Mathematics Education, B.A.

Requirements

The Bachelor of Arts with a major in mathematics education requires a minimum of 120 s.h., including 42 s.h. in mathematics professional education courses, and a minimum of 41-42 s.h. in mathematics education content courses for students earning the B.A. in mathematics or a minimum of 47-50 s.h. in mathematics education content courses for students earning the B.S. in mathematics. Students must maintain a g.p.a. 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 B.A. in mathematics (Program B) or a B.S. in mathematics (Program B) at the University of Iowa in order to earn the B.A. 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 B.A. 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.

Professional Education Course Requirements

Students complete 42 s.h. from the following.

Foundation Courses

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

Additional Licensure Courses

Code    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

Mathematics Education Content Courses

Students earning a B.A. in mathematics complete at least 41-42 s.h. from the following; students earning a B.S. in mathematics complete at least 47-50 s.h. from the following.

Code    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

Student Teaching

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

Code    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

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 November 15 and April 15 for the following spring semester.

The B.A. with a major in mathematics education requires the following work.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT:3120</td>
<td>Probability and Statistics</td>
<td>4</td>
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<tr>
<td>One of these:</td>
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<tr>
<td>MATH:4050</td>
<td>Introduction to Discrete Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>MATH:4060</td>
<td>Discrete Mathematical Models</td>
<td>3</td>
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<td>And:</td>
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<tr>
<td>students earning a B.A. in mathematics, one additional course beyond calculus</td>
<td>3-4</td>
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<tr>
<td>students earning a B.S. in mathematics, three additional courses beyond calculus, including at least two courses numbered MATH:4120 or above</td>
<td>9-12</td>
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