

Nebraska Wesleyan University

Catalog 2020-2021

Major:

Mathematics (B.A., B.S.)

Students studying mathematics at Nebraska Wesleyan University have opportunities to engage themselves fully in their education by conducting research with faculty, teaching in the Math Tutoring Center, grading for courses, attending Math Club events, and working collaboratively with their peers.

Departments/Programs:

Mathematics and Computer Science

Mathematics Major (B.A. or B.S.** , 41-42 hours)

Courses	35 hours
MATH 1600 Calculus I	5 hours
MATH 1610 Calculus II	5 hours
MATH 2200 Foundations of Modern Mathematics	3 hours
MATH 2600 Calculus III	4 hours
MATH 3200 Linear Algebra	3 hours
MATH 3300 Mathematical Statistics I	3 hours
MATH 3600 Mathematical Problem Solving	1 hour
MATH 3750 Numerical Analysis or MATH 3700 Mathematical Modeling	3 hours
MATH 4200 Abstract Algebra I	4 hours
MATH 4300 Real Analysis	4 hours
Math Elective	3-4 hours

Select one of the following (may not use a course taken above as an elective):

- MATH 3100 Differential Equations
- MATH 3500 Geometry
- MATH 3700 Mathematical Modeling
- MATH 3750 Numerical Analysis
- MATH 4800 Research Experience

Capstone	3 hours
MATH 4980 Mathematics Seminar	3 hours

Students seeking an education field endorsement in mathematics follow the above requirements with the following changes:

- Take MATH 3500 Geometry rather than MATH 4300 Real Analysis.
- Take EDUC 4870 Supervised Teaching in the Secondary School rather than MATH 4980 Mathematics Seminar.
- May use MATH 4300 Real Analysis or MATH 4980 Mathematics Seminar as part of the 3-4 hours of mathematics electives.

See the Nebraska Wesleyan University Department of Education for information regarding education courses required for teaching certification.

Required Supporting Program	20 hours
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An approved supporting program of 20 hours that includes **CMPSC 1500 Program Design** is also required for all Mathematics majors. Cooperatively designed by the student and advisor, the supporting program may overlap with one or more minors or a second major.

For the mathematics major, the B.A. degree requires a minor from the humanities or arts, or more than 50 percent of the supporting program from these areas, while the B.S. degree requires a minor from the natural or social sciences, or more than 50 percent of the supporting program from these areas. Mathematics majors seeking an education endorsement whose supporting program consists of education courses will receive a B.S. degree.

***A Mathematics major may earn either a B.A. or B.S. degree. However, if a student has a first major that is associated with a different baccalaureate degree, the Mathematics major may serve as a second major for the degree associated with the first major (B.F.A., B.M., B.S.N.).*