II
Science 2: BIO 281 Biology with or without BIO 282 Biology Lab
*as long as a lab is included in 1 of the 2 courses

Computer Engineering (science elective 2 deferred to term 6)
any two out of six of BIO 281 Biology, CH 116 Chemistry II, PEP 201 Physics III for Engineers with lab, NANO 200 Intro to Nanotechnology, EN250 Quantitative Biology or PEP 151 Introduction to Astronomy
*as long as a lab is included in 1 of the 2 courses

Electrical Engineering (science elective 2 deferred to term 6)
any two out of six of BIO 281 Biology, CH 116 Chemistry II, PEP 201 Physics III for Engineers with lab, NANO 200 Intro to Nanotechnology, EN 250 Quantitative Biology or PEP 151 Introduction to Astronomy
*as long as a lab is included in 1 of the 2 courses

Engineering - concentration in Naval Engineering
any two out of six of BIO 281 Biology, CH 116 Chemistry II, PEP 201 Physics III for Engineers with lab, NANO 200 Intro to Nanotechnology, EN 250 Quantitative Biology or PEP 151 Introduction to Astronomy
*as long as a lab is included in 1 of the 2 courses

Engineering Management
any two out of six of BIO 281 Biology, CH 116 Chemistry II, PEP 201 Physics III for Engineers with lab, NANO 200 Intro to Nanotechnology, EN 250 Quantitative Biology or PEP 151 Introduction to Astronomy
*as long as a lab is included in 1 of the 2 courses

Environmental Engineering
Science 1: CH 116 Chemistry II and CH 118 Chemistry Lab II
Science 2: BIO 281 Biology, PEP 151 Introduction to Astronomy, NANO 200 Intro to Nanotechnology, EN 250 Quantitative Biology (web course) or PEP 201 Physics III for Engineers with lab
*as long as a lab is included in 1 of the 2 courses
**Mechanical Engineering**

Students entering Fall 2016 or later:
- any two out of six of BIO 281 Biology, CH 116 Chemistry II, PEP 201 Physics III for Engineers with lab, NANO 200 Intro to Nanotechnology, EN 250 Quantitative Biology or PEP 151 Introduction to Astronomy, PEP 336 – Introduction to Cosmology and Astrophysics, PEP 351 – Planetary Science
*as long as a lab is included in 1 of the 2 courses

Students who entered prior to Fall 2016:
  - Science 1: CH 116 Chemistry II or BIO 281 Biology
  - Science 2: PEP 201 Physics III for Engineers with lab

**Software Engineering**

any two out of six of BIO 281 Biology, CH 116 Chemistry II, PEP 201 Physics III for Engineers with lab, NANO 200 Intro to Nanotechnology, EN250 Quantitative Biology or PEP 151 Introduction to Astronomy,
*as long as a lab is included in 1 of the 2 courses

**LAB REQUIREMENT**

If a lab was NOT taken with the Science Elective I choice it will be required with the Science Elective II choice.

- EN 250, NANO 200, PEP 151, PEP 336 & PEP 351 do not have a laboratory associated with it.
- PEP 201 has a built in lab component which fulfills the lab requirement.

**WHEN COURSES ARE OFFERED:**

- CH 116 and BIO 281 are offered in the Spring & Summer II
- NANO 200 is offered only in the Fall
- PEP 151 is offered in the Fall & Summer II
- PEP 201 is offered in all semesters
- PEP 336 is offered in only in the Spring
- PEP 351 is offered in Spring and Summer

**NOTE:**

Science Elective I & II cannot be in the same field.
- BIO 281 & EN 250 are considered science electives from the same field.

*Modified: Nov. 2, 2016*