

## B.A. Mathematics

## 2024-2025 Texas Common Course Numbering System Transfer Guide

This four-year plan provides a model for on-time completion of this UNT program using as many TCCNS courses as possible. The four-year plan also shows the first point when no TCCNS options are available for this program. See the current <u>Undergraduate Catalog</u> for course prerequisites. Course availability at UNT is subject to change, and the plan shown below may change based on updates to UNT's course offerings.

First Year Fall		First Year Spring	
UNT Requirement	TCCNS Option	UNT Requirement	TCCNS Option
UNT Core: Creative Arts	See list of approved courses	CSCE 1010 or 1020 or 1030	COSC 1315 or 1336 or 1436
ENGL 1310	ENGL 1301	ENGL 1320 or TECM 2700	ENGL 1302 or 2311
MATH 1710 <sup>1</sup>	MATH 2313 or 2413	MATH 1720 <sup>1</sup>	MATH 2314 or 2414
MATH 2000 <sup>4</sup>	MATH 2305	PSCI 2306	GOVT 2306
PSCI 2305	GOVT 2305	Laboratory Science Option <sup>5</sup>	Consult UNT advisor

Second Year Fall		Second Year Spring	
UNT Requirement	TCCNS Option	UNT Requirement	TCCNS Option
UNT Core: American History	See list of approved courses	UNT Core: American History	See list of approved courses
UNT Core: Language, Philosophy & Culture	See list of approved courses	MATH 3000	N/A
MATH 2700	MATH 2318 or 2418	MATH Depth Course (Advanced)	N/A
MATH 2730	MATH 2315 or 2415	Laboratory Science Option <sup>5</sup>	Consult UNT advisor
Laboratory Science Option <sup>5</sup>	Consult UNT advisor	Minor Course <sup>2</sup>	Consult UNT advisor

Third Year Fall		Third Year Spring	
UNT Requirement	TCCNS Option	UNT Requirement	TCCNS Option
UNT Core: Social & Behavioral Sciences	See list of approved courses	MATH Depth Course (Advanced)	N/A
MATH 3510 or 3610 <sup>3</sup>	N/A	MATH Breadth Course (Advanced)	N/A
MATH Breadth Course (Advanced)	N/A	Minor Course <sup>2</sup> (Advanced)	N/A
Minor Course <sup>2</sup>	Consult UNT advisor	Minor Course <sup>2</sup>	Consult UNT advisor
Elective	Consult UNT advisor		

Students have the option to take MATH 1810 / 1820 / 1830 or MATH 1710 / 1820 / 1830 in place of MATH 1710 / 1720. Note that the MATH 1810 / 1820 / 1830 or the MATH 1710 / 1820 / 1830 options may result in needing additional courses taken to fulfill the UNT Core. See your advisor for more information.

- 3 Note that MATH 3510 or 3610 must be taken if neither were completed as part of the depth requirement. If one was taken, then the student will need to take an additional advanced elective.
- Incoming students who have already taken an introduction to mathematical proofs may request substitution of MATH 2000 by an upper-level mathematics course numbered 3350 or higher. Please see an advisor for more information.
- <sup>5</sup> If the three laboratory courses do not total to be 11 hours, then the student will need to take another elective to reach the 120 required hours for the degree.

<sup>2</sup> Students can either choose a minor of at least 18 hours of which 6 must be 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, or completion of the data analytics certificate.



## B.A. Mathematics

## 2024-2025 Texas Common Course Numbering System Transfer Guide

Fourth Year Fall		Fourth Year Spring	
UNT Requirement	TCCNS Option	UNT Requirement	TCCNS Option
MATH Breadth Course (Advanced)	N/A	MATH Elective (3350 or higher)	N/A
Minor Course <sup>2</sup> (Advanced)	N/A	Elective (Advanced)	N/A
Elective (Advanced)	N/A	Minor Course <sup>2</sup>	Consult UNT advisor
Elective	Consult UNT advisor	Elective	Consult UNT advisor
Foreign Language Option I or II	Consult UNT advisor	Foreign Language Option I or II	Consult UNT advisor

<sup>&</sup>lt;sup>2</sup> Students can either choose a minor of at least 18 hours of which 6 must be 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, or completion of the data analytics certificate.



