2023-2024 Catalog

Mathematics

Bachelor of Arts
Academic Department
Mathematics

Mathematics is one of the most permanent and universal of the liberal arts and sciences. The courses offered by the department recognize mathematics as the universal tool for the life, natural, and social sciences. The program's core consists of topics chosen to ensure students understand and appreciate the nature of mathematical thought and the role abstraction and logic play in it.

The Department of Mathematics, Statistics and Computer Science at UST offers various degree programs related to mathematics and computer science for undergraduate students. Students can pursue a Bachelor of Arts degree with a major or minor in mathematics, a Bachelor of Science degree in applied mathematics, a Bachelor of Science degree with a major or minor in computer science, a minor in Applied Statistics and/or a minor Data Analytics. Students interested in a teaching career may select courses specifically designed to support their goals. In addition, the department also offers a variety of courses that fulfill the University's core curriculum requirement.

The Distinguished Student of Mathematics Scholarship Endowment Fund and the Dr. William A. and Margaret Reddie Endowed Scholarship in Mathematics provide financial assistance to majors in mathematics. The Mathematics Department Research and Development Endowment Fund supports the Department of Mathematics, Statistics, and Computer Science.

**All graduating seniors who major in mathematics must take the Educational Testing Service (ETS) Major Field Test in Mathematics before graduation but no earlier than the penultimate semester. **

Total Credits 47

Mathematics Required

Complete all of the following courses.

Item #	Course Title		Credits
☐ MATH 1431	Calculus I	MATH 1431 Prerequisite: MATH 1430 or department consent.	4
☐ MATH 1432	Calculus II	MATH 1432 Prerequisite: Grade of 'C' or Better in MATH 1431	4
☐ MATH 2431	Calculus III	MATH 2431 Prerequisite: MATH 1432 with a grade of "C" or better	4
☐ MATH 2343	Differential Equations I	MATH 2343 Prerequisite: MATH 1432 with a grade of "C" or better	3
☐ MATH 3334	Linear Algebra I	MATH 3334 Prerequisite: MATH 1432	3
☐ MATH 3360	Discrete Mathematics	MATH 3360 Prerequisite: MATH 1431	3
☐ MATH 4370	Capstone Project		3
☐ MATH 4331	Real Analysis I	MATH 4331 Prerequisite MATH 2431	3
☐ MATH 4338	Abstract Algebra I	MATH 4338 Prerequisite: MATH 3360	3

Computer Science

Complete one of the following courses.

Item #	Course Title	Credits
☐ COMSC 1450	Introduction to Programming and Computer Science	4

Mathematics Electives

Choose 2 courses from the 3000/4000 level MATH courses.

Note: MATH 3313, 3332, 3333, 3336, 3341, 3342 and 3354 do <u>NOT</u> apply to mathematics major requirements.

Lab Science Course Requirement

Complete at least one lecture/lab in an approved science area (BIOL/CHEM/PHYS).

Philosophy Logic Course Requirement

Complete one of the following courses.

Item #	Course Title		Credits
☐ PHIL 3333	Logic (Traditional Logic)		3
☐ PHIL 3350	Contemporary Logic	PHIL 3350 Prerequisite: PHIL 2314 or 2316/3316	3