

2020-2021 BMath CS + Software Engineering Specialization

1. Under **Required Courses** and **Electives**, check off the forty-one unique courses (20.5 units) that you have earned university credit for. **Additional Elective Units** can be *any* course for which you received university credit.
2. Verify that the **Required Courses** and **Electives** also satisfy the **Additional Constraints**.

Required Courses

- 9.5 CS Units
 - CS 1[134]5
 - CS 1[34]6
 - CS 240
 - CS 241
 - CS 245
 - CS 246
 - CS 251
 - CS 341
 - CS 350
 - CS 360 or CS 365
 - CS 370 or CS 371
 - CS 445/ECE 451
 - CS 446/ECE 452
 - CS 447/ECE 453
 - CS 492
 - CS 3XX from List A
 - CS 3XX from List A
 - CS 4XX from List B
 - CS 4XX from List B

- 4.5 Math Units
 - MATH 1[34]5
 - MATH 1[34]6
 - MATH 1[234]7
 - MATH 1[234]8
 - MATH 2[34]5
 - MATH 2[34]7
 - MATH 2[34]9
 - STAT 2[34]0
 - STAT 2[34]1
- 1.5 Additional Math Units¹
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Electives

- 5.0 Non-Math Elective Units
 - Communication list I²
 - Communication list II³
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- 1.5 Additional Math Units¹
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Additional Constraints

- Choose two from List A:
 - CS 343
 - CS 348
 - CS 349
- Choose two from List B:
 - CS 444 CS 457
 - CS 448 CS 458
 - CS 449 CS 484
 - CS 450 CS 485
 - CS 452 CS 486
 - CS 454 CS 488
 - CS 456
- Non-math elective units must satisfy [breadth and depth](#) requirements:
 - All of (breadth):
 - 1.0 units from the humanities⁴
 - 1.0 units from the social sciences
 - 0.5 units from the pure sciences
 - 0.5 units from the pure or applied sciences
 - One of (depth):
 - 1.5 units in the same subject area with at least 0.5 units at the 3rd year level or higher, or
 - 1.5 units with the same subject forming a prerequisite chain of length three
- Seven (regular) or eight (co-op) terms enrolled in at least three courses totaling 1.5 units
- No more than 2.0 units of failed courses
- No more than 5.0 units of unusable course attempts (failures and repeats of passed courses)
- CS major average of 60% or higher
- Cumulative average of 60% or higher
- Co-op requirements met, if applicable, including PD 1, PD 11, PD 10, and a minimum of two other PD courses

¹Three additional courses labeled ACTSC, AMATH, CO, PMATH, STAT, excluding the following:

- Courses with requisites normally excluding Honours CS students
- Courses cross-listed with a CS course
- Courses explicitly listed in CS major plans as alternatives to CS courses
- Readings and Topics courses
- ACTSC 221, CO 353, CO 380, CO 480

²Communication List I: At least 60% in one of EMLS 101R, EMLS 102R, EMLS/ENGL 129R, ENGL 109, SPCOM 100, SPCOM 223.

³Communication List II: One of EMLS 103R, EMLS 104R, EMLS 110R, ENGL 108B, ENGL 108D, ENGL 119, ENGL 208B, ENGL 209, ENGL 210E, ENGL 210F, ENGL 378/MTHEL 300, SPCOM 225, SPCOM 227, SPCOM 228, or an additional course from Communication List 1.

⁴The below Communication courses from List II can be used to satisfy both the Communication List II requirement *and* 0.5 unit for the humanities (breadth) requirement. Communication List I courses do NOT satisfy the humanities (breadth) requirement.

- ENGL 108B, ENGL 108D, ENGL 119, ENGL 208B, ENGL 209, ENGL 210E, ENGL 210F, ENGL 378/MTHEL 300, SPCOM 225, SPCOM 227, SPCOM 228.

Disclaimer: This checklist is a handy tool, but it is not a substitute for the official degree regulations. If there is a question of interpretation or a discrepancy, the University Calendar always takes precedence: <http://ugradcalendar.uwaterloo.ca/group/MATH-Computer-Science-1>. You may complete the checklist and ask a CS advisor to review it, but the student is ultimately responsible for ensuring that they have met their degree requirements.