Bachelor of Science: Major in MATH  
2016-2017 Catalog Year

Major Requirements

<table>
<thead>
<tr>
<th>Mathematics Core</th>
<th>16 hours</th>
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<tbody>
<tr>
<td>MATH 1710</td>
<td>Calculus I</td>
</tr>
<tr>
<td>MATH 1720</td>
<td>Calculus II</td>
</tr>
<tr>
<td>MATH 2700</td>
<td>Linear Algebra and Vector Geometry</td>
</tr>
<tr>
<td>MATH 2730</td>
<td>Calculus III</td>
</tr>
<tr>
<td>MATH 3000</td>
<td>Real Analysis</td>
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</tbody>
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Breadth and Depth Requirements: 18 hours

Pick three courses from one area and one course from the others.

1. Analysis (Math 3610 required if chosen for depth)
   - MATH 3350 Introduction to Numerical Analysis
   - MATH 3410 Differential Equations I
   - MATH 3420 Differential Equations II
   - MATH 3610 Real Analysis II
   - MATH 3740 Vector Calculus

2. Algebra (Math 3510 required if chosen for depth)
   - MATH 3400 Number Theory
   - MATH 3510 Introduction to Abstract Algebra I
   - MATH 4010 Introduction to Metamathematics
   - MATH 4430 Introduction to Graph Theory
   - MATH 4450 Introduction to the Theory of Matrices
   - MATH 4510 Abstract Algebra II

3. Probability/Statistics
   - MATH 3680 Applied Statistics
   - MATH 4610 Probability
   - MATH 4650 Statistics

4. Geometry/Topology
   - MATH 3740 Vector Calculus
   - MATH 4060 Foundations of Geometry
   - MATH 4500 Introduction to Topology

Mathematics Elective Requirement: 9 hours

Three additional mathematics courses chosen from among MATH 2000 or MATH 3350 or higher.

Theory Requirement
At least one of MATH 3510 and 3610 must be chosen above.

Computer Programming: 3 or 4 hours chosen from
- CSCE 1010 Introduction to Computer Science
- CSCE 1020 Program Development
- CSCE 1030 Computer Science I

Minor Requirements

One of the following is required:
- A minor of 18 hours (6 advanced). A minor in statistics does not fulfill this requirement.
- Completion of a second major in addition to mathematics.
- Completion of the Actuarial Science certificate. See separate advising sheet for details.

Academic Advising
To schedule an appointment with faculty advisor, please e-mail MathAdvising@unt.edu

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Dr. John Quintanilla, John.Quintanilla@unt.edu

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