## **Mathematics Major**

Total Major Hours: 38-46

Suggested hours per semester: 16

## Major Academic Plan (MAP) for Catalog Year 2020-2021

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	Spring Semester 1	Summer 1
Calculus <sup>1, 2</sup> CORE 101: First Year Seminar  First-Year CATC options-  AHS 101: Wellness (2)  COMM 101: Oral Comm (2)  ENGW 103: First-Year Writing  Language Core Competency or  Thematic Core Course	MATH 245 Linear Algebra* MATH 331 Vector Calculus* (2)  First-Year CATC Options (2-4) Language Core Competency BITH 211/ARCH 211: Old Testament	Consider study, internship or research options – Wheaton In summer program, WIN (HoneyRock), non-major internship, summer research
Fall Semester 2	Spring Semester 2	Summer 2
MATH 241 Introduction to Proofs* (2) or CSCI 243 Discrete Mathematics & Functional Programming <sup>1</sup> MATH 301 Intro to Upper-Level Math* (2)	MATH 333 Differential Equations* CSCI 235 Programming I <sup>1</sup> OR CSCI 245 Programming II*	Consider study, internship or research options – Wheaton In summer program, WIN (HoneyRock), non-major internship, summer research
Thematic Core or Core Competency Courses (4-8) BITH 213/ARCH 213: New Testament	Thematic Core Course BITH 315: Christian Thought* Advanced Integrative Seminar?*	
Fall Semester 3	Spring Semester 3	Summer 3
MATH 363 Probability & Statistics I* Math Course in Concentration  Consider semester off campus or abroad – GPS	Math Course in Concentration	Consider study, internship or research options – Wheaton In summer program, WIN (HoneyRock), internship, summer research
Advanced Integrative Seminar?*	Thematic Core Course Advanced Integrative Seminar?*	
Fall Semester 4	Spring Semester 4	Summer 4
Math Course in Concentration Math Course in Concentration	MATH 494 Senior Seminar* (2) Math Course in Concentration	
Complete CATC Coursework	Complete CATC Coursework	

## **Notes or Special Guidance for Majors:**

<sup>\*</sup>Course has prerequisite

<sup>&</sup>lt;sup>F</sup> Fall only course

<sup>&</sup>lt;sup>S</sup> Spring only course

\*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>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 <u>department's website</u> or in the Course Catalog.