

## Suggested Sequence for Computer Science Majors

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.

| <b>Students Intending to apply for<br/>Jobs in the Industry</b>  |
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| <b>Year 1 (8 units)</b>  |
| CSC 099: Orientation to CS (0 unit; Fall)<br>CSC 220: Computational Problem Solving (Fall)<br>CSC 230: Data Structures (Spring)<br>CSC 270: Discrete Structures (Spring)<br>MAT 127: Calculus A<br>MAT 128: Calculus B ( <i>if selected option</i> ) <u>or</u> Science<br>Freshman Seminar (Fall)<br>World Language 1 and 2                                  |
| <b>Year 2 (8.25 units)</b>   |
| CSC 199: Prof. Dev. Seminar (0.25 unit; Fall)<br>CSC 325: Computer Architecture (Fall or Spring)<br>CSC 335: Analysis of Algorithms (Fall or Spring)<br>CSC 345: Operating Systems <u>or</u> CS Option<br>CS Option<br>STA 215: Statistical Inference<br>MAT 205: Linear Algebra ( <i>suggested</i> ) <u>or</u> Science<br>World Language 3<br>Free Elective |
| <b>Year 3 (8.25 units)</b>   |
| CSC 299: Junior Seminar (0.25 unit; Spring)<br>CS Option <u>or</u> CSC 345: Operating Systems ( <i>if not already taken</i> )<br>CSC 415: Software Engineering<br>CSC 435: Programming Languages ( <i>Fall</i> )<br>Science<br>Science <u>or</u> Math ( <i>if not already taken</i> )<br>Free Elective<br>Liberal Learning (2 units)                         |
| <b>Year 4 (8 units)</b>  |
| CS Capstone ( <i>Internship suggested, Fall</i> )<br>CS Option<br>Science<br>Free Elective (2 units)<br>Liberal Learning (3 units)   |

| <b>Students Intending to apply to<br/>Graduate Schools</b>   |
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| <b>Year 1 (8 units)</b>  |
| CSC 099: Orientation to CS (0 unit; Fall)<br>CSC 220: Computational Problem Solving (Fall)<br>CSC 230: Data Structures (Spring)<br>CSC 270: Discrete Structures (Spring)<br>MAT 127: Calculus A<br>MAT 128: Calculus B ( <i>if selected option</i> ) <u>or</u> Science<br>Freshman Seminar (Fall)<br>World Language 1 and 2  |
| <b>Year 2 (8.25 units)</b>   |
| CSC 199: Prof. Dev. Seminar (0.25 unit; Fall)<br>CSC 325: Computer Architecture (Fall or Spring)<br>CSC 335: Analysis of Algorithms (Fall or Spring)<br>CSC 345: Operating Systems <u>or</u> CS Option<br>CS Option<br>STA 215: Statistical Inference<br>MAT 205: Linear Algebra ( <i>suggested</i> ) <u>or</u> Science<br>World Language 3<br>Free Elective                                   |
| <b>Year 3 (8.25 units)</b>   |
| CSC 299: Junior Seminar (0.25 unit; Spring)<br>CS Option <u>or</u> CSC 345: Operating Systems ( <i>if not already taken</i> )<br>CSC 415: Software Engineering<br>CSC 445: Theory of Computation ( <i>Spring</i> )<br>CS Capstone ( <i>Mentored Research suggested</i> )<br>Science<br>Free Elective = Mentored Research 1 or 2 with intent to publish suggested<br>Liberal Learning (2 units) |
| <b>Year 4 (8 units)</b>  |
| CS Option ( <i>CSC 435 suggested, Fall</i> )<br>Free Elective = Mentored Research 1 or 2 with intent to publish suggested<br>Science<br>Science <u>or</u> Math ( <i>if not already taken</i> )<br>Free Elective<br>Liberal Learning (3 units)  |

# Suggested Sequence for Computer Science Majors

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

