Suggested Sequence for Computer Science Majors

All courses are 1 unit (4 credit hours) unless otherwise noted. A full-time load is 3 or 4 units, or up to a maximum of 4.5 units, in a semester. Students are encouraged to shadow a research lab (CSC 298) in their first and second years.

- Green indicates Computer Science courses;
- Blue indicates Math or Science correlate courses;
- Orange indicates College Core courses, including first year seminar, and world language requirements.
- Black indicates free elective courses.

NOTES: *The sequences below are *suggestions*; students who need courses such as MAT 120, FYW, etc. in the first year will adjust courses taken in later semesters. Students must review their program plan with their CS academic advisor to ensure that they keep on track. In most semesters, students take two units of CS, one unit of correlate math or science, and one unit of College Core (includes language and FYS).*

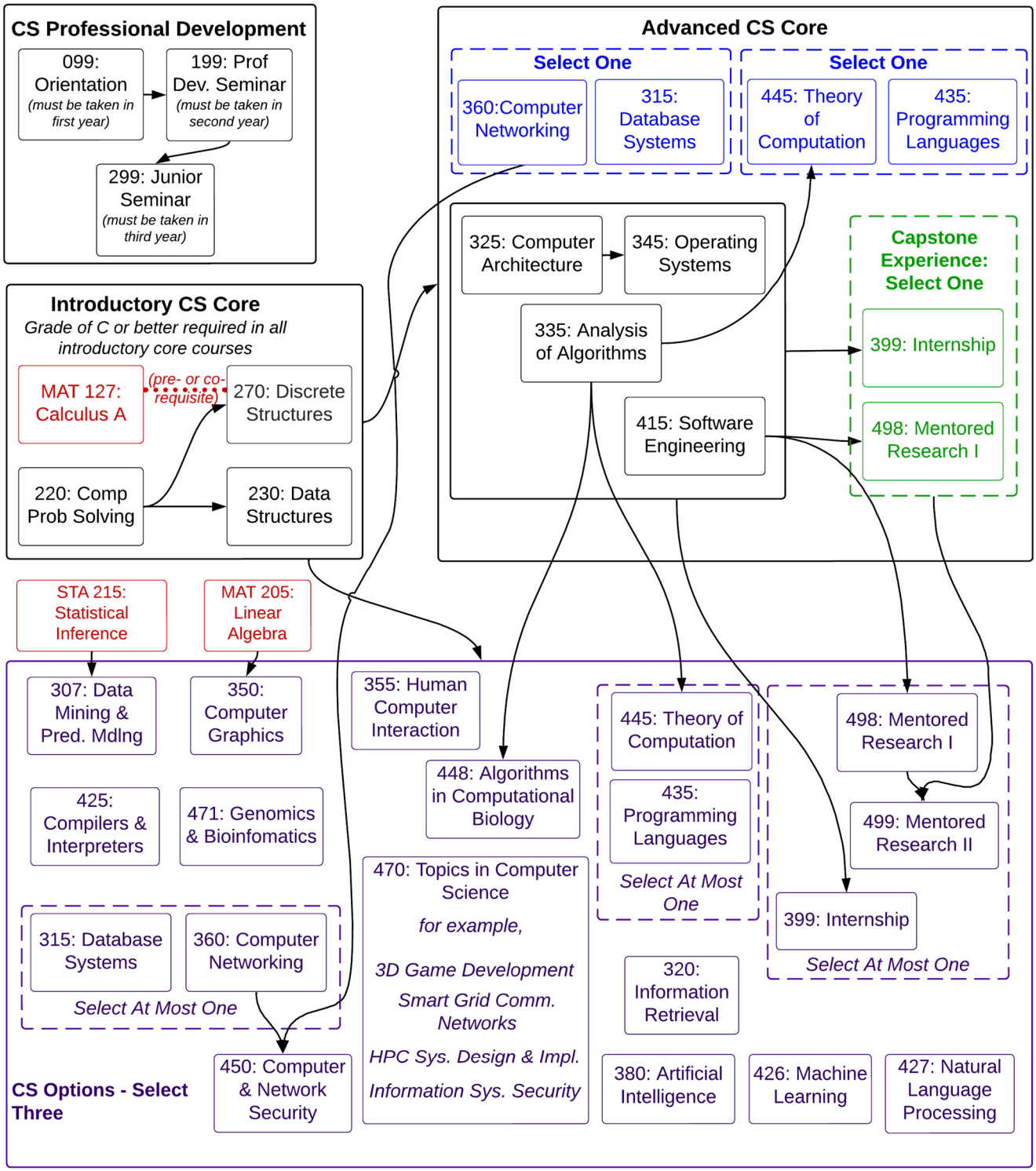
Students Intending to apply for Jobs in the Industry
Year 1 (8 units)
CSC 099: Orientation to CS (0 unit; Fall) CSC 220: Computational Problem Solving (Fall) CSC 230: Data Structures (Spring) CSC 270: Discrete Structures (Spring) MAT 127: Calculus A MAT 128: Calculus B *(if selected option)* or Science First Year Seminar World Language or College Core
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) CSC 345: Operating Systems or CS Option CSC 360 (Fall) or CSC 315 (Spring) STA 215: Statistical Inference MAT 205: Linear Algebra *(suggested)* or Science World Language or College Core Free Elective
Year 3 (8.25 units)
CSC 299: Junior Seminar (0.25 unit; Spring) CS Option or CSC 345: Operating Systems (*if not already taken*) CS Option CSC 415: Software Engineering Science Science (