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 in

1 hour

3 hours

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

Program Requirement Courses - 20 Total Hours

Orientation Courses

ORNT 1101 Freshman Orientation

General Education Elective Courses

MATH 1613 Plane Trignometry	3 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 - 3 Total Hours (use gen hrs to choose 6 hrs)

**MATH 2613 Differential Equations	3 hours
BIOL 1114 General Biology	4 hours
BIOL 2124 Microbiology	4 hours
ENGL 1223 Technical Writing	3 hours
COMM 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 Cre	edit Hours
ENGL 1113 English Com	nposition I	3 hours
ORNT 1101 Freshman Orientation		1 hour
*MATH 1613 Plane Trigonometry		3 hours
CHEM 1515 Chemistry f	for Engineers	5 hours
ENGR 1111 Intro to Eng	ineering	1 hour
*MATH 1513 Algebra for	· STEM	3 hours
(if ACT score requires i	t) (or)	
Additional Program Ele	ctive	

Second Semester17 Total Credit HoursENGL 1213 English Composition II3 hoursHIST 1483 Amer. History to 18773 hours(or) HIST 1493 Amer. History Since 1877MATH 2144 Calculus I4 hoursBADM 1113 Digital/Financial Literacy3 hoursPHYS 2014 Engineering Physics I4 hours

Third Semester	14 Total Cre	dit Hours
POLI 1113 American Gov	ernment	3 hours
PHYS 2114 Engineering Physics II 4 ho		4 hours
(or) PHYS 1214 Genera	al 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 Mathematician 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 by A.C.T. test scores--primary or a residual 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 quidelines.