## B.A. Mathematics

## 2024-2025 Texas Common Course Numbering System Transfer Guide

Students may not declare a major within the College of Science until they have completed MATH 1100 (MATH 1314 or 1414) or MATH 1180 (MATH 1324) with a 'C' or higher or have demonstrated proficiency through a math placement exam. Applicants who do not meet the math proficiency requirement will be provisionally admitted as Pre-College of Science (PCOS). PCOS students may visit the College of Science Advising Center for assistance.

#### Courses Recommended for Transfer

The UNT Core requirements are shown with Texas Common Course Numbering System values only when UNT offers equivalent courses. There may be other courses in transfer that apply toward the specific degree requirement, but those listed are known to apply.

#### **UNT Core: Communication**

ENGL 1301; and ENGL 1302 or 2311

A grade of 'C' or higher is required on courses applied toward this requirement.

ENGL 1301 and 2311 are recommended.

#### **UNT Core: Mathematics**

This requirement will be met by fulfilling the B.A. Mathematics major requirements.

#### **UNT Core: Life and Physical Sciences**

This requirement will be met by fulfilling the B.A. Mathematics major requirements.

#### **UNT Core: American History**

Two courses chosen from: HIST 1301, 1302, 2301

#### **UNT Core: Government/Political Science**

**GOVT** 2305 and 2306

#### **UNT Core: Creative Arts**

One course chosen from: ARTS 1301 or 1304; DRAM 1310; MUSI 1306 or 1307; SPCH 2341

#### **UNT Core: Language, Philosophy and Culture**

One course chosen from: ARTS 1303; ENGL 2321, 2326, 2331, 2341, or 2351; HIST 2321 or 2322; PHIL 1301, 1304, 2303, or 2306

#### **UNT Core: Social and Behavioral Sciences**

One course chosen from: **ANTH** 2346, 2351; **BUSI** 1307; **COMM** 1307; **CRIJ** 1301; **ECON** 2301 or 2302; **GEOG** 1303; **PSYC** 2301 or 2330; **SOCI** 1301; **SOCW** 2361; **SPCH** 1318; **TECA** 1354

#### **UNT Core: Core Option Courses**

This requirement will be met by fulfilling the B.A. Mathematics major requirements.

#### **College of Science: Breadth Requirement**

Students pursuing the Bachelor of Arts must complete four classes (minimum 3 hours each) from classes outside of COS. These classes may not be simultaneously applied to University Core Curriculum requirements. Students are encouraged to use these 12 hours to add value to their degree by applying them to a certificate, minor, or second major that will support their goals, in consultation with the COS Advising Center.

This requirement will be deemed complete for Bachelor of Arts students who attain Intermediate II (2312) level proficiency in a foreign language (for all languages other than American Sign Language, prerequisites for 2312 are 1411, 1412, and 2311, in sequence). Also, students who graduated from a high school outside the United States at which English was not the primary language should ask the COS Advising Center about eligibility for waiving this requirement.

#### **Mathematics: Major Requirements**

TCCNS options:

- MATH 2305
- MATH 2313 or 2413 (also fulfills the Mathematics core requirement)
- MATH 2314 or 2414 (also fulfills a portion of the Core Option Courses core requirement)
- MATH 2315 or 2415
- MATH 2318 or 2418

Students must achieve a grade point average of at least 2.0 in all mathematics courses which are applied toward a mathematics major and are numbered 3350 or above.

Courses listed above are TCCNS options and do not include all courses required for the B.A. Mathematics major.

