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.

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 student 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.

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

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.

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.
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:
students earning a B.A. in mathematics, one
additional course beyond calculus  3-4

students earning a B.S. in mathematics, three
additional courses beyond calculus, including
at least two courses numbered MATH:4120 or
above  9-12

**Academic Plans**

**Sample Plan of Study**

Sample plans represent one way to complete a program of
study. Actual course selection and sequence will vary and
should be discussed with an academic advisor. For additional
sample plans, see MyUI.

**Mathematics Education, B.A.**

**Course**  **Title**  **Academic Career**  **Hours**

**Any Semester**

Admission to the Teacher Education Program,
College of Education, is by competitive application.
For information about application requirements,
process, and deadlines, please consult an advisor
for the College of Education.

Students must maintain a GPA of at least 2.70 in
professional education course requirements.

Students must earn another major at the University
of Iowa in order to earn the BA in mathematics
education. Both degrees may be earned at the same
time.  

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.

**First Year**

**Fall**

MATH:1850  Calculus I  4
ENGL:1200 or RHET:1030  The Interpretation of Literature
or Rhetoric  3 - 4
GE CLAS Core: World Languages First Level
Proficiency or elective course  4 - 5
CSI:1600  Success at Iowa  2

**Spring**

PSQF:1075  Educational Psychology and
Measurement  3
MATH:1860  Calculus II  4
ENGL:1200 or RHET:1030  The Interpretation of Literature
or Rhetoric  3 - 4

GE CLAS Core: World Languages Second Level
Proficiency or elective course  4 - 5
10-hour pre-admission school field experience  

**Summer**

Prepare materials for Teacher Education Program
application (e.g. essays, letters of recommendation) 

**Second Year**

**Fall**

EPLS:3000  Foundations of Education  3
GE CLAS Core: International and Global Issues  3
GE CLAS Core: World Languages Second Level
Proficiency or elective course  4 - 5

Course(s) required for second degree - consult
sample plan for BA or BS in mathematics (Program
B)

Admission Application: apply to the Teacher
Education Program  

**Spring**

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
GE CLAS Core: Social Sciences  3
GE CLAS Core: World Languages Fourth Level
Proficiency or elective course  4 - 5

Course(s) required for second degree - consult
sample plan for BA or BS in mathematics (Program
B)

**Third Year**

**Fall**

EDTL:3532  Introduction and Practicum:
Mathematics  3
EDTL:4900  Foundations of Special Education  3
GE CLAS Core: Historical Perspectives  3

Course(s) required for second degree - consult
sample plan for BA or BS in mathematics (Program
B)

**Spring**

EDTL:3534  Methods: Middle School
Mathematics  3
EPLS:4180  Human Relations for the
Classroom Teacher  3
GE CLAS Core: Natural Sciences without Lab  3

Course(s) required for second degree - consult
sample plan for BA or BS in mathematics (Program
B)

Apply for student teaching (see the College of
Education website for application instructions and
deadlines)
## Fourth Year

### Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>EDTL:4535</td>
<td>Methods: High School Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>GE CLAS Core:</td>
<td>Literary, Visual, and Performing Arts</td>
<td>3</td>
</tr>
<tr>
<td>EDTL:4091</td>
<td>Observation and Laboratory Practice in the Secondary School</td>
<td>6</td>
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<tr>
<td>EDTL:4092</td>
<td>Observation and Laboratory Practice in the Secondary School</td>
<td>6</td>
</tr>
<tr>
<td>GE CLAS Core:</td>
<td>Natural Sciences with Lab</td>
<td>4</td>
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**Course(s) required for second degree - consult sample plan for BA or BS in mathematics (Program B)**

**Hours**  **17-18**

### Spring

<table>
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<tr>
<th>Course</th>
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<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDTL:4087</td>
<td>Seminar: Curriculum and Student Teaching</td>
<td>3</td>
</tr>
<tr>
<td>EDTL:4091</td>
<td>Observation and Laboratory Practice in the Secondary School</td>
<td>6</td>
</tr>
<tr>
<td>EDTL:4092</td>
<td>Observation and Laboratory Practice in the Secondary School</td>
<td>6</td>
</tr>
</tbody>
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**Degree Application: apply on MyUI before deadline (typically in February for spring, September for fall)**

**Exam: edTPA**

**Hours**  **15**

**Total Hours**  **126-133**

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a These majors include a BA in mathematics (program B) or a BS in mathematics (program B) at the University of Iowa.
b Enrollment in math courses requires completion of a placement exam.
c Students who have completed four years of a single language in high school have satisfied the GE CLAS Core World Languages requirement. Enrollment in world languages courses requires a placement exam, unless enrolling in a first-semester-level course.
d Complete the College of Education verification of 10 hour field experience form available on the Office of Student Services web page.
e Please see the College of Education website for detailed application instructions and deadlines. Admission is selective and a priority deadline exists.
f GE CLAS Core courses may be completed in any order unless used as a prerequisite for another course. Students should consult with an advisor about the best sequencing of courses.
g Fulfills a major requirement and may fulfill a GE requirement.
h Please see Academic Calendar, Office of the Registrar website for current degree application deadlines. Students should apply for a degree for the session in which all requirements will be met. For any questions on appropriate timing, contact your academic advisor or Graduation Services.
i As a requirement for completion of an approved Teacher Education Program for initial teaching licensure, the state of Iowa requires a passing score on this exam. The assessment is required before recommendation for licensure or certification to any state.