

COMPUTING SCIENCE HONOURS: FALL 2023 GRADUATION PLANNER

Name: _____ Student ID: _____ Date: _____

PROGRAM REQUIREMENT OVERVIEW

A minimum of 132 units are required to complete the Bachelor of Science (BSc) in Computing Science Honours Program. This consists of:

- Lower Division (51 - 52 units)

 - CMPT/MACM/MATH/STAT (36 - 37 units)
 - WQB courses (15 units)
- +
- Upper Division (60 units)

 - CMPT/MACM/MATH (54 units)
 - Elective courses (6 units)
- +
- General Electives
- = 132 Units Overall

CONTINUANCE GPA: Students should maintain a CGPA and a UDGPA of 3.00 in order to continue in the Computing Science honours program.

LOWER DIVISION REQUIREMENTS (100/200) – 51 - 52 units – Complete all of:

COMPUTING SCIENCE		
<input type="checkbox"/> CMPT 120	<input type="checkbox"/> CMPT 276	<input type="checkbox"/> MATH 151 or 150 or 154 ** or 157**
<input type="checkbox"/> CMPT 125	<input type="checkbox"/> CMPT 295	<input type="checkbox"/> MATH 152 or 155 ** or 158 **
<input type="checkbox"/> CMPT 210	<input type="checkbox"/> MACM 101 (B-SCI)	<input type="checkbox"/> MATH 232 or 240
<input type="checkbox"/> CMPT 225	<input type="checkbox"/> STAT 271	

*** with a grade of at least B+, and with school permission.

UPPER DIVISION REQUIREMENTS (300/400) – 60 units:

Bold courses are required. Requirements for breadth, depth and BSc (see next page)

TABLE I: COMPUTING SCIENCE CONCENTRATIONS

Artificial Intelligence	Visual & Interactive Computing	Computing Systems	Information Systems	Programming Languages & Software	Theoretical Computing Science
<input type="checkbox"/> CMPT 310	<input type="checkbox"/> CMPT 361	<input type="checkbox"/> CMPT 300	<input type="checkbox"/> CMPT 353	<input type="checkbox"/> CMPT 373	<input type="checkbox"/> CMPT 307
<input type="checkbox"/> CMPT 340	<input type="checkbox"/> CMPT 363	<input type="checkbox"/> CMPT 305	<input type="checkbox"/> CMPT 354	<input type="checkbox"/> CMPT 383	<input type="checkbox"/> CMPT 308
<input type="checkbox"/> CMPT 410	<input type="checkbox"/> CMPT 365	<input type="checkbox"/> CMPT 371	<input type="checkbox"/> CMPT 362	<input type="checkbox"/> CMPT 384	<input type="checkbox"/> CMPT 404
<input type="checkbox"/> CMPT 411	<input type="checkbox"/> CMPT 412	<input type="checkbox"/> CMPT 379	<input type="checkbox"/> CMPT 372	<input type="checkbox"/> CMPT 473	<input type="checkbox"/> CMPT 405
<input type="checkbox"/> CMPT 413	<input type="checkbox"/> CMPT 461	<input type="checkbox"/> CMPT 403	<input type="checkbox"/> CMPT 441	<input type="checkbox"/> CMPT 475	<input type="checkbox"/> CMPT 406
<input type="checkbox"/> CMPT 417	<input type="checkbox"/> CMPT 464	<input type="checkbox"/> CMPT 431	<input type="checkbox"/> CMPT 454	<input type="checkbox"/> CMPT 477	<input type="checkbox"/> CMPT 407
<input type="checkbox"/> CMPT 419	<input type="checkbox"/> CMPT 466	<input type="checkbox"/> CMPT 433	<input type="checkbox"/> CMPT 456	<input type="checkbox"/> CMPT 489	<input type="checkbox"/> CMPT 409
<input type="checkbox"/> CMPT 420	<input type="checkbox"/> CMPT 467	<input type="checkbox"/> CMPT 450	<input type="checkbox"/> CMPT 459		<input type="checkbox"/> CMPT 476
	<input type="checkbox"/> CMPT 469	<input type="checkbox"/> CMPT 471	<input type="checkbox"/> CMPT 474		<input type="checkbox"/> MACM 300
		<input type="checkbox"/> CMPT 479			
		<input type="checkbox"/> CMPT 499			

OPTIONAL REQUIREMENTS:

COMPUTING SCIENCE CO-OP EDUCATION

<input type="checkbox"/> CMPT 426	<input type="checkbox"/> CMPT 427	<input type="checkbox"/> CMPT 428	<input type="checkbox"/> CMPT 429	<input type="checkbox"/> CMPT 430
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SUMMARY OF REQUIREMENTS:

Breadth (18)	
Depth (18)	
BSc (9)	
Research (6)	Writing (6)

Concentration:

Requirement	Complete	In Progress	Total	Remaining
Total Units (min 132)				
Upper Division Units (min 60)				
CS Upper Division Units (min 54)				

