Bachelor of Science in Mathematics

Degree Requirements

Candidates for the Bachelor of Science in Mathematics must meet the following requirements.

- 1. Hours Required for the Degree: Completion of a minimum of 130 total semester hours; 42 must be advanced.
- **2. General University Requirements:** See "General Degree Requirements" in the Academics section of this catalog.
- **3.** College of Arts and Sciences Core Curriculum: Minimum 61 hours (includes requirements of University Core Curriculum). See "Arts and Sciences Core Curriculum" in the College of Arts and Sciences section of this catalog for specific core requirements and list of approved courses.
- **4. Major Requirements:** 40 hours of math courses as follow: MATH 1710, 1720, 2510, 2520, 2700, 2730, 3410, 3510 and 4500, plus 12 hours numbered above 3200.
- **5. Minor Requirements:** A minor of 18 hours (6 advanced) in one of the following areas of study: biology, chemistry, computer science, economics, physics or engineering technology.
- **6. Electives:** See four-year plan.
- **7. Other Course Requirements:** The laboratory science requirement must be met with the following: BIOL 1710/1730 and 1720/1740, and either PHYS 1710/1730 and 2220/2240, or CHEM 1410/1430 and 1420/1440.
- **8. Other Requirements:** Bachelor's degree candidates in mathematics must present at least a 2.0 grade point average on all mathematics courses above 3150.

See the chair of the mathematics department or the undergraduate adviser for a degree plan during the first year of study at UNT.

In order to teach mathematics at the secondary level, students are required to obtain a bachelors degree in mathematics. In addition, 21 hours in the College of Education (including student teaching) are required.

Students taking mathematics courses at the 2000-level or above are expected to be competent in computer programming, using languages such as BASIC, C, Fortran, or PASCAL. This competency can be obtained through completion of CSCI 1110.

It is recommended that the required foreign language be German, French, Russian, or Spanish. Students wishing to take some other language must consult the chair of the mathematics department.

DRED (Traffic Safety) courses may not be used to satisfy any portion of a degree in the College of Arts and Sciences.

BS in Mathematics

Following is **one** suggested four-year degree plan. Students are encouraged to see their adviser each semester for help with program decisions and enrollment.

| BS in Mathematics | | | |
|---|---------------------|---|-------------------------------|
| FRESHMAN YEAR | TTOTIDG | FRESHMAN YEAR | TTOTIBO |
| FALL | HOURS | SPRING | HOURS |
| CSCI 1110, Program Development | 4 | ECON 1110, Principles of Macroecono | |
| ENGL 1310, College Writing I | 3 | ENGL 1320, College Writing II ⁶ | 3 |
| LANG 2040, Foreign Language | _ | LANG 2050, Foreign Language | _ |
| (intermediate) ^{3, 13} | 3 | (intermediate) ^{3, 13} | 3 |
| MATH 1710, Calculus I ⁴ | 4 | MATH 1720, Calculus II | 3 |
| Laboratory Science ⁵⁶ | <u>4</u> | Laboratory Science ⁵⁶ | <u>4</u> 16 |
| Total | 18 | Total | 16 |
| SOPHOMORE YEAR | | SOPHOMORE YEAR | |
| FALL | HOURS | SPRING | HOURS |
| ENGL 2210, World Literature I | 3 | ENGL 2220, World Literature II | 3 |
| HIST 2610, United States History to 18 | 365 ¹² 3 | HIST 2620, United States History Since | e 1865 ¹² 3 |
| MATH 2510, Real Analysis I | 3 | MATH 2520, Real Analysis II | 3 |
| MATH 2730, Multivariable Calculus | 3 | MATH 2700, Linear Algebra and Vector | or |
| Laboratory Science ⁵⁶ | 4 | Geometry | 3 |
| Wellness ¹¹ | 2-3 | Laboratory Science ⁵⁶ | 4 |
| Total | 18-19 | Understanding of Ideas and Values ⁸ | <u>3</u> |
| | | Total | 19 |
| JUNIOR YEAR | | JUNIOR YEAR | |
| FALL | HOURS | SPRING | HOURS |
| MATH 3510, Introduction to Abstract | | MATH 3410, Differential Equations I | 3 |
| Algebra I ⁵⁴ | 3 | MATH 4500, Introduction to Topology | 3 |
| MATH (above 3150) | 3 | PSCI 1050, American Government | 3 |
| PSCI 1040, American Government | 3 | Minor Concentration (elective) ^{16,55} | 6 |
| Minor (elective) ^{16,55} | <u>_6</u> | Oral Communication ² | <u>3</u> |
| Total | 15 | Total | 18 |
| SENIOR YEAR | | SENIOR YEAR | |
| FALL | HOURS | SPRING | HOURS |
| MATH (above 3150) | 3 | MATH (above 3150) | 3 |
| MATH (above 3150) | 3 | Minor ^{16, 55} | 3 |
| Minor ⁵⁵ | 3 | Understanding of Ideas and Values ⁸ | 3 3 3 <u>3</u> 15 |
| Visual and Performing Arts ⁷ | 3 | Elective ¹⁶ | 3 |
| Elective ¹⁶ | _3 | Elective ¹⁶ | <u>3</u> |
| Total | 15 | Total | 15 |

Actual degree plans may vary depending on availability of courses in a given semester.

Some courses may require prerequisites not listed.

See Arts and Sciences folding key (#2) for footnotes.

UNT Undergraduate Catalog Department of Mathematics