

Requirements effective Fall 2018 for class of 2021+

Department of Mathematics and Computer Science COMPUTER SCIENCE MAJOR Checklist

Student: _____

Department Requirements:

| Course | Taken | Course | Taken | Course | Taken |
|-------------|--------------|------------------|--------------|-------------------|--------------|
| | Quarter/Year | | Quarter/Year | | Quarter/Year |
| CSCI 10 & L | | COEN 20 & L | | COEN 177 & L | (4) |
| CSCI 60 & L | | COEN/ELEN 21 & L | | CSCI Emphasis I * | (5) |
| CSCI 61 | | MATH 51 | | CSCI Emphasis II | (6) |
| MATH 11 | | MATH 53 | | CSCI Emphasis III | (7) |
| MATH 12 | | CSCI 161 | (1) | CSCI Emphasis IV | (8) |
| MATH 13 | | CSCI 163A | (2) | CSCI Emphasis V | (9) |
| MATH 14 | | MATH 122 | (3) | | |

Legend:

* The five courses must be taken within one emphasis.

Algorithms and Complexity Emphasis: CSCI 162, CSCI 163B, MATH 177; two more courses from MATH 175, MATH 176, MATH 178, CSCI 165, CSCI 181, MATH 101 or any other additional upper division CSCI or COEN courses.

Data Science Emphasis: CSCI 183, MATH 123, CSCI 184; two more courses from CSCI 164, CSCI 166 or any other upper division CSCI or COEN course.

Security Emphasis: CSCI 180, MATH 178, CSCI 181; two more courses from MATH 175, COEN 152 & L, COEN 161 & L, COEN 146 & L or any other upper division CSCI or COEN course.

Software Emphasis: CSCI 169, CSCI 187, COEN 146 & L; one more course from CSCI 183, CSCI 168, CSCI 164, or any other upper division CSCI course. One more course from CSCI 183, 164, 168; COEN 163, 166, 168, or any other upper division CSCI or COEN course.

Open emphasis of the student's choosing. In order to pursue this emphasis the student must get their courses approved and get their advisor's signature at least three quarters before they graduate. Three of the five upper division courses must be CSCI or MATH. See the Bulletin for some examples.

It is highly recommended that students (especially in the Software Emphasis) take additional upper-division courses beyond the minimum required for the degree, e.g. COEN 178 (Databases).

College and University Requirements:

| Course | Taken | Course | Taken | Course | Taken |
|-------------|--------------|-----------------------|--------------|-------------------|--------------|
| | Quarter/Year | | Quarter/Year | | Quarter/Year |
| CTW 1 | | Natural Science *** | | Culture&Ideas III | (12?) |
| CTW 2 | | Rel Theol Culture I | | Civic Engag. | |
| Adv Wrtg** | (11?) | Rel Theol Culture II | | Elective | (11?) |
| Ethics | | Rel Theol Culture III | (10) | Elective | (12?) |
| Diversity | | Social Science | | Elective | |
| Arts | | Culture&Ideas I | | Elective | |
| Language I | | Culture&Ideas II | | Elective | |
| Language II | | | | (Elective) | |

EXPERIENTIAL LEARNING COURSE: _____

PATHWAY NAME: _____

Pathway Courses: 1 _____ 2 _____ 3 _____ 4 _____

** MATH 100 is highly recommended, if offered, but may not be taken to fulfill any mathematics and computer science upper-division requirements for students majoring in mathematics or computer science.

*** One of ANTH 1, PHYS 31, CHEM 11 or ENVS 21.

NOTE: A student must take at least 12 Upper Division courses as noted below.

These courses are noted in places marked by (1), (2), ... (12).

Class Status Summary:

Graduation Requirements:

Freshman 44 units (11 courses)
Sophomore 88 units
Junior 131 units
Senior 175 units

- 1) 175 units
- 2) 60 Upper Division units (at least 12-15 courses)
- 3) 2.0 GPA overall
- 4) 2.0 GPA in major/minor
- 5) Residency

Check University Bulletin for complete information.