2023-2024 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

### Electives
- ☐ 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

- ☐ 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 courses below (at least one course must be from Math and one from Engineering)⁵:
  - Math Courses
    - ☐ CO 367
    - ☐ CO 456
    - ☐ CO 463
    - ☐ CO 466
    - ☐ CS 452
    - ☐ CS 479
    - ☐ CS 480⁶
    - ☐ CS 484
    - ☐ CS 341
    - ☐ CS 341
    - ☐ STAT 341
    - ☐ STAT 440
    - ☐ STAT 441
    - ☐ STAT 444
  - Engineering Courses
    - ☐ ECE 380 or SE 380
    - ☐ ECE 423
    - ☐ ECE 457C
    - ☐ ECE 481
    - ☐ ECE 486
    - ☐ ECE 488
    - ☐ ECE 495
    - ☐ MTE 544
    - ☐ SYDE 552/BIOL 487
    - ☐ SYDE 556
    - ☐ SYDE 572

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

Communication 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

Three 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

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

You 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.

One 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.

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.