Computer Science Major

	Total Major hours: 50
	Suggested hours per semester: 16-18

Major Academic Plan (MAP) for Catalog Year 2023-2024

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

CSCI 235 Programming I: Problem Solving[1,3]
 MATH 235 Calculus I*[1] or CSCI 243 Discrete Mathematics & Functional Programming[1]
 	
 CORE 101: First Year Seminar
 First Year CATC options-
    ▪ *COMM 101: Oral Comm (2)*
    ▪ *ENGW 103: First-Year Writing*
    ▪ *Language Core Competency or Thematic Core Course*
	CSCI 245 Programming II: Object-Oriented Design*
	 CSCI 243 Discrete Mathematics & Functional Programming[1], if not complete
	
	 First Year CATC Options
	 Language Core Competency
	    BITH 211/ARCH 211: Old Testament
		Consider study, internship or research options – Wheaton In summer program, WIN (Honey Rock), Wheaton in the Black Hills, non-major internship, summer research

Fall Semester 2	**Spring Semester 2**	**Summer 2**
CSCI 351 Introduction to Computer Systems[F]* MATH 245 Linear Algebra* *Thematic Core or Core Competency Courses (4-8)* *BITH 213/ARCH 213: New Testament*	CSCI 335 Software Development[S]* CSCI 345 Data Structures & Algorithms[S]* *Thematic Core Course* *BITH 315: Christian Thought* *Advanced Integrative Seminar? **	Consider study, internship or research options – Wheaton In summer program, WIN (Honey Rock), non-major internship, summer research
Fall Semester 3	**Spring Semester 3**	**Summer 3**
CSCI elective[2] PHYS 231[1]* or MATH 236 or above *Consider semester off campus or abroad – GPS* *Advanced Integrative Seminar? **	CSCI elective[2] *Thematic Core (4-8)* *Advanced Integrative Seminar? **	Consider study, internship or research options – Wheaton In summer program, WIN (Honey Rock), non-major internship, summer research
Fall Semester 4	**Spring Semester 4**	**Summer 4**
CSCI elective[2] *Complete CATC Coursework*	CSCI 494 Social & Ethical Issues (capstone)* *Complete CATC Coursework*	

Last updated: 4/18/2023

Notes or Special Guidance for Majors:

*Course has prerequisite
[F] Fall only course
[S] Spring only course
[#] Offered every other year

[1] Computer Science courses that meet CATC tags (with max of 3 major counting for Christ at the Core Thematic Core): CSCI 235 (AAQR), CSCI 243 (AAQR), MATH 231 (AAQR), PHYS 231 (SP)

[2] Select 12 additional credits of Computer Science electives above 300 excluding CSCI 493 Mentoring Seminar, CSCI 495 Independent Study, & CSCI 496 Internship. Note: CSCI elective courses are on a two-year rotation.

[3] Appropriate substitutions for students placed out of CSCI 235 are:

- 4 hours of computer science above 300 (excluding CSCI 496 Internship).
- MATH numbered MATH 232 or above, or
- PHYS 232

-See the program website for model schedules tailored to specific situations, including students who enter college with credit for calculus, students who enter college with AP computer science or comparable prior experience, and students who wish to complete the major in six semesters.