Bachelor of Science in Mathematics  
2022 - 2023 Degree Requirements Checklist

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<tr>
<th>College of Science Admission Requirement</th>
<th>Other Required Courses for Degree</th>
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| Students must demonstrate proficiency in College Algebra by placing into Math Level 2 or higher through the UNT Math Placement Exam OR completing College Algebra or higher with a grade of C or higher. | • Three lab science courses intended for science majors in one of the following areas (12hrs)  
   o Biology emphasis  
   o Chemistry emphasis  
   o Physics emphasis  
• Six hours of technical writing courses or six hours of a foreign language  
• CSCE 1010: Discovering Computer Science (3hrs) or CSCE 1030: Computer Science I (4hrs) |

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<th>Math Foundation Requirements</th>
<th>Minor Requirements</th>
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| • MATH 1710: Calculus I (4hrs) (C or higher)  
• MATH 1720: Calculus I (3hrs) (C or higher)  
• MATH 2000: Discrete Math (3hrs) (C or higher)  
• MATH 2700: Linear Algebra and Vector Geometry  
• MATH 2730: Multivariable Calculus (3hrs)  
• MATH 3000: Real Analysis I (3hrs)  
• MATH 3510: Intro. to Abstract Algebra I (3hrs) or MATH 3610: Real Analysis II (3hrs) (can double-dip with depth or breadth course) | • One of the following is required:  
   o Minor of at least 18 hours; cannot minor in Statistics  
   o Completion of a second major in addition to Mathematics  
   o Completion of the Actuarial Science, Data Analytics, or Secondary Teaching certificate |

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<th>Major Depth Requirements</th>
<th>University Core Requirements</th>
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| Students must complete three courses from one of the following areas  
  • Analysis area  
    o MATH 3350: Intro. to Numerical Analysis (3hrs)  
    o MATH 3410: Differential Equations I (3hrs)  
    o MATH 3420: Differential Equations II (3hrs)  
    o MATH 3610: Real Analysis II (3hrs) (required if chosen for depth)  
    o MATH 3740: Vector Calculus (3hrs)  
    o MATH 4080: Differential Geometry (3hrs)  
    o MATH 4100: Fourier Analysis (3hrs)  
    o MATH 4200: Dynamical Systems (3hrs)  
    o MATH 4520: Intro. to Functions of a Complex Variable (3hrs)  
  • Algebra area  
    o MATH 3400: Number Theory (3hrs)  
    o MATH 3510: Intro. to Abstract Algebra I (3hrs) (required if chosen for depth)  
    o MATH 4010: Intro. to Metamathematics (3hrs)  
    o MATH 4430: Intro. to Graph Theory (3hrs)  
    o MATH 4450: Intro. to the Theory of Matrices (3hrs)  
    o MATH 4510: Abstract Algebra II (3hrs)  
  • Probability & Statistics area  
    o MATH 3680: Applied Statistics (3hrs)  
    o MATH 4610: Probability (3hrs)  
    o MATH 4650: Statistics (3hrs)  
  • Geometry & Topology area  
    o MATH 3740: Vector Calculus (3hrs)  
    o MATH 4060: Foundations of Geometry (3hrs)  
    o MATH 4080: Differential Geometry (3hrs)  
    o MATH 4500: Intro. to Topology (3hrs) | Communication – English Composition and Rhetoric (6hrs total)  
  C or higher required for English core  
  • ENGL 1310: First-Year Writing I (3hrs)  
  • ENGL 3120: First-Year Writing II (3hrs) or TECM 2700: Technical Writing (3hrs) |

| Other Major Requirements | Mathematics (at least 3hrs total)  
  • Double-dips with major requirement  
  • Double-dips with major requirement  
Creative Arts (3hrs total)  
  • See catalog or online degree audit for acceptable options  
  • See catalog or online degree audit for acceptable options  
  Language, Philosophy, & Culture (3hrs total)  
  • American History (6hrs total)  
  • HIST 2610: US History to 1865 (3hrs)  
  • HIST 2620: US History since 1865 (3hrs) |

| Additional University Requirements | Social & Behavioral Sciences (3hrs total)  
  • See catalog or online degree audit for acceptable options  
Component Area Option (6hrs total)  
  • Double-dips with major requirement |

| Major Breadth Requirements | Minimum of 120 total hours  
  • Minimum of 36 advanced hours  
   o Elective requirements vary by path  
   • Minimum 2.000 UNT GPA and Overall GPA |

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<th>Students must complete one course in each of the three areas above not used to satisfy the depth requirement. (9hrs)</th>
<th>Other Major Requirements</th>
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| • Six hours of advanced math electives numbered 3350 or above  
• Minimum of 2.0 GPA in math courses numbered 3350 or above |  

College of Science Advising Center  
Hickory Hall 283; (940) 369-8606; COSAdvising@unt.edu  
This is an unofficial simplified checklist effective Fall 2022. Degree requirements and pre-requisites are subject to change, please check with an advisor for any updates. Online catalog - http://catalog.unt.edu/