

Mathematics Major

Total Major Hours: 38-46
Suggested hours per semester: 16

Major Academic Plan (MAP) for Catalog Year 2022-2023

The catalog is the final authority on CATC and major requirements; this is intended as a tool for planning purposes. Student course sequencing may vary depending on course offerings and other variables.

Fall Semester 1 Calculus II* ^{1, 2} <i>CORE 101: First Year Seminar</i> <i>First-Year CATC options-</i> <ul style="list-style-type: none"> ▪ <i>AHS 101: Wellness (2)</i> ▪ <i>COMM 101: Oral Comm (2)</i> ▪ <i>ENGW 103: First-Year Writing</i> ▪ <i>Language Core Competency or Thematic Core Course</i> 	Spring Semester 1 MATH 245 Linear Algebra* MATH 331 Vector Calculus* (2) <i>First-Year CATC Options (2-4)</i> <i>Language Core Competency</i> <i>BITH 211/ARCH 211: Old Testament</i>	Summer 1 <i>Consider study, internship or research options – Wheaton In summer program, WIN (HoneyRock), Wheaton in the Black Hills, non-major internship, summer research at Wheaton, Research Experiences with Undergraduates (REUs), Summer Institute in Biostatistics (SIBS)</i>
Fall Semester 2 MATH 241 Introduction to Proofs* (2) or CSCI 243 Discrete Mathematics & Functional Programming¹ MATH 301 Intro to Upper-Level Math* (2) <i>Thematic Core or Core Competency Courses (4-8)</i> <i>BITH 213/ARCH 213: New Testament</i>	Spring Semester 2 MATH 333 Differential Equations* CSCI 235 Programming I¹ OR CSCI 245 Programming II* <i>Thematic Core Course</i> <i>BITH 315: Christian Thought*</i> <i>Advanced Integrative Seminar?*</i>	Summer 2 <i>Consider study, internship or research options.</i>
Fall Semester 3 MATH 363 Probability & Statistics I* Math Course in Concentration Consider semester off campus or abroad – GPS <i>Advanced Integrative Seminar?*</i>	Spring Semester 3 Math Course in Concentration <i>Thematic Core Course</i> <i>Advanced Integrative Seminar?*</i>	Summer 3 <i>Consider study, internship or research options.</i>
Fall Semester 4 MATH 494 Senior Seminar* (2) Math Course in Concentration Math Course in Concentration <i>Complete CATC Coursework</i>	Spring Semester 4 MATH 494 Senior Seminar* (2) Math Course in Concentration <i>Complete CATC Coursework</i>	Summer 4

Notes or Special Guidance for Majors:

*Course has prerequisite

^F Fall only course

^S Spring only course

[#] Offered every other year

¹ Mathematics major courses that meet CATC tags: CSCI 235 (AAQR), CSCI 243 (AAQR), MATH 231 (AAQR), Calculus AB or BC AP Exam with qualifying score (AAQR)

² Students not ready for Calculus II should discuss with their faculty advisor next steps.

Guidelines for determining Calculus placement:

1. Students with a score of 4 or 5 on AP Calculus BC Exam should enroll in Math 234 (Calculus 2B) in A Quad and MATH 331 (Vector Calculus) in B Quad.
2. Students with a score of 3 on the AP Calculus BC Exam or a score of 4 or 5 on the AP Calculus AB Exam should enroll in MATH 232 (Calculus 2).
3. Students with a score of 3 on the AP Calculus AB Exam should enroll in MATH 233 (Calculus 1B) in B-Quad.
4. Students without AP or dual enrollment credit should take the [Calculus Readiness Assessment](#).

-Concentrations: All math majors complete a common set of required mathematics courses in their first two years. During their sophomore year, each math major chooses one of the following four concentrations: Pure Mathematics, Statistics, Applied Mathematics, or Math and Secondary Education. Each concentration has a required set of upper-level mathematics course requirements. These requirements can be found on the [department's website](#) or in the Course Catalog.