

# 2022-2023 BMath (CS) + Software Engineering Specialization

1. Please watch the "[How to Pick Your CS Checklist and Fill it in](#)" video.
2. Under **Required Courses** and **Electives**, check off the forty unique courses (20.75 units) that you have earned university credit for. **Additional Elective Units** can be *any* course for which you received university credit.
3. Verify that the **Required Courses** and **Electives** also satisfy the **Additional Constraints**.

## Required Courses

- |   |  |
|---|--|
| <input type="checkbox"/> <b>9.75 CS Units</b>     | <input type="checkbox"/> <b>4.5 Math Units</b> |
| <input type="checkbox"/> CS 1[134]5               | <input type="checkbox"/> MATH 1[34]5           |
| <input type="checkbox"/> CS 1[34]6                | <input type="checkbox"/> MATH 1[034]6          |
| <input type="checkbox"/> CS 136L (0.25 unit)      | <input type="checkbox"/> MATH 1[234]7          |
| <input type="checkbox"/> CS 240                   | <input type="checkbox"/> MATH 1[234]8          |
| <input type="checkbox"/> CS 241                   | <input type="checkbox"/> MATH 2[34]5           |
| <input type="checkbox"/> CS 245                   | <input type="checkbox"/> MATH 2[34]7           |
| <input type="checkbox"/> CS 246                   | <input type="checkbox"/> MATH 2[34]9           |
| <input type="checkbox"/> CS 251                   | <input type="checkbox"/> STAT 2[34]0           |
| <input type="checkbox"/> CS 341                   | <input type="checkbox"/> STAT 2[34]1           |
| <input type="checkbox"/> CS 350                   |  |
| <input type="checkbox"/> CS 360 or CS 365 _____   |  |
| <input type="checkbox"/> CS 370 or CS 371 _____   |  |
| <input type="checkbox"/> CS 3XX from List A _____ |  |
| <input type="checkbox"/> CS 3XX from List A _____ |  |
| <input type="checkbox"/> CS 445/ECE 451           |  |
| <input type="checkbox"/> CS 446/ECE 452           |  |
| <input type="checkbox"/> CS 447/ECE 453           |  |
| <input type="checkbox"/> CS 4XX from List B _____ |  |
| <input type="checkbox"/> CS 4XX from List B _____ |  |
| <input type="checkbox"/> CS 492                   |  |

## Electives

- |  |  |
|--|--|
| <input type="checkbox"/> <b>5.0 Non-Math Elective Units including <a href="#">Breadth and Depth</a>:</b> | <input type="checkbox"/> <b>1.5 Additional <a href="#">Math</a> Elective Units<sup>4</sup></b> |
| <input type="checkbox"/> Communication list I <sup>1</sup> : _____                                       | <input type="checkbox"/> _____   |
| <input type="checkbox"/> Communication list II <sup>2</sup> : _____                                      | <input type="checkbox"/> _____   |
| <input type="checkbox"/> Humanities: _____   | <input type="checkbox"/> _____   |
| <input type="checkbox"/> Humanities or non-math <sup>3</sup> : _____                                     |  |
| <input type="checkbox"/> Social Science: _____   |  |
| <input type="checkbox"/> Social Science: _____   |  |
| <input type="checkbox"/> Pure Science: _____   |  |
| <input type="checkbox"/> Pure or Applied Sciences: _____   |  |
| <input type="checkbox"/> _____   |  |
| <input type="checkbox"/> _____   |  |

## Additional Constraints

- |   |   |
|---|---|
| <input type="checkbox"/> List A – Choose two courses below:<br><input type="checkbox"/> CS 343<br><input type="checkbox"/> CS 348<br><input type="checkbox"/> CS 349  | <input type="checkbox"/> List B - Choose two courses below:<br><input type="checkbox"/> CS 442 <input type="checkbox"/> CS 449 <input type="checkbox"/> CS 452 <input type="checkbox"/> CS 457 <input type="checkbox"/> CS 484<br><input type="checkbox"/> CS 444 <input type="checkbox"/> CS 450 <input type="checkbox"/> CS 454 <input type="checkbox"/> CS 458 <input type="checkbox"/> CS 486<br><input type="checkbox"/> CS 448 <input type="checkbox"/> CS 451 <input type="checkbox"/> CS 456 <input type="checkbox"/> CS 480 <input type="checkbox"/> CS 488                    |
| <input type="checkbox"/> <b>Depth</b> - 1.5 units in the same subject where either:<br>(a) at least 0.5 unit is 3xx or higher, <b>or</b><br>(b) all three form a prerequisite chain.<br>Courses for breadth can also be used for depth.<br><b>Write the non-math elective units from above that you will use for depth.</b><br><input type="checkbox"/> _____<br><input type="checkbox"/> _____<br><input type="checkbox"/> _____ | <input type="checkbox"/> Seven (regular) or eight (co-op) terms enrolled in at least three courses totaling 1.5 units<br><input type="checkbox"/> No more than 2.0 units of failed courses<br><input type="checkbox"/> No more than 5.0 units of unusable course attempts (failures and repeats of passed courses)<br><input type="checkbox"/> CS major average of 60% or higher<br><input type="checkbox"/> Cumulative average of 60% or higher<br><input type="checkbox"/> Co-op requirements met, if applicable, including PD 1, PD 11, PD 10, and a minimum of two other PD courses |

<sup>1</sup>Communication List I: At least 60% in one of EMLS 101R, EMLS 102R, EMLS/ENGL 129R, ENGL 109, SPCOM 100, SPCOM 223.

<sup>2</sup>Communication List II: One of EMLS 103R, EMLS 104R, EMLS 110R, ENGL 101B, 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.

<sup>3</sup>The courses below can be used to satisfy both the Communication List II requirement **and** 0.5 unit for the humanities (breadth) requirement.

- ENGL 101B, ENGL 108B, ENGL 108D, ENGL 119, ENGL 208B, ENGL 209, ENGL 210E, ENGL 210F, ENGL 378/MTHEL 300, SPCOM 225, SPCOM 227, SPCOM 228.

If you use one of the Communication List II courses for humanities, then the checkbox needs to be replaced by any non-Math course.

<sup>4</sup>Three additional courses labeled ACTSC, AMATH, CO, PMATH, STAT, excluding the following:

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

Disclaimer: This checklist is a handy tool, but it is not a substitute for the official degree regulations. 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. If there is a question of interpretation or a discrepancy, the [University Calendar](#) always takes precedence.