MATHEMATICS AND PHYSICAL SCIENCE – CHEMISTRY/PHYSICS OPTION

(Note: Program requirements for this degree are offered on NOC Enid and NOC Tonkawa campus only.
At the beginning of each course listing, the four letter abbreviation indicates the department and the four digits indicate the course code used for enrollment. The total course hour value follows each.)

PROGRAM REQUIREMENTS

	Credit Hours
GENERAL EDUCATION COURSES	**37 TOTAL HOURS**
ENGLISH COMPOSITION COURSES	
ENGL 1113 English Composition I	3 hours
ENGL 1213 English Composition II	3 hours
HISTORY AND GOVERNMENT COURSES	
HIST 1483 American History to 1877 (OR) HIST 1493 American 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 College Algebra	3 hours
SCIENCE COURSES	
One Biological Science with Lab	4 hours
CHEM 1314 Chemistry I	4 hours
COMPUTER SCIENCE COURSES	
BSAD 1113 Digital/Financial Literacy (or other approved computer course)	3 hours
ORIENTATION COURSES	
ORNT 1101 Freshman Orientation	1 hour
GENERAL EDUCATION ELECTIVE COURSES	4 hours
(3 of 4 hours for these electives are designated for MATH 1613 Plane Trigonometry; 1 hour can be combined with requirement for recommended electives below, or selected from course in Language Arts, Natural Science, Foreign Languages, Fine Arts, Humanities, Mathematics, Behavioral, or Social Sciences.)	
PROGRAM REQUIREMENT COURSES	**18 TOTAL HOURS**
**CHEM 1414 General Chemistry II	4 hours
**PHYS 2014 Engineering Physics I	4 hours
**MATH 2145 Calculus I	5 hours
**MATH 2155 Calculus II	5 hours
RECOMMENDED PROGRAM ELECTIVE COURSES	**5 TOTAL HOURS**
**MATH 2613 Differential Equations	3 hours
**PHYS 2114 Engineering Physics II	4 hours
**PRDV 2321 Professional Development	1 hour
BISI 1214 Environmental Science	4 hours
TOTAL CREDIT HOURS	**60**

SUGGESTED COURSE SEQUENCE

	Credit Hours
FIRST SEMESTER	**17 TOTAL HOURS**
ENGL 1113 English Composition I	3 hours
ORNT 1101 Freshman Orientation	1 hour
MATH 1513 College Algebra (Pre-Calculus)	3 hours
MATH 1613 Plane Trigonometry	3 hours
CHEM 1314 General Chemistry I	4 hours
Humanities Electives	3 hours
SECOND SEMESTER	**15 TOTAL HOURS**
ENGL 1213 English Composition II	3 hours
HIST 1483 American History to 1877 (OR) HIST 1493 American History Since 1877	3 hours
CHEM 1414 General Chemistry II	4 hours
MATH 2145 Calculus I	5 hours
THIRD SEMESTER	**15 TOTAL HOURS**
BSAD 1113 Digital/Financial Literacy	3 hours
MATH 2155 Calculus II	5 hours
BISI 1114 General Biology (OR) BISI 1414 General Zoology	4 hours
Humanities Electives	3 hours
FOURTH SEMESTER	**13 TOTAL HOURS**
POLI 1113 American Government	3 hours
PHYS 2014 Engineering Physics I	4 hours
*Program/Gen Ed Electives (2 courses)	6 hours

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

* Hours from recommended program electives and general education electives in Science may be combined for final 6 hours required to graduate.

**These program courses are typically offered only once a year. See course descriptions for fall or spring designations and plan accordingly.

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**
- **High School Science**
- **Teacher**
- **Meteorologist**
- **Geologist**
- **Laboratory 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: ACT | Northern Oklahoma College (http://www.noc.edu/act) for placement guidelines.