

**Bachelor of Science in Mathematics
With Concentration in Computer Science (BS MATH CSCI)
2024 - 2025 Advising Handout**

Important Information About Your Degree

- **College of Science Admission Requirement:** Students must demonstrate proficiency in College Algebra by placing into Math Level 2 or higher through the UNT Math Placement Exam (Not the same as TSI) OR completing College Algebra or higher with a grade of C or higher.
- **UNT Double-Dip Course Policy (Best Selection):** Courses shown in *italics* satisfy multiple degree program requirements. Students who do not take the Best Selection courses, will have to take additional courses to meet program requirements. Whether or not the course is taken to fulfill a specific university core category, all courses are required by the program to complete the degree. Electives may be required due to double-dipping.
- Hour and GPA Requirements for graduation/degree completion:
 - BS in Math requires at least 120 hours, 36 advanced, 2.00 UNT GPA, 2.00 overall GPA, and a minimum 2.0 GPA in math courses numbered 3350 or above.
- Courses marked with an asterisk (*) require a grade of **C or Higher**.
- Courses in **bold** require prerequisites. **Prerequisites** are listed in the university catalog with the course description.
- An official degree audit is required for graduation; Students **must** meet with an academic advisor to request that their audit be made official. Students can review degree requirements by running their audit at <http://degreeread.unt.edu>
- For major-specific career information, contact the Department of Mathematics in GAB 443 or at MathAdvising@unt.edu.
- For information regarding transfer credit or enrollment issues, contact Krista Hines (krista.hines@unt.edu)
- For information regarding Data Analytics certificate, contact analytics@unt.edu.
- For teaching certification courses and requirements, contact tnt@unt.edu.
- For assistance with TSI status or mandatory courses, contact TSI@unt.edu.
- For additional program information visit <https://cos.unt.edu/advising> or contact the COS Advising Center at cosadvising@unt.edu.

Advising Notation Key

X = Requirement Completed
Credit is posted within the degree audit.

IP = In Progress/Pending Credit
Advisor has seen proof from an unofficial transcript or an official score

? = Needs further evaluation
Student may need to provide additional information. (ex. a course syllabus)

Foundation Requirements:		
MATH 1710* – Calculus I		4
MATH 1720* – Calculus II		3
MATH 2000* – Discrete Math		3
MATH 2700 – Linear Algebra and Vector Geometry		3
MATH 2730 – Multivariable Calculus		3
MATH 3000 – Real Analysis I		3
Math & Computer Science Major Requirements		
Complete 15 hours of Math and Computer Science Electives. Must have a minimum of 2 Math Courses and 2 Computer Science Courses		
Math Elective Options:		
MATH 1780 – Probability Models		3
MATH 3180 – Probability for Engineers		3
MATH 3350 – Intro to Numerical Analysis		3
MATH 3410 – Differential Equations I		3
MATH 3420 – Differential Equations I		3
MATH 3680 – Applied Statistics		3
MATH 3850 – Mathematical Modeling		3
MATH 4610 – Probability		3
MATH 4650 – Statistics		3
Computer Science Elective Options:		
CSC 3550 – Foundations of Cybersecurity		3
CSC 3850 – Intro. to Computational Life Science		3
CSC 4110 – Intro. to Algorithms		3
CSC 4201 – Intro. to Artificial Intelligence		3
CSC 4205 – Intro. to Machine Learning		3
CSC 4210 – Game Programming I		3
CSC 4230 – Intro. to Computer Graphics		3
CSC 4290 – Intro. to Natural Language Processing		3
CSC 4350 – Fundamentals of Database Systems		3
CSC 4380 – Data Mining		3
CSC 4810 – Bioinformatics Algorithms		3
CSC 4820 – Advances in Bioinformatics		3
Data Analytics Certificate Requirements		
Completion of Data Analytics Certificate required to graduate with BS-MATH-CSCI degree		
IPAC 4130 – Data Analytics I		3
or MATH 3680 – Applied Statistics		3
IPAC 4230 – Data Analytics II		3
IPAC 4240 – Principles of Data Structures, Harvesting & Wrangling		3
IPAC 4340 – Methods for Discovery & Learning from Data		3
IPAC 4250 – Principles of Data Visualization for Large Data		3

University Core Requirements		
42 hours – Students may elect to take any course approved for the University Core Curriculum to fulfill these requirements; however, there are courses recommended in the core categories for students pursuing a Mathematics major		
Composition I*:		3
Composition II*:		3
<i>Math:</i>		3
<i>Life & Physical Science:</i>		3
<i>Life & Physical Science:</i>		3
<i>Creative Arts:</i>		3
<i>Language, Philosophy & Culture:</i>		3
<i>US History to 1865:</i>		3
<i>US History from 1865:</i>		3
<i>Federal Government:</i>		3
<i>Texas Government:</i>		3
<i>Social & Behavioral Sciences:</i>		3
<i>Component Area Option I:</i>		3
<i>Component Area Option II:</i>		3
Other Required Courses for Degree		
Foreign Language Option 1: Complete 6 hours total – See catalog for options		
Foreign Language 1010 -		3
Foreign Language 1020 -		3
Foreign Language Option 2: Complete 6 hours total.		
TECM 2700* – Technical Writing		3
Advanced Technical Writing* – See Course Catalog for options		3
Computer Programming Core		
<i>CSC 1010 – Discovering Computer Science</i>		3
CSC 1030* – Computer Science I		4
or CSC 1035* – Computer Programming I		4
CSC 1040* – Computer Science II		3
or CSC 1045 – Computer Programming II		3
CSC 2100 – Foundations of Computing		3
CSC 2110 – Foundations of Data Structures		3
Three lab science courses intended for science majors in one of the following areas of emphasis (12 hours)		
Biology Emphasis		
BIOL 1710*	3	and CHEM 1410 & 1430 – Gen. Chem I & Lab or PHYS 1710 & 1730 – Gen. Phys I & Lab
BIOL 1720*	3	
BIOL 1760*	2	
Chemistry Emphasis		
CHEM 1410* & 1430*	4	and one Core Curriculum for natural sciences, or any 3 hours from CHEM 2000 +
CHEM 1420* & 1440*	4	
Physics Emphasis		
PHYS 1710* & 1730*	4	and one Core Curriculum for natural sciences, or any 3 hours from PHYS 2000 +
PHYS 2220* & 2240*	4	
Additional University Requirements		
Advanced Hours: Elective requirements vary by path.		

*This information is for **ADVISING ONLY** and is not official. Requirements can and do change without notification.