Mathematics Education, BA

Requirements

The Bachelor of Arts with a major in mathematics education requires a minimum of 120 s.h., including 46 s.h. in mathematics professional education courses, and a minimum of 41–42 s.h. in mathematics education content courses for students earning the BA in mathematics or a minimum of 47–50 s.h. in mathematics education content courses for students earning the BS in mathematics. Students must maintain a grade-point average of at least 2.70 in professional education course requirements. They also must complete the GE CLAS Core. The major requires admission to the Teacher Education Program (TEP). Application information can be obtained through the Office of Student Services.

Students must earn a BA in mathematics (Program B) or a BS in mathematics (Program B) at the University of Iowa in order to earn the BA. in mathematics education; both degrees may be earned at the same time. Separate application to each degree program is required. Graduates who have earned one of these degrees at another institution and wish to earn the BA in mathematics education should consult the Department of Teaching and Learning; additional coursework may be required. Students also complete coursework in teacher licensure including student teaching.

An Iowa secondary teaching license qualifies holders to teach in grades 5–12. Additional subject area endorsements can be completed in any 5–12 licensure program. For more information and an advisor, contact the Department of Teaching and Learning.

For initial licensure, student teaching must be an all-day, full-semester experience. Most students are placed in a district within a 60-mile radius of Iowa City. Placements outside this area require special approval and are considered on an individual basis. Special site programs provide experience in districts with diverse populations and students also may apply to student teach at international sites for the second half of the semester.

Additional information about options for student teaching and application procedures is available from the Office of Student Services. Applications for student teaching must be submitted during the calendar year before the student teaching semester. The deadline for students planning to student teach the following fall semester is Nov. 15 and April 15 for the following spring semester.

The BA with a major in mathematics education requires the following work.

Professional Education Course Requirements

Students complete 46 s.h. from the following.

Foundation Courses

Foundation courses may be completed before or after admission to the major.

Course #	Title	Hours
All of these:		
EDTL:4900	Foundations of Special Education	3
EPLS:3000	Foundations of Education	3
PSQF:1075	Educational Psychology and Measurement	3

Additional Licensure Courses

Course #	Title	Hours
All of these:		
EDTL:3002	Teaching and Learning Technologies	2
EDTL:3091	Secondary Education Program Orientation and Classroom Management	3
EDTL:3095	Teaching Reading in Secondary Content Areas	1
EDTL:3532	Introduction and Practicum: Mathematics	3
EDTL:3534	Methods: Middle School Mathematics	3
EDTL:4535	Methods: High School Mathematics	3
EDTL:4750	Assessment in Science, Technology, Engineering, and Mathematics (STEM)	2
EDTL:4751	Learning in the Science, Technology, Engineering, and Mathematics (STEM) Classroom	2
EPLS:4180	Human Relations for the Classroom Teacher	3

Student Teaching

Transfer students should consult their advisor since they must complete certain courses before they student teach.

Course #	Title	Hours
All of these:		
EDTL:4087	Seminar: Curriculum and Student Teaching	3
EDTL:4091	Observation and Laboratory Practice in the Secondary School	6
EDTL:4092	Observation and Laboratory Practice in the Secondary School	6

Mathematics Education Content Courses

Students earning a BA in mathematics complete at least 41–42 s.h. from the following; students earning a BS in mathematics complete at least 47–50 s.h. from the following.

Course #	Title	Hours
All of these:		
CS:1210	Computer Science I: Fundamentals	4
MATH:1850	Calculus I	4
MATH:1860	Calculus II	4
MATH:2150	Foundations of Geometry	3

MATH:2700	Introduction to Linear Algebra	4
MATH:2850	Calculus III	4
MATH:3720	Introduction to Abstract Algebra I	4
MATH:3770	Fundamental Properties of Spaces and Functions I	4
STAT:3120	Probability and Statistics	4
One of these:		
MATH:4050	Introduction to Discrete Mathematics	3
MATH:4060	Discrete Mathematical Models	3
And:		
For students earning a BA in mathematics, one additional course beyond calculus		3-4
For students earning a BS in mathematics, three additional courses beyond calculus, including at least two courses numbered MATH:4120 or above		9-12