

MATHEMATICS MAJOR FOR THE HIGH SCHOOL TEACHING LICENSE (9-12) / BACHELOR OF ARTS

Total Credit Hours: 120

Major Credit Hours: 46

The Department of Engineering, Computing and Mathematical Sciences features a fully approved Mathematics program that prepares candidates to teach grades 9-12 in Illinois public and private schools. The program is approved by the State Educator Preparation and Licensure Board in conjunction with the Illinois State Board of Education and includes all the requirements for a major in Mathematics. Mathematics majors in this concentration must declare majors in both Mathematics and Secondary Education. See advisors in the Department of Engineering, Computing and Mathematical Sciences and the Department of Education for specific approvals and a list of required courses.

Teacher Candidates seeking a Professional Educator License with a Mathematics Endorsement must complete all requirements of the Department of Education (<https://catalog.lewisu.edu/undergraduate/education-social-sciences/education/>) and the following coursework in the content area as well as professional education courses. For a detailed description of the courses, please click on the appropriate link.

Only grades of "C" and above are acceptable in professional education courses and in any courses counted toward any endorsement or license. A "C-" or lower grade will require that the course be repeated.

Requirements

Degree Requirements

Code	Title	Hours
Core Courses		
CPSC 20000	Introduction to Computer Science	3
or DATA 20000	Introduction to Data Science	
MATH 20900	Calculus 1	4
MATH 21000	Discrete Mathematics	4
MATH 22000	Applied Probability and Statistics	3
MATH 23500	Calculus 2	4
MATH 25000	Calculus 3	4
MATH 30500	Linear Algebra	3
MATH 32500	Foundations of Advanced Mathematics	3
MATH 44000	Abstract Algebra I	3
MATH 45000	Real Analysis 1	3
MATH 48000	Senior Seminar	3
Additional Courses for Teacher Licensure		
MATH 27000	History of Mathematics	3
MATH 32000	Theories of Geometry	3
Sequence Elective		
Select one course from the following to complete one sequence:		3
Algebra Sequence:		
MATH 30600	Advanced Linear Algebra	
MATH 44100	Abstract Algebra 2	

Analysis Sequence:

MATH 35000 Numerical Analysis

MATH 43000 Complex Analysis

MATH 45100 Real Analysis 2

Statistics Sequence:

MATH 31500 Probability Theory

MATH 31600 Advanced Statistics

Total Hours

46

Advanced Writing Requirement

The Advanced Writing Requirement of the General Education Curriculum is satisfied by successful completion of MATH 48000 Senior Seminar.

Professional Educator License

Secondary education majors must complete the professional educator program of study in their subject area. See content area for Secondary Licensure (<https://catalog.lewisu.edu/undergraduate/education-social-sciences/education/>) content requirements.