## Program Requirements

**General Education Courses - 37 Total Credit Hours**

- ENGL 1113 English Composition I 3 hours
- ENGL 1213 English Composition II 3 hours

**History & Government Courses**

- HIST 1483 Amer. History to 1877 3 hours
- (or) HIST 1493 Amer. History Since 1877 3 hours
- POLI 1113 American Government 3 hours

**Humanities Courses**

- Electives 6 hours

One 3 hour course to be chosen from those listed with the International Dimension and 3 hours of humanities electives.

**Mathematics Courses**

- MATH 1513 Algebra for STEM 3 hours

**Science Courses**

- CHEM 1315 Chemistry I 5 hours
- CHEM 1414 General Chemistry II 4 hours

**Computer Science Courses**

- BSAD 1113 Digital/Financial Literacy 3 hours
- (or other approved computer course)

**Orientation Courses**

- ORNT 1101 Freshman Orientation 1 hour

**General Education Elective Courses** 3 hours

(To avoid additional coursework, the general elective is designated for MATH 1613 Plane Trigonometry.)

**Program Requirement Courses - 17 Total Hours**

- **PHYS 2014 Engineering Physics I** 4 hours
- **MATH 2144 Calculus I** 4 hours
- **MATH 2154 Calculus II** 4 hours
- **MATH 2164 Calculus III** 4 hours
- PRDV 2321 Professional Development 1 hour

**Recommended Program Elective Courses - 6 Total Hours**

- BISI 1114 General Biology 4 hours
- BISI 1314 General Botany 4 hours
- BISI 2124 Microbiology 4 hours
- BISI 1214 Environmental Science 4 hours
- ENGL 1223 Technical Writing 3 hours
- **MATH 2613 Differential Equations** 3 hours
- **PHYS 2114 Engineering Physics II** 4 hours
- Programming Language Course(s) 3 hours

**Total Credit Hours** 60 hours

## Suggested Course Sequence:

### First Semester 18 Total Credit Hours

- ENGL 1113 English Composition I 3 hours
- ORNT 1101 Freshman Orientation 1 hour
- MATH 1513 Algebra for STEM 3 hours
- MATH 1613 Plane Trigonometry 3 hours
- CHEM 1315 General Chemistry I 5 hours
- Humanities Electives 3 hours

### Second Semester 14 Total Credit Hours

- ENGL 1213 English Composition II 3 hours
- HIST 1483 Amer. History to 1877 3 hours
- (or) HIST 1493 Amer. History Since 1877 3 hours
- CHEM 1414 General Chemistry II 4 hours
- MATH 2144 Calculus I 4 hours

### Third Semester 13-14 Total Credit Hours

- BSAD 1113 Digital/Financial Literacy 3 hours
- Program Elective: MATH 2613 (or) PHYS 2114 Recommended 3-4 hours
- Humanities Electives 3 hours

### Fourth Semester 15 Total Credit Hours

- POLI 1113 American Government 3 hours
- PHYS 2014 Engineering Physics I 4 hours
- MATH 2164 Calculus III 4 hours
- Program Elective 3 hours
- PRDV 2321 Professional Development 1 hour

This is a suggested sequence timeline only. A student may require more than four semesters to complete an Associate in Science degree.

**These program courses are typically offered only once a year.** See course descriptions for fall or spring designsations and plan accordingly. Some degrees allow General Physics to substitute for Engineering Physics; check with your advisor.

The Chemistry/Physics degree option prepares students to transfer to a four-year university to pursue a bachelor’s degree. The program is an excellent starting place for students considering careers in research, medicine, or academia.

Students transferring should consult the catalog from the institution to which they are planning to transfer to carefully select courses that will meet requirements to complete their bachelor’s degree.

### Career Opportunities

- Entry-Level Scientist
- Biotechnology
- High School Science Teacher
- Meteorologist
- Geologist
- Labratory Chemist

NOC evaluates students for placement into either foundational or college-level courses, whichever will lead to the greatest possibility of student success. Academic placement is determined either by A.C.T. test scores or by Accuplacer test scores. These tests are administered in the Testing Center at NOC. Based upon the scores, students may be required to take one or more courses for remediation in English, Math, or Reading, either prior to or concurrent with credit courses. See the NOC testing web page by clicking on the following link: [http://www.noc.edu/act](http://www.noc.edu/act) for placement guidelines.