Mathematics, MAT

Department of Mathematics, College of Arts & Sciences

Vision Statement
The Master of Arts for Teachers of Mathematics degree is ideal for:

• Current high school teachers who are planning on teaching advanced secondary mathematics such as Dual-Enrollment calculus at their high school.
• Any student interested in teaching freshman/sophomore level mathematics courses at local universities.
• Any student interested in pursuing a PhD in Education with an emphasis in mathematics.

NOTE: This program does not help a student get a state certification to teach high school math. For those students with an undergraduate degrees already interested in pursuing a degree to teach high school math, but do not yet have a state certification to teach, consider the Teacher Academy Project (http://www.unomaha.edu/college-of-education/moec/projects/teacher-academy-project).

Program Contact Information
Dr. Michael Matthews, Graduate Program Chair (GPC)
Durham Science Center (DSC) 231
402-554-3558
michaelmatthews@unomaha.edu

Program Website (http://www.unomaha.edu/college-of-arts-and-sciences/mathematics)

Other Program-Related Information
Graduate Assistantships
The Mathematics Department annually awards four graduate assistantships for work within the department. There are also several joint UNO/Metropolitan Community College positions in which the teaching assignments are at MCC. All of these positions pay an annual stipend plus a waiver of tuition. For the details of the nature of the work, please contact the department chair.

Teachers of Mathematics Scholarship
The Teacher of Mathematics Scholarship is awarded to teachers of high school mathematics who are interested in obtaining a graduate degree in mathematics (MS, MA, or MAT) at UNO for the purpose of becoming eligible to teach UNO Calculus Dual Enrollment courses. These scholarships are awarded to teachers in school districts that are participating in the Dual Enrollment program. They will provide for the reimbursement of resident tuition for up to six graduate credit hours per semester for one year. No scholarship award becomes final until UNO graduate admission status is obtained. Continuation beyond the first year depends upon satisfactory academic progress and funds available. For further information contact Dr. Janice Rech.

Admissions

Application Deadlines
Applications for this program are accepted on a rolling basis. All materials must be submitted prior to the beginning of the semester in which the student has elected to begin coursework.

Program-Specific Requirements
• Hold state certification for teaching secondary school mathematics

Degree Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td></td>
<td>Required Courses</td>
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</tr>
<tr>
<td>MTCH 8020</td>
<td>TOPICS IN GEOMETRY AND TOPOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>MTCH 8030</td>
<td>PROBLEM SOLVING WITH NUMBER SENSE &amp; GEOMETRY FOR TEACHERS</td>
<td>3</td>
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<tr>
<td>MTCH 8040</td>
<td>TOPICS IN MATHEMATICAL COMPUTING</td>
<td>3</td>
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<tr>
<td></td>
<td>Education Courses</td>
<td>9</td>
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<tr>
<td>Graduate only courses TED 8xx0 to be selected in consultation with your advisor</td>
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Mathematic Sequences
Complete two advisor approved Mathematics (not MTCH) sequences of courses (total of 18 hours). Each sequence must consist of 3 connected courses (as defined by the MAT advisors).

Total Credits
36

1 For example: Applied Modern Algebra, Algebra 1, and Algebra 2. If one of the courses has been taken previously as an undergraduate the course will not count toward the 36 credits, however it will count in terms of completed the three course sequence. Such a situation would in effect enable the MAT student to finish the 3 course sequence quicker and free up 1 class for an elective in mathematics.

Exit Requirements

• Comprehensive Examination
  • Pass the Mathematics comprehensive examination. The examination is offered three times a year; on April 15, July 15, and November 15th (or the proceeding Friday if any of these dates falls on a weekend). The Mathematics exam is three hours in length and covers the terminal course of each of the 2 Math sequence of courses. Each course instructor will write a 1.5 hour exam and grade the exam as pass or fail. To pass the overall MAT mathematics portion comprehensive exam, the student must pass both.