College of Science

B.S. 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 *Undergraduate Catalog* 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[1]	MATH 2313 or 2413	MATH 1720[1]	MATH 2314 or 2414
MATH 2000[5]	MATH 2305	PSCI 2306	GOVT 2306
PSCI 2305	GOVT 2305	Laboratory Science Option[4]	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
MATH 2700	MATH 2318 or 2418	MATH 3000	N/A
MATH 2730	MATH 2315 or 2415	MATH Depth Course (Advanced)	N/A
Laboratory Science Option[4]	Consult UNT advisor	Laboratory Science Option[4]	Consult UNT advisor
Minor Course[2]	Consult UNT advisor	Minor Course[2]	Consult UNT advisor

Third Year Fall		Third Year Spring	
UNT Requirement	TCCNS Option	UNT Requirement	TCCNS Option
UNT Core: Language, Philosophy & Culture	See list of approved courses	UNT Core: Social & Behavioral Sciences	See list of approved courses
UNT Core: Core Option Course or Elective	See list of approved courses or Consult UNT advisor	MATH Breadth Course (Advanced)	N/A
MATH 3510 or 3610[3]	N/A	MATH Breadth Course (Advanced)	N/A
Foreign Language Option I or II	Consult UNT advisor	Foreign Language Option I or II	Consult UNT advisor
Minor Course[2]	Consult UNT advisor		

[1] 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.

[2] 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.

[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.

[4] 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.

[5] 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.

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Fourth Year Fall		Fourth Year Spring	
UNT Requirement	TCCNS Option	UNT Requirement	TCCNS Option
MATH Depth Course (Advanced)	N/A	MATH Breadth Course (Advanced)	N/A
MATH Depth Course (Advanced)	N/A	MATH Elective (3350 or higher)	N/A
MATH Elective (3350 or higher)	N/A	Minor Course[2] (Advanced)	N/A
Minor Course[2]	Consult UNT advisor	Minor Course[2] (Advanced)	N/A
Elective	Consult UNT advisor	Elective	Consult UNT advisor

[2] 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.

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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.S. Mathematics major requirements.

UNT Core: Life and Physical Sciences

This requirement will be met by fulfilling the B.S. 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

One course for this requirement will be met by fulfilling the B.S. Mathematics major requirements. In addition, complete one course from Core Option A or Option B.

Option A: ANTH 2401 or 2301/2101, 2346, or 2351; **ARTS** 1301, 1303 or 1304; **ASTR** 1403 or 1404; **BIOL** 1306 or 1406, 1307 or 1407, 1322, 1408 or 1308/1108, 2301 or 2401, 2302 or 2402, 2406 or 2306/2106; **BUSI** 1307 or 2305; **CHEM** 1311 or 1411, 1312 or 1412; **COMM** 1307 or 2300; **CRIJ** 1301; **DRAM** 1310; **ECON** 2301 or 2302; **ENGL** 1301, 1302, 2311, 2321, 2326, 2331, 2341, or 2351; **GEOG** 1303; **GEOL** 1401 or 1403; **HECO** 1322; **HIST** 1301, 1302, 2301, 2321, or 2322; **MATH** 1324, 1325, 1332, 1342, 2312 or 2412; **MUSI** 1306 or 1307; **PHIL** 1301, 1304, 2303, or 2306; **PHYS** 1301 or 1401, 1302 or 1402, 1403, 1404, 1410, 1415, 2325 or 2425, or 2326 or 2426; **PSYC** 2301 or 2330; **SOCI** 1301; **SOCW** 2361; **SPCH** 1315, 1318 or 2341; **TECA** 1354

Option B: **COMM** 2302; **SPCH** 1311; **TECA** 1303

CSCE *1010 (at UNT only) is an option for the major and will fulfill 3 hours of this requirement.*

The additional 3 hours needed may be fulfilled depending on which Laboratory Science option is chosen. Consult UNT advisor for more information.

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.S. Mathematics major.

Mathematics: Laboratory Sciences

TCCNS options:

Option I: Biology Emphasis

- **BIOL** 1106/1306 or 1406 (approved substitution)
- **BIOL** 1107/1307 or 1407 (approved substitution)
- **PHYS** 2125/2325 or 2425, or **CHEM** 1111/1311 or 1411

Option II: Chemistry Emphasis

- **CHEM** 1111/1311 or 1411
- **CHEM** 1112/1312 or 1412
- One additional course that meets the University Core Curriculum requirement for the natural sciences, or any 3 hours from **CHEM** numbered at least 2000

Option III: Physics Emphasis

- **PHYS** 2125/2325 or 2425
- **PHYS** 2126/2326 or 2426
- One additional course that meets the University Core Curriculum requirement for the natural sciences, or any 3 hours from **PHYS** numbered at least 2000

Option IV: Double-Major Students

Students double majoring in mathematics and another discipline (typically biology, chemistry, physics or engineering) that requires at least 12 hours of laboratory science intended for science and engineering majors may use the same laboratory science courses that satisfy the requirements for the other major to satisfy the laboratory science requirement for the mathematics major.

Option V: Geography/Geology Minor Students

To satisfy the laboratory science requirement for the mathematics major, students with a minor in geography or geology may use:

- **GEOL** 1401
- **GEOL** 1403
- **PHYS** 2125/2325 or 2425, or **CHEM** 1111/1311 or 1411

Three laboratory science courses are required. Two out of the three courses will also fulfill the Life & Physical Sciences core requirement and one course may 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.S. Mathematics major.

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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.

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.S. 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.S. 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.

Mathematics: Grad Track Option

The B.S. Mathematics major has a grad track option leading to a M.S. Mathematics. For more information, review the UNT undergraduate catalog and consult a UNT 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 Science in Mathematics 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 Core requirements 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 https://cos.unt.edu/advising.