

Associate in Science Degree
Northern Oklahoma College
Division of Science, Math, and Engineering

Bachelor of Science Degree
Northwestern Oklahoma State University
School of Arts and Sciences

Mathematics and Physical Science-Mathematics Option

The Associate in Science degree program in Mathematics and Physical Science-Mathematics Option consists of 60 hours designed to provide the student with the first two years of general education and program requirements for transfer seamlessly to the Bachelor of Science degree in Mathematics at Northwestern Oklahoma State University.

Mathematics

Transfer students who have completed an Associate in Science degree in Mathematics from Northern Oklahoma College will have met the NWOSU General Education Requirements.

PROGRAM REQUIREMENTS

Credit Hours

GENERAL EDUCATION	37	
ENGLISH COMPOSITION		
ENGL 1113 English Composition I	3	
ENGL 1213 English Composition II	3	
HISTORY AND GOVERNMENT		
HIST 1483 American History to 1865 (or)		
HIST 1493 American History since 1865	3	
POLI 1113 American National Government	3	
HUMANITIES		
Electives	6	
*One 3-hour course to be chosen from those listed with International Dimension and 3 hours of humanities elective.		
MATHEMATICS		
MATH 1513 College Algebra	3	
SCIENCE		
One Biological Science with Lab	4	
One Physical Science with Lab	4	
COMPUTER SCIENCE		
CS 1113 Computer Concepts (or)		
BSAD 1113 Digital/Financial Literacy	3	
ORIENTATION		
ORNT 1101 Freshman Orientation	1	
GENERAL EDUCATION ELECTIVES		4
MATH 1613 Plane Trigonometry	3	
Select courses from: Language Arts, Natural Sciences, Foreign Languages, Fine Arts, Humanities, Mathematics, Behavioral or Social Sciences		
PROGRAM REQUIREMENTS	13	
MATH 2145 Calculus I	5	
MATH 2155 Calculus II	5	
MATH 2613 Differential Equations	3	
RECOMMENDED PROGRAM ELECTIVES	10	
Select courses from: Computer Science, Physics and Statistics.		
TOTAL CREDIT HOURS	60	

*Students scoring 26 or above on the math subsection of the ACT do not have to take MATH 1513 College Algebra.
 **Students scoring 28 or above on the math subsection of the ACT do not have to take MATH 1613 Plane Trigonometry.
 Students not taking Algebra and 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.

PROGRAM REQUIREMENTS

Credit Hours

MAJOR REQUIREMENTS	46
*MATH 1613 Trigonometry	3
*MATH 2013 Statistics	3
*MATH 2215 Analytical Geometry & Calculus I	5
*MATH 2315 Analytical Geometry & Calculus II	5
MATH 3323 Multivariable Calculus	3
MATH 3053 Discrete Math	3
MATH 3013 Linear Algebra	3
MATH 3033 Probability & Statistics I	3
MATH 3043 Math Technology	3
Electives chosen from:	15
MATH 3053 Modern Algebra	
MATH 3513 College Geometry	
MATH 4033 Probability & Statistics II	
MATH 4203 Differential Equations	
MATH 4533 Math Models & Applications	
MATH 4333 History of Math	

NOTE 1: Program Specific General Education: MATH 1513 College Algebra

NOTE 2: Advanced Standing tests are available in MATH 1513 and MATH 2215.

*Students who complete these courses as part of the Associate in Science in Math and Physical Science-Mathematics Option degree requirements at NOC are not required to take them again at NWOSU.