

# 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.

<p><b>Fall Semester 1</b></p> <p>Calculus II*<sup>1, 2</sup></p> <p>CORE 101: First Year Seminar First-Year CATC options-</p> <ul style="list-style-type: none"> <li>▪ AHS 101: Wellness (2)</li> <li>▪ COMM 101: Oral Comm (2)</li> <li>▪ ENGW 103: First-Year Writing</li> <li>▪ Language Core Competency or Thematic Core Course</li> </ul>	<p><b>Spring Semester 1</b></p> <p>MATH 245 Linear Algebra* MATH 331 Vector Calculus* (2)</p> <p>First-Year CATC Options (2-4) Language Core Competency BITH 211/ARCH 211: Old Testament</p>	<p><b>Summer 1</b></p> <p>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)</p>
<p><b>Fall Semester 2</b></p> <p>MATH 241 Introduction to Proofs* (2) or CSCI 243 Discrete Mathematics &amp; Functional Programming<sup>1</sup> MATH 301 Intro to Upper-Level Math* (2)</p> <p>Thematic Core or Core Competency Courses (4-8) BITH 213/ARCH 213: New Testament</p>	<p><b>Spring Semester 2</b></p> <p>MATH 333 Differential Equations* CSCI 235 Programming I<sup>1</sup> OR CSCI 245 Programming II*</p> <p>Thematic Core Course BITH 315: Christian Thought* Advanced Integrative Seminar?*</p>	<p><b>Summer 2</b></p> <p>Consider study, internship or research options.</p>
<p><b>Fall Semester 3</b></p> <p>MATH 363 Probability &amp; Statistics I* Math Course in Concentration</p> <p>Consider semester off campus or abroad – GPS</p> <p>Advanced Integrative Seminar?*</p>	<p><b>Spring Semester 3</b></p> <p>Math Course in Concentration</p> <p>Thematic Core Course Advanced Integrative Seminar?*</p>	<p><b>Summer 3</b></p> <p>Consider study, internship or research options.</p>
<p><b>Fall Semester 4</b></p> <p>MATH 494 Senior Seminar* (2) Math Course in Concentration Math Course in Concentration</p> <p>Complete CATC Coursework</p>	<p><b>Spring Semester 4</b></p> <p>MATH 494 Senior Seminar* (2) Math Course in Concentration</p> <p>Complete CATC Coursework</p>	<p><b>Summer 4</b></p>

### Notes or Special Guidance for Majors:

\*Course has prerequisite

<sup>F</sup> Fall only course

<sup>S</sup> Spring only course

<sup>#</sup> Offered every other year

<sup>1</sup> 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)

<sup>2</sup> 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.