

2021-2022 BMath CS + Digital Hardware 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 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

7.5 CS Units

- CS 1[134]5
- CS 1[34]6
- CS 240
- CS 241
- CS 245
- CS 246
- ECE 222
- CS 341
- CS 350
- CS 360 or CS 365 _____
- CS 370 or CS 371 _____
- CS 340-398; 440-489 _____
- CS 450 or ECE 429 or ECE 320

- CS 440-489 _____
- CS 440-489 or CS 499T or
CS 6xx or CS 7xx or CO 487
or STAT 440

4.5 Math Units

- MATH 1[34]5
- MATH 1[034]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 Units⁵

- _____
- _____
- _____

Electives

5.0 Non-Math Elective Units

- Including [Breadth and Depth](#)**
- Communication list I¹: _____
 - Communication list II²: _____
 - Humanities: _____
 - Humanities or
non-math³: _____
 - Social Science: _____
 - Social Science: _____
 - Pure Science:
Recommended: PHYS 121
 - Pure or Applied Science:
GENE 123 or MTE 120
 - ECE 124
 - ECE 224 or MTE 325

1.5 Additional [Math](#) or Non-Math Elective Units

- ECE 327
- ECE 423
- Recommended:
ECE 455

Additional Constraints

- Two of:
 - CS 452
 - CS 454
 - CS 456
 - CS 457

- Depth** – The depth requirement can be potentially met by the required ECE courses. Please check with a CS Advisor to confirm if the ECE courses you plan on taking will satisfy depth **before** you choose them during course selection.
- 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

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

²Communication 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.

³The 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 101B, ENGL 208B, ENGL 209, ENGL 210E, ENGL 210F, ENGL 378/MTHEL 300, SPCOM 225, SPCOM 227, SPCOM 228.

⁴Students taking ECE 429 instead of CS 450 will count this as a 0.5 math unit in the range CS 440-CS 498, and not a 0.5 non-math unit.

⁵Three 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
- 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. If there is a question of interpretation or a discrepancy, the [University Calendar](#) always takes precedence. 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.