

Mathematics, B.S.

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Degree Requirements

The B.S. in Mathematics degree consists of a minimum of 43 credit hours of approved Mathematics (MATH), Operations Research (OPRS), or Statistics (STAT) courses, one programming course in computer science (ITSC), 11 credit hours of science electives, and 18 credit hours of approved related coursework in an area outside of the department or an approved University minor from outside the department.

General Education Courses (18-26 credit hours)

For details on required courses, refer to the General Education Program. Total hours to satisfy General Education Requirements may vary as some general education requirements may be double-counted in the major with departmental approval. Please see your advisor for information.

Foreign Language (0-8 credit hours)

Students are required to demonstrate proficiency in the language of their choice through the 1202 level. For details on demonstrating proficiency refer to the College of Science Foreign Language Requirement in the Undergraduate Catalog.

Core Courses (34 credit hours)

ITSC 1212: Introduction to Computer Science
MATH 1241: Calculus I
MATH 1242: Calculus II
MATH 2164: Matrices and Linear Algebra
MATH 2167: Intro to Math Reasoning
MATH 2171: Differential Equations
MATH 2241: Calculus III
MATH 2242: Calculus IV
MATH 2688: Math Awareness Seminar
MATH 3141: Advanced Calculus of One Variable
MATH 3142: Advanced Calculus of Several Variables
MATH 3163: Introduction to Modern Algebra

Restricted Elective Courses (12 credit hours)

Select 9 credits of elective courses from MATH, STAT, or OPRS at the 3000-level or above.

Select 3 credits from:

MATH 3123: Probability and Statistics II
MATH 3181: Fundamental Concepts of Geometry
MATH 4163: Modern Algebra
MATH 4164: Abstract Linear Algebra
MATH 4181: Introduction to Topology
OPRS 3111: Operations Research: Deterministic Models



**Restricted Related Elective Courses
(18 credit hours)**

Courses that count towards this requirement must have a discipline prefix other than MATH, STAT, or OPRS. A minor or second major satisfies this requirement.

Capstone Project (1-6 credit hours)

MATH 3689: Mathematics Project Seminar 1 or the sequence
MATH 3790: Junior Honors Seminar 3
MATH 3791: Senior Honors Tutorial 3

**Restricted Science Elective Courses
(11 credit hours)**

Any science course with prefix BIOL, CHEM, ESCI, GEOL, or PHYS is permissible.

Unrestricted Elective Courses

As needed to complete the 120 credit hours required for graduation.

Other Important Requirements:

Minimum 120 credit hours (all courses)

Minimum overall GPA of 2.0 (all courses)

Minimum major GPA of 2.0 (degree courses)

