



SIMON FRASER
UNIVERSITY

**COMPUTING SCIENCE B.SC. MAJOR -
INFORMATION SYSTEMS CONCENTRATION (Cloud Computing)**
FALL 2022 GRADUATION PLANNER

Name:

Student ID:

Date:

This area embraces software engineering and database systems design, and provides the academic preparation necessary for the efficient and effective development of large software products and the design and management of computer information systems, specifically in cloud and backend development.

Year 1

- CMPT 120 Programming 1
- MACM 101 Discrete Math 1
- MATH 151 Calculus 1
- OR MATH 150 Calculus 1 with Review
- CMPT 105W CS Writing I (or in 2nd term)
- QWB Breadth: _____

- CMPT 125 Programming 2
- MATH 152 Calculus 2
- MATH 240 Algebra I: Linear Algebra
- OR MATH 232 Applied Linear Algebra
- QWB Breadth: _____
- General Elective: _____

Year 2

- CMPT 225 Data Structures and Programming
- CMPT 295 Intro to Computer Systems
- CMPT 210 Probability and Computing
- OR MACM 201 Discrete Mathematics II
- QWB Breadth: _____
- General Elective: _____

- CMPT 276 Software Engineering
- STAT 271 Probability and Statistics for CS
- OR STAT 270 Introduction to Probability & Statistics
- CMPT 272 Front End Web Dev*
- QWB Breadth: _____
- QWB Breadth: _____

Year 3

- CMPT 307 Data Structures and Algorithms
- CMPT 371 Networking
- CMPT 354 Databases
- CMPT 376W CS Writing II
- General Elective: _____

- CMPT 372 (prereq: 272) Backend Web Dev**
- CMPT 373 Software Development Methods
- CMPT 300 Operating Systems
- General Elective: _____
- General Elective: _____

Year 4

- CMPT 474 Web Systems Architecture
- CMPT 431 Distributed Systems
- MACM 316 Numerical Analysis
- UD General Elective: _____
- General Elective: _____

- Information Systems Elective
- CMPT 456 Information Retrieval and Web Search
- OR CMPT 454 Database II
- CMPT 404 Cryptography and Protocols
- CMPT 310 Artificial Intelligence Survey
- UD General Elective: _____
- General Elective: _____

* CMPT 272 was offered as CMPT 218 in Spring 2021/2022

**CMPT 372 replaced CMPT 470 effective Summer 2022

Other recommended courses: Cmpt 471 - Networking II, Cmpt 353 - Computational Data Science

WQB Breadth Requirements

6 units of Breadth Social (B-SOC)

6 units of Breadth Humanities (B-HUM)

3 units of Breadth Science (B-SCI)

Refer to: http://www.sfu.ca/ugcr/for_students/wqb_requirements/breadth.html for courses that fulfill these requirements.

This Concentration Planning Form contains a recommended course plan for Computing Science major BSc students to obtain a concentration designation, along with course suggestions to optimize the knowledge and skills upon completion of this concentration, while distributing the difficulty of the course load per term. It is not a substitute for the official degree regulations found at www.sfu.ca/students/calendar.html. If there is a question of interpretation or a discrepancy, the University Calendar always takes precedence. For assistance or queries on possible substitutions, ask a FAS advisor to help. The student is ultimately responsible for ensuring that they have met their degree requirements.

CO-OPERATIVE EDUCATION Combines work experience with academic studies—all students are encouraged to apply once they have completed 30 units. Co-op does not count towards academic credits. Co-op is not mandatory; however, three work terms must be successfully completed in order to obtain an undergraduate degree with a co-op designation. For more information about Co-op, please see: <http://www.sfu.ca/coop/programs/cmpt/prospective.html>.

CMPT 415/416 SPECIAL RESEARCH PROJECTS are courses that may be used for upper division credit. See: <https://www.sfu.ca/computing/current-students/undergraduate-students/research.html>

FACULTY OF APPLIED SCIENCE RESIDENCY REQUIREMENTS At least two thirds of the total Upper Division (UD) units in the program must have been completed at Simon Fraser University. Please refer to the current SFU calendar for details.

CONTINUATION REQUIREMENTS Students who do not maintain at least a 2.40 CGPA, will be placed on probation by the School of Computing Science. Courses available to probationary students may be limited. Each term, these students must consult an advisor prior to enrollment and must achieve either a term 2.40 GPA or an improved CGPA. Students who fail to do so may be removed from the program.

ADVISING View drop-in advising times here <https://booking.cs.sfu.ca/adbooking/calendar.cgi> or email asadvice@sfu.ca. Please bring a copy of your advising transcript (download at go.sfu.ca) with you to the advising session.