MATHEMATICS AND PHYSICAL SCIENCE – MATHEMATICS TECHNOLOGY 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

General Education Courses - 37 Total Credit Hours

English Composition Courses

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	
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 1515 Chemistry for Engineers	5 hours
PHYS 2014 Engineering Physics I	4 hour
(or) PHYS 1114 General Physics I	

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 ed elective is designated for MATH 1613 Plane Trigonometry.)

Program Requirement Courses - 17 Total Hours

**MATH 2144 Calculus I	4 hours
**MATH 2154 Calculus II	4 hours
**MATH 2164 Calculus III	4 hours
**ENGR 1111 Intro to Engineering	1 hour
PHYS 2114 Engineering Physics II	4 hours
(or) PHYS 1214 General Physics II	

Recommended Program Elective Courses - 6-7 Total Hours

**MATH 2613 Differential Equations	3 hours
BISI 1114 General Biology	4 hours
BISI 2124 Microbiology	4 hours
ENGL 1223 Technical Writing	3 hours
SPCH 1713 Intro to Oral Communication	3 hours

Other course may be substituted with approval.

Total Credit Hours	**60 hours**

Suggested Course Sequence:

First Semester	**16 Total Credit Hours**
ENGL 1113 English Composition I	3 hours
ORNT 1101 Freshman Orientation	1 hour
*MATH 1613 Plane Trigonometry	3 hours
CHEM 1515 Chemistry for Engineers	5 hours
ENGR 1111 Intro to Engineering	1 hour
*MATH 1513 Algebra for STEM	3 hours
(if ACT score requires it) (or)	
Additional Program Elective	

Second Semester	**17 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	
MATH 2144 Calculus I	4 hours
BSAD 1113 Digital/Financial Literacy	3 hours
PHYS 2014 Engineering Physics I	4 hours

Third Semester	**14 Total Credit Hours**
POLI 1113 American Government	3 hours
PHYS 2114 Engineering Physics II	4 hours
(or) PHYS 1214 General Physics II	
Humanities Elective	3 hours
MATH 2154 Calculus II	4 hours

Fourth Semester	**13 Total Credit Hours**
MATH 2164 Calculus III	4 hours
Humanities Elective	3 hours
Program Electives	6 hours

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

*Students scoring 26 or above on the math subsection of the ACT do not have to take MATH 1513 Algebra for STEM. Students scoring 28 or above on the math subsection of the ACT o not have to take MATH 1613 Plane Trigonometry. Students not taking Algebra & Trigonometry because of ACT scores or CLEP exam results are required to substitute 3-6 hours of credit in appropriate General Education Electives or RECOMMENDED PROGRAM ELECTIVES to complete 60 hours at NOC and maximize their transfer hours to the four-year institution.

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

The Mathematics degree option is designed to prepare students to transfer to a four-university to pursue a bachelor's degree.

Students should consult the catalog from the institution to which they are planning to transfer to complete the bachelor's degree.

Career Opportunities

Math Education
Mathmatician
Scientist

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 for placement guidelines.