

Mathematics

Our math major is intended to aid in the development of exact, concise, and independent reasoning, to cultivate the imagination, and to inspire habits of original and independent thought.

Major

The requirements for a major in mathematics are 11 units, including four core mathematics courses, one analysis course, one algebra course, five electives, and a senior-year experience.

Foundational Courses

MATH 135. Calculus I MATH 136. Calculus II MATH 205. Multivariable Calculus MATH 280. Bridge to Higher Math

Analysis Courses

MATH 305. Real Analysis MATH 306. Complex Analysis

Algebra Courses

MATH 315. Group Theory MATH 316. Ring Theory

Electives

Three at the 200-level or above and two at the 300-level or above. STAT 113 and CS 140 may count as 200-level electives. Any course cross-listed as MATH or STAT may also count.

Senior Year Experience (SYE)

Students must fulfill a Senior-Year Experience (SYE) requirement either in mathematics as one of the 11 units in the major or by completing an SYE outside the major.

For SYEs within the department, you have 3 choices:

- Take an SYE seminar (MATH/CS/STAT 450)
- Do an independent SYE project with a department faculty member (MATH/CS/STAT 489)
- Do an independent HONORS SYE project with a department faculty member (MATH/CS/STAT 498)
- Do an internship approved by the department chair.

Minor

Seven units are required for the math minor and must include MATH 135, MATH 136, and MATH 205. The four additional courses must be 200-level or above. STAT 113 and CS 140 may count as 200-level electives. Any course cross-listed as MATH or STAT may also count.