### Suggested Sequence for Computer Science Majors (Effective Fall 2019)

All courses are 1 Unit (4 credit hours) unless otherwise noted. A full-time student typically takes 4 units, or up to a maximum of 4.5 units, in a semester.

- Green indicates Computer Science courses;
- Blue indicates Math or Science correlate courses;
- Orange indicates liberal learning courses, including the world language requirement.
- Black indicates free elective courses.

# Students Intending to apply for Jobs in the Industry

# Year 1 (8 units)

CSC 099: Orientation to CS (0 unit; Fall)

CSC 220: Computational Problem Solving (Fall)

CSC 230: Data Structures (Spring)

CSC 270: Discrete Structures (Spring)

MAT 127: Calculus A

MAT 128: Calculus B (if selected option) or Science

Freshman Seminar (Fall) World Language 1 and 2

### Year 2 (8.25 units)

CSC 199: Prof. Dev. Seminar (0.25 unit; Fall)

CSC 325: Computer Architecture (Fall or Spring)

CSC 335: Analysis of Algorithms (Fall or Spring)

CS Option 1 or CSC 345: Operating Systems

CSC 360 (Fall) or CSC 315 (Spring)

Science

MAT 205: Linear Algebra (suggested)

World Language 3

Free Elective

#### Year 3 (8.25 units)

CSC 299: Junior Seminar (0.25 unit; Spring)

CS Option 1 or CSC 345: Operating Systems (*if not already taken*)

CSC 415: Software Engineering

CSC 435: Programming Languages (Fall, if selected option)

CS Option 2

Free Elective

Science

Liberal Learning (2 units)

#### Year 4 (8 units)

CS Capstone (*Internship suggested*)

CS Option 3

Free Elective (3 units)

Liberal Learning (3 units)

## **Students Intending to apply to**

**Graduate Schools** 

### Year 1 (8 units)

CSC 099: Orientation to CS (0 unit; Fall)

CSC 220: Computational Problem Solving (Fall)

CSC 230: Data Structures (Spring)

CSC 270: Discrete Structures (Spring)

MAT 127: Calculus A

MAT 128: Calculus B (if selected option) or Science

Freshman Seminar (Fall)

World Language 1 and 2

#### Year 2 (8.25 units)

CSC 199: Prof. Dev. Seminar (0.25 unit; Fall)

CSC 325: Computer Architecture (Fall or Spring)

CSC 335: Analysis of Algorithms (Fall or Spring)

CS Option 1 or CSC 345: Operating Systems

CSC 360 (Fall) or CSC 315 (Spring)

Science

MAT 205: Linear Algebra (suggested)

World Language 3

Free Elective

#### Year 3 (8.25 units)

CSC 299: Junior Seminar (0.25 unit; Spring)

CS Option 1 or CSC 345: Operating Systems (*if not already taken*)

CSC 415: Software Engineering

CSC 445: Theory of Computation (Spring, if selected option)

CS Option 2 <u>or</u> CS Capstone (*Mentored Research suggested for either choice*)

Free Elective = Mentored Research 1 or 2 with intent to publish suggested

Science

Liberal Learning (2 units)

### Year 4 (8 units)

CS Option 2 or CS Capstone (*Internship suggested*)

CS Option 3 (CSC 435 suggested)

Free Elective = Mentored Research 1 or 2 with intent to publish suggested

Free Elective (2 units)

Liberal Learning (3 units)

### Suggested Sequence for Computer Science Majors (Effective Fall 2019)

The flowchart below shows the Computer Science core and optional courses. The arrows indicate the prerequisite structure.