### **Mathematics: Laboratory Sciences**

TCCNS options:

Group I - Complete one of the following:

- PHYS 2125/2325 or 2425
- **CHEM** 1111/1311 or 1411

Group II - Complete one of the following:

- BIOL 1106/1306 or 1406 (approved substitution)
- **CHEM** 1111/1311 or 1411
- CHEM 1112/1312 or 1412
- PHYS 2125/2325 or 2425
- PHYS 2126/2326 or 2426

Group III – Complete one course that meets the University Core Curriculum for the Life & Physical Sciences requirement:

- **ANTH** 2401 or 2301/2101
- **ASTR** 1403
- **ASTR** 1404
- **BIOL** 1408 or 1308/1108
- **BIOL** 2406 or 2306/2106
- **GEOL** 1403
- PHYS 1403PHYS 1404
- PHYS 1410
- PHYS 1415

GEOL 1401

Three laboratory science courses are required. Two out of the three courses will also fulfill the Life & Physical Sciences core requirement and the third course will fulfill 3 hours of the Core Option Course requirement.

Courses listed above are TCCNS options and do not include all courses required for the B.A. Mathematics major.



## B.A. Mathematics

## 2024-2025 Texas Common Course Numbering System Transfer Guide

#### Mathematics: Foreign Language

#### TCCNS options:

- Foreign Language 1411 & 1412
- ENGL 2311

Students may complete either of two options to satisfy the College of Science foreign language requirement.

Option I: Proficiency in a foreign language equivalent to 1412 is required. Students intending to pursue a graduate degree in mathematics are encouraged to study French, German or Russian. Students may take **SPAN** 1030 (at UNT only) in place of **SPAN** 1010 (**SPAN** 1411) and **SPAN** 1020 (**SPAN** 1412).

Option II: Complete 6 hours of technical writing courses from **TECM** 2700 (*ENGL* 2311), 4180, 4190, 4250, or 4700.

Courses listed above are TCCNS options and do not include all courses required for the B.A. Mathematics major.

#### **Mathematics: Computer Programming**

#### TCCNS options:

COSC 1315 or 1336 or 1436

Students taking mathematics courses at the 2000 level or above are expected to be competent in computer programming, using languages such as BASIC, C, C++, Fortran, PASCAL or Java. Students are encouraged to complete the programming requirement during their freshman or sophomore year. Students who have acquired a solid programming competency in a non-academic setting, such as through work experience, may demonstrate their programming competency by passing a departmental exam in place of the course requirement.

Courses listed above are TCCNS options and do not include all courses required for the B.A. Mathematics major.

### **Mathematics: Required Minor**

One of the following is required:

- A minor of at least 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. Students must take MATH 3680, MATH 4610 and MATH 4650 (all at UNT only) for fulfilling degree requirements; students are also encouraged to take MATH 3350 and MATH 3740 (both at UNT only). Also, no mathematics courses may be chosen for fulfilling the elective requirements of the certificate program
- Completion of the data analytics certificate

#### **Mathematics: Teacher Certification Option**

The College of Science encourages students to explore teaching at the secondary level as a career option. A higher GPA may be required for the certification option. For more information, contact your advisor.

#### **Special Notes**

Hours Required and General/College Requirements: A minimum of 120 semester hours, of which 36 must be advanced, and fulfillment of degree requirements for the Bachelor of Arts degree as specified in the General University Requirements section of the UNT catalog and the College of Science requirements.

**UNT Core Curriculum/Transfer of Core Curriculum:** UNT complies with the mandate of the Texas Legislature regarding <u>Core requirements</u> for state-assisted institutions. Students who successfully complete the common core curriculum (in whole or in part) at a Texas state-assisted institution of higher education are eligible to transfer as "core complete" for those categories in the UNT University Core Curriculum.

Individual academic programs may require courses contained in parts of the University Core Curriculum. Students who wish to take courses that will fulfill both core and major/program requirements simultaneously should check with academic advisors for assistance in selecting core courses.

**Choice of Catalog:** Any student transferring directly from a Texas public community college to UNT shall have the same choice of catalog designating degree requirements as the student would have had if the dates of attendance at the university had been the same as the dates of attendance at the community college.

The College of Science required curriculum and policies are located in the undergraduate catalog under the corresponding catalog year.

For additional program and contact information, visit the College of Science Student Advising website at <a href="https://cos.unt.edu/advising">https://cos.unt.edu/advising</a>.