

Computer Science Major

Four Year Sample Plan for students beginning at Covenant during the 2025-2026 academic year

This sample plan contains all courses required to complete the bachelor of arts degree with a major in Computer Science. After starting classes at the college, the student will work with an academic advisor in the Computer Science department to customize his/her academic plan.

Freshman - Fall Semester		Hours	Freshman - Spring Semester		Hours
COS 130 Computer Programming Method.		3	COS 150 Advanced Programming Method.		3
BIB 101 Old Testament Introduction		3	BIB 102 New Testament Introduction		3
COR 100 Christian Mind		2	Core Fine Arts Distribution course		3
ENG 111 English Composition		3	Core Natural Science Lab course		4
COR 154 Embracing Human Flourishing		2	Elective		3
Core Social Science Distribution course		3			
Total semester hours		16	Total semester hours		16
Sophomore - Fall Semester		Hours	Sophomore - Spring Semester		Hours
BIB 201 Christian Doctrine I		3	BIB 202 Christian Doctrine II		3
COR 225 Cultural Heritage of the West I		3	COR 226 Cultural Heritage of the West II		3
COS 200 Data Science		3	COS 230 Data Structures and Algorithms		3
COS 210 Discrete Structures		3	COS 260 Ethical and Professional Issues in Computing		3
PHI 357 Formal Logic		3			
Elective		1	Elective		3
Total semester hours		16	Total semester hours		15
Junior - Fall Semester		Hours	Junior - Spring Semester		Hours
COS 326 Operating Systems		3	COS 311 Computer & Information Security		3
COS 440 Programming Paradigms		3	COS 327 Network Programming		3
COR 340 Christ and Culture Seminar		1	Global Awareness Course		3
HIS 325 Contemporary World History		3	Core Foreign Language course #2		3
Core Foreign Language course #1		3	Elective		4
Elective		3			
Total semester hours		16	Total semester hours		16
Senior - Fall Semester		Hours	Senior - Spring Semester		Hours
COS 417 Software Security Engineering		3	COS 480 Artificial Intelligence		3
COS 450 Intro to Computer Organization		3	COS 492 Capstone Project		3
Cultural Inquiry course		3	Elective		4
Elective		3	Elective		3
Elective		3	Elective		3
Total semester hours		15	Total semester hours		16

Total earned hours required for the degree = 126

This guide is intended to be used as a helpful tool. In the future, some courses may be offered in a different semester than listed here. So, this plan should not be understood as a guarantee or contract of the exact scheduling of courses. Each student should use this plan with the understanding that customization may be needed to fit his or her specific situation.