

COMPUTER SCIENCE MAJOR

Total credits required for major - 42 to 60 credits with a minimum of 36 senior-level credits.

Notes:

- Students majoring in Computer Science are required to take MATH 114, one of MATH 120 or MATH 125, and STAT 151.
- No more than 9 credits of independent work from CMPT 398, CMPT 496, and CMPT 498, can be used to fulfill the minimum senior-level requirements.
- Students who declare the Computer Science Major and who do not have credit for CMPT 101, or equivalent, are required to take this course. CMPT 101 can be used to fulfill a general CMPT requirement.
- Students need to have successfully completed MATH 114 and have completed or be currently enrolled in CMPT 200 before declaring the Computer Science Major.

Course ID	Course Name	Credits
Specific Major Requirements		
CMPT 103	Introduction to Computing II	3
CMPT 200	Data Structures and Algorithms	3
CMPT 201	Practical Programming Methodology	3
CMPT 305	Introduction to Object-Oriented Programming	3
CMPT 395	Introduction to Software Engineering	3
CMPT 496	Final Project	3
Choose either the General Computer Science major or one of the Databases and Interactive Visualization, Systems and Information Security, or Gaming Streams		24-42
Total Credits		42-60

General Computer Science Major Requirements

Course ID	Course Name	Credits
Choose 6 credits from following:		6
CMPT 204	Algorithms I	
CMPT 229	Computer Organization and Architecture	
CMPT 250	Introduction to Human Computer Interaction	
CMPT 280	Introduction to Computer Security	
CMPT 291	Introduction to File and Database Management	
Choose 6 credits from the following:		6
CMPT 306	Non-Procedural Programming Languages	
CMPT 315	Web Application Development	
CMPT 330	Introduction to Real Time Gaming	
CMPT 355	Introduction to Artificial Intelligence	
CMPT 360	Introduction to Operating Systems	
CMPT 361	Introduction to Networks	
CMPT 370	Introduction to Computer Graphics	
CMPT 380	Computer Systems Security	
CMPT 391	Database Management Systems	
Choose 12 to 30 credits from junior- and senior-level CMPT		12-30
Total Credits		24-42

Databases and Interactive Visualization Stream

Course ID	Course Name	Credits
CMPT 250	Introduction to Human Computer Interaction	3
CMPT 272	Formal Systems and Logic in Computing Science	3
CMPT 291	Introduction to File and Database Management	3
Choose 12 credits from the following:		12
CMPT 315	Web Application Development	
CMPT 351	Human Computer Interaction: Usability	
CMPT 391	Database Management Systems	
CMPT 450	Information Visualization	
CMPT 491	Datamining and Advanced Database Topics	
Choose 3 to 21 credits from junior- and senior-level CMPT.		3-21
Total Credits		24-42

System and Information Security Stream

Course ID	Course Name	Credits
CMPT 229	Computer Organization and Architecture	3
CMPT 280	Introduction to Computer Security	3
CMPT 360	Introduction to Operating Systems	3
CMPT 361	Introduction to Networks	3
CMPT 380	Computer Systems Security	3
CMPT 464	Wireless Networks and Embedded Systems	3
CMPT 480	Computer Network Security	3
Choose 3 to 21 credits from junior- and senior-level CMPT		3-21
Total Credits		24-42

Gaming Stream

Course ID	Course Name	Credits
CMPT 230	Introduction to Computer Games	3
CMPT 291	Introduction to File and Database Management	3
CMPT 330	Introduction to Real Time Gaming	3
CMPT 370	Introduction to Computer Graphics	3
CRWR 295	Introduction to Creative Writing	3
Choose 3 credits from the following:		3
CMPT 250	Introduction to Human Computer Interaction	
CMPT 280	Introduction to Computer Security	
CMPT 355	Introduction to Artificial Intelligence	
Choose 6 to 24 credits from junior- and senior-level CMPT		6-24
Total Credits		24-42