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

- **7.5 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 450 or ECE 429
  - CS 440-489

- **3.5 Math Units**
  - MATH 1[34]5
  - MATH 1[34]6
  - MATH 1[234]7
  - MATH 2[34]5
  - STAT 2[34]0

### Electives

- **5.0 Units**
  - Communication list I:
  - Communication list II:
  - GENE 123 or MTE 120
  - ECE 124
  - ECE 224 or MTE 325
  - ECE 327
  - ECE 423
  - Recommended: ECE 455
  - Recommended: PHYS 121
  - One of ECE 320, ECE 429, or CS 450

- **2.5 Non-Math Elective Units**
  - Humanities:
  - Humanities or non-math:
  - Social Science:
  - Social Science:
  - Pure Science:

- **1.5 Additional Units**

### Additional Constraints

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

- **Depth**—The depth requirement is automatically met by the required ECE courses.

- 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

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


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


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.

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](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.