

College of Science

B.S. Mathematics

2019-2020 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.

YEAR	FALL SEMESTER		SPRING SEMESTER	
	UNT Requirement	TCCNS Option	UNT Requirement	TCCNS Option
FRESHMAN	ENGL 1310	ENGL 1301	CSCE 1020 or CSCE 1030	COSC 1315 or 1415 or COSC 1336 or 1436
	MATH 1710	MATH 2313 or 2413 or 2513	TECM 2700	ENGL 2311
	MATH 2000	MATH 2305 or 2405	MATH 1720	MATH 2314 OR 2414
	PSCI 2305	GOVT 2305		
	Elective	Consult UNT advisor	B.S. Math: Laboratory Science	See list of approved courses

YEAR	FALL SEMESTER		SPRING SEMESTER	
	UNT Requirement	TCCNS Option	UNT Requirement	TCCNS Option
SOPHOMORE	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	None
	MATH 2730	MATH 2315 or 2415	Advanced MATH Depth Elective	
	B.S. Math: Laboratory Science	See list of approved courses	B.S. Math: Laboratory Science	See list of approved courses
	Minor	Consult UNT advisor	Minor	Consult UNT advisor

YEAR	FALL SEMESTER		SPRING SEMESTER	
	UNT Requirement	TCCNS Option	UNT Requirement	TCCNS Option
JUNIOR	MATH 3510 or MATH 3610	None	Advanced MATH Breadth Elective	None
	Foreign Language Option I or II	Consult UNT advisor	Advanced MATH Breadth or Depth Elective	
	UNT Core: Language, Philosophy & Culture	See list of approved courses	Minor (advanced)	
	Minor	Consult UNT advisor	PSCI 2306	GOVT 2306
	Minor	Consult UNT advisor	UNT Core: Social & Behavioral Sciences	See list of approved courses

YEAR	FALL SEMESTER		SPRING SEMESTER	
	UNT Requirement	TCCNS Option	UNT Requirement	TCCNS Option
SENIOR	Advanced MATH Depth Elective	None	Advanced MATH Breadth Elective	None
	MATH Elective (3350 or higher)		MATH Elective (3350 or higher)	
	Elective	Consult UNT advisor	Elective (advanced)	
	Elective	Consult UNT advisor	Minor (advanced)	
	UNT Core: Creative Arts	See list of approved courses	Elective	

Students may not declare a major within the College of Science until they have completed MATH 1100 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.

The College of Science encourages students to explore teaching at the secondary level as a career option. Students seeking secondary teacher certification should contact the Teach North Texas Program in the College of Science.

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 better is required on courses applied toward this requirement.

ENGL 2311 is recommended.

UNT Core: Mathematics

This requirement will be met by fulfilling B.S. Mathematics major requirements (see next column).

UNT Core: Life & Physical Sciences

This requirement will be met by fulfilling B.S. Mathematics laboratory science requirement (see next column).

UNT Core: American History

Two courses chosen from: HIST 1301, 1302, 2301

UNT Core: Political Science

GOVT 2305 and 2306

UNT Core: Creative Arts

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

UNT Core: Language, Philosophy and Culture

One course chosen from: ARTS 1303; ENGL 2332 or 2333; HIST 2321 or 2322; PHIL 1301, 1304, 2303, 2306, or 2316

UNT Core: Social & Behavioral Sciences

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

UNT Core: Component Area Option

This requirement may be met by fulfilling B.S. Mathematics major requirements (see next column).

B.S. Mathematics: Major Requirements

- MATH 2313 or 2413 or 2513 (also fulfills the Mathematics core requirement)
- MATH 2314 or 2414
- MATH 2315 or 2416
- MATH 2318 or 2418
- MATH 2305 or 2405

MATH 2314 and 2305 also fulfill the Component Area Option core requirement.

Advanced Mathematics Courses

No TCCNS options available

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

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

B.S. Mathematics: Laboratory Sciences

The College of Science major in mathematics with Teacher Certification requires students to complete at least 11 hours in laboratory sciences. These may also fulfill the Life & Physical Sciences and Component Area Option core requirements.

Option I. Biology Emphasis

- BIOL 1406 or 1306/1106**
- BIOL 1407 or 1307/1107**
- PHYS 2425 or 2325/2125 or CHEM 1411 or 1311/1111

Option II. Chemistry Emphasis

- CHEM 1411 or 1311/1111
- CHEM 1412 or 1312/1112
- Any CHEM numbered at least 2000 or one of the following:

- ANTH 2401 or 2301/2101
- ASTR 1403 or 1303/1103
- ASTR 1404 or 1304/1104
- BIOL 1406 or 1306/1106**
- BIOL 1407 or 1307/1107**
- BIOL 1408 or 1308/1108
- BIOL 2401 or 2301/2101
- BIOL 2402 or 2302/2102
- BIOL 2406 or 2306/2106
- GEOL 1401 or 1301/1101
- GEOL 1403 or 1303/1103
- PHYS 1401 or 1301/1101
- PHYS 1402 or 1302/1102
- PHYS 1403 or 1303/1103
- PHYS 1404 or 1304/1104
- PHYS 1410 or 1310/1110
- PHYS 1415 or 1315/1115
- PHYS 2425 or 2325/2125
- PHYS 2426 or 2326/2126

B.S. Mathematics: Laboratory Sciences (cont.)

Option III. Physics Emphasis

- PHYS 2425 or 2325/2125
- PHYS 2426 or 2326/2126
- Any PHYS numbered at least 2000 or one of the following:
 - ANTH 2401 or 2301/2101
 - CHEM 1412 or 1312/1112
 - ASTR 1403 or 1303/1103
 - GEOL 1401 or 1301/1101
 - ASTR 1404 or 1304/1104
 - GEOL 1403 or 1303/1103
 - BIOL 1406 or 1306/1106**
 - PHYS 1401 or 1301/1101
 - BIOL 1407 or 1307/1107**
 - PHYS 1402 or 1302/1102
 - BIOL 1408 or 1308/1108
 - PHYS 1403 or 1303/1103
 - BIOL 2401 or 2301/2101
 - PHYS 1404 or 1304/1104
 - BIOL 2402 or 2302/2102
 - PHYS 1410 or 1310/1110
 - BIOL 2406 or 2306/2106
 - PHYS 1415 or 1315/1115
 - CHEM 1411 or 1311/1111

** Approved substitution

Option IV. 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. Students with a minor in geography or geology may use GEOL 1401* (1101/1301), GEOL 1403* (1103/1303), and any course listed in Option I, II, or III to satisfy the laboratory science requirement for the mathematics major.

B.S. Mathematics: Foreign Language

Students may complete either of two options to satisfy the Mathematics Foreign Language requirement:

Option I: Proficiency in a foreign language equivalent to 1312 or 1412 or 1512. 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 the following: ENGL 2311 (also partially fulfills Communication core requirement) and one advanced level TECM course option at UNT from approved list.

B.S. Mathematics: Computer Programming

- COSC 1315 or 1415, or COSC 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 COSC 1315 or 1415; or COSC 1336 or 1436 course requirement.

Minor (Required)

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 certificate program in actuarial science.

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 Science 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 [mandates of the 1997 Texas Legislature](#) regarding 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 www.cos.unt.edu/advising.