Teaching and Learning, M.A.T.

Mathematics Education

The Master of Arts in Teaching in teaching and learning with a mathematics education subprogram requires a minimum of 48 s.h. of graduate credit. Students must maintain a program g.p.a. of at least 3.00.

The program is designed primarily for students who decide they would like to become teachers and have already completed a B.S. or B.A. in mathematics. It features advanced work in mathematics along with the courses required for certification. It is a means by which students can obtain both a master's degree and certification. It is assumed that students have completed a baccalaureate degree in mathematics equivalent to one that would be completed at the University of Iowa, but has no previous coursework in education. More coursework may be advised if there are mathematics courses a student has not taken as part of the undergraduate mathematics baccalaureate degree program to render the student's degree equivalent to one from the University of Iowa.

The M.A.T. in teaching and learning with a mathematics education subprogram requires the following work.

Graduate Mathematics Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>At least 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>
</tr>
<tr>
<td>MATH:4120</td>
<td>History of Mathematics</td>
<td>3</td>
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Comprehensive Examination

The comprehensive exam includes a required two-part exam in mathematics and mathematics education. At the discretion of the examining committee, this exam may consist of two parts and is both written and oral. The mathematics and mathematics education comprehensive examinations will not duplicate course examinations, but will assess both mathematics education and the mathematics specialization area chosen by a student.

Admission

Applicants must meet the admission requirements of the Graduate College. They also must meet all Teacher Education Program (TEP) application requirements. Candidates should have completed a baccalaureate degree program in mathematics equivalent to that which is offered through the College of Liberal Arts and Sciences at the University of Iowa. An undergraduate g.p.a. of at least 3.00 is required for admission and must be maintained throughout the enrollment period.

Combined Program

B.A. in Mathematics/M.A.T.

The College of Liberal Arts and Sciences and the College of Education offer students the opportunity to earn their Bachelor of Arts in mathematics/Master of Arts in Teaching degree in education with a mathematics education subprogram in as little as five years.

The Combined B.A./M.A.T. (4+1) program is a seamless process whereby students can progress from undergraduate to graduate status. The usual period of study for both the Bachelor of Arts and the Master of Arts in Teaching degree is six years. Through careful planning, many of the courses required for the M.A.T. program can be taken during the undergraduate years, creating an opportunity to focus the fifth year of study on the comprehensive and student teaching requirements. Visit B.A./M.A.T. Mathematics Education on the College of Education website.

Admission

Students are eligible to apply to the 4+1 program during their sophomore or junior year if they have a cumulative g.p.a. of at least 3.25 or if they meet special considerations. Application materials must include a completed application to the Teacher Education Program (TEP), two recommendations from University of Iowa faculty, a career plan describing how this program will enhance the student's scholarly and or
Students who submit completed applications will be notified within 30 days if they have been accepted into the program. The program accepts a limited number of students each year on a competitive basis. Once accepted into the program, a student meets with an advisor to select an advisory committee to plan a course of study.

During the sixth semester, a student in the program who has completed 80 s.h. of undergraduate work and maintained a 3.00 minimum g.p.a. must apply to the Graduate College. Application to the Graduate College must include a completed Graduate College application form, a letter of application/statement of purpose, one additional letter of recommendation from a faculty member in the mathematics major, Graduate Record Exam (GRE) General Test scores (however, the GRE requirement has been suspended for the 2021-22 admissions cycle), and Test of English as a Foreign Language (TOEFL) test scores for international students.

Students are granted undergraduate/graduate credit for coursework during the seventh semester; they begin paying graduate tuition during the eighth semester until completion of the program. The baccalaureate degree must be conferred at the end of the eighth semester or in the program’s fourth year.