

2024-2025 BMath (CS) + Artificial Intelligence 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 (20.0 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

7.75 CS Units

- CS 1[134]5
- CS 1[34]6
- CS 136L (0.25 unit)
- 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 340-398; 440-489 _____
- CS 480 or CS 485
- CS 486
- CS 492

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

Electives

5.0 Non-Math Elective Units, including [Breadth and Depth](#)

- Social Science: _____
- Social Science: _____
- Pure Science: _____
- Pure/Applied Science: _____
- _____
- _____

Choose either:

- Comm. list I¹: _____
- Comm. list I or II²: _____
- Humanities: _____
- Humanities: _____

OR

- Comm. list I¹: _____
- COMMST or ENGL from Comm. list II²: _____
- Humanities: _____
- Non-Math: _____

1.5 Additional [Math³](#) Elective Units

- _____
- _____
- _____

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

- _____
- _____
- _____

Additional Constraints

- List A⁴ – Choose four courses⁵ below (at least one course must be from Math and one from Engineering)⁵:

Math Courses

- | | | |
|---------------------------------|----------------------------------------------|-----------------------------------|
| <input type="checkbox"/> CO 367 | <input type="checkbox"/> CS 452 | <input type="checkbox"/> STAT 341 |
| <input type="checkbox"/> CO 456 | <input type="checkbox"/> CS 479 | <input type="checkbox"/> STAT 440 |
| <input type="checkbox"/> CO 463 | <input type="checkbox"/> CS 480 ⁶ | <input type="checkbox"/> STAT 441 |
| <input type="checkbox"/> CO 466 | <input type="checkbox"/> CS 484 | <input type="checkbox"/> STAT 444 |
| | <input type="checkbox"/> CS 485 ⁶ | |

Engineering Courses

- | | |
|--------------------------------------------|--------------------------------------------|
| <input type="checkbox"/> ECE 380 or SE 380 | <input type="checkbox"/> MTE 544 |
| <input type="checkbox"/> ECE 423 | <input type="checkbox"/> SYDE 552/BIOL 487 |
| <input type="checkbox"/> ECE 457C | <input type="checkbox"/> SYDE 556 |
| <input type="checkbox"/> ECE 481 | <input type="checkbox"/> SYDE 572 |
| <input type="checkbox"/> ECE 486 | |
| <input type="checkbox"/> ECE 488 | |
| <input type="checkbox"/> ECE 495 | |

- Depth** - 1.5 units in the same subject where either:
 - (a) at least 0.5 unit is 3XX or higher, **or**
 - (b) all three form a prerequisite chain.

Courses for breadth can also be used for depth.

Write the non-math elective units from above that you will use for depth.

- _____
- _____
- _____

- 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 COMMST 100, COMMST 223, EMLS 101R, EMLS 102R, EMLS/ENGL 129R, ENGL 109.

²Communication List II: One of COMMST 225, COMMST 227, COMMST 228, *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

³Three 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

⁴Special topics courses (e.g. CS 489) may sometimes be appropriate for List A; interested students should see a CS advisor for confirmation.

⁵You must meet the pre-requisites before taking any course in List A. In some cases, this means that you might need to take one or more additional courses beyond those on this checklist. Refer to the [UG calendar](#) or talk to the instructor/advisor of that course regarding what prerequisites you may need and/or whether you can be overridden into their course if you already have an equivalent. Engineering courses listed here cannot be used towards non-math electives.

⁶One of CS 480 and CS 485 is required. If both courses are taken, then one of them can count as one of 'Choose four courses below' from List A. If only one course is taken, it cannot count as one of 'Choose four courses below' from list A.

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.