ELECTIVE & BSc REQUIREMENTS:

REQUIRED WRITING	
<input type="checkbox"/> CMPT 105W	
<input type="checkbox"/> CMPT 376W	

REQUIRED WQB	
<input type="checkbox"/> B-SCI _____	<input type="checkbox"/> B-HUM _____
<input type="checkbox"/> B-SOC _____	<input type="checkbox"/> B-HUM _____
<input type="checkbox"/> B-SOC _____	

BSc CREDENTIAL	
<input type="checkbox"/> MACM 316	
<input type="checkbox"/> Additional course from Tables I or III	
<input type="checkbox"/> Additional course from Tables I or III	

TABLE III: COMPUTING MATHEMATICS	
<input type="checkbox"/> MATH 308	<input type="checkbox"/> MACM 401
<input type="checkbox"/> MATH 340	<input type="checkbox"/> MACM 442
<input type="checkbox"/> MATH 343	<input type="checkbox"/> MACM 316 (BSc)

UPPER DIVISION ELECTIVES	
<input type="checkbox"/> ANY 3XX/4XX	<input type="checkbox"/> ANY 3XX/4XX

RESEARCH REQUIREMENTS:

RESEARCH	
CHOOSE ONE OF THE FOLLOWING	
<input type="checkbox"/> CMPT 415 (3) & CMPT 416 (3)	<input type="checkbox"/> CMPT 498 (6)

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ACADEMIC REQUIREMENTS

LOWER DIVISION REQUIREMENTS (or equivalents):

- MATH 154/157 and 155/158, with grades of B+ or higher, may substitute MATH 150/151 and 152 with school permission.
- WQB requirements: Students are required to complete 6 units of writing (W), 6 units of Breadth Science (B-Sci), 6 units of Breadth Social Science (B-Soc), 6 units of Breadth Humanities (B-Hum) and 6 units of Undesignated Breadth (UB).
- Computing Science students automatically fulfill their WQB requirements of 6 UB units with MATH courses and 3 B-Sci units with MACM 101 and 6 W units with CMPT 105W and CMPT 376W. Some WQB courses may fulfill two requirements. Some courses have multiple designations. For complete WQB regulations please refer to: http://www.sfu.ca/ugcr/for_students.html.

UPPER DIVISION REQUIREMENTS:

- **Breadth requirement (18 units)**
One course from each the six areas of Table I must be completed. These courses must include CMPT 300, 307 and 354.
- **Depth requirement (24 units)**
Eighteen units of additional CMPT courses numbered CMPT 300 or above must be completed, at least twelve of which must be numbered 400 or above. These eighteen units must include CMPT 405; at least one other course in the theoretical computing science concentration; and, unless given special permission, *cannot include CMPT 415, CMPT 416 and CMPT 495*.

In addition, six units of research are required including both of CMPT 415 (3) and 416 (3), or CMPT 498 (6).

- **BSc Credential (9 units)**
Completion of MACM 316 plus two **additional** courses chosen from Tables I or III.
- **Writing requirement (3 units)**
CMPT 376W required to satisfy UD W requirements.

Note: The following courses may be counted as being part of Tables I or III with permission of the School: CMPT 318, 415, 416, 496, 497, 498 and 700 or 800 level CMPT courses. Appeal form: <https://coursys.sfu.ca/forms/apsc-cmpt-appeal-form/>

AREA OF CONCENTRATION

Students complete the major requirements, including four courses in the corresponding section in Table I, at least two of which must be at the 400 division. Students may complete one or more concentrations. Courses used to meet the requirements of a concentration may also be used to meet other program requirements.

ELECTIVE COURSES

Students will have room to take additional elective credits in order to complete 132 credits required for graduation.

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 current SFU calendar for details.

CONTINUATION REQUIREMENTS

Students should maintain a CGPA and a UDGPA of 3.00 in order to continue in the Computing Science honours program.

WQB REQUIREMENTS

Students need to complete:

- One Lower Division (LD) Writing Course (CMPT 105W)
- One Upper Division (UD) Writing Course (CMPT 376W)
- 6 units of Breadth Science (B-Sci) (MACM 101 and one other B-Sci)
- 6 units of Breadth Social (B-Soc)
- 6 units of Breadth Humanities (B-Hum)
- 6 units of Undesignated Breadth (UB) (MATH 150/151 and MATH 152)

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

CO-OPERATIVE EDUCATION

Combines work experience with academic studies—all students are encouraged to apply. 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>.

ADVISING

Advising is available at the Burnaby & Surrey campus and Zoom drop-in for students in the Computing Science degree program. Please see the FAS Advising website to <https://www.sfu.ca/fas/current-student/advising.html> for details. You may also email asadvice@sfu.ca for your questions.

Please bring a copy of your [advising transcript](#) (download at go.sfu.ca) with you to the advising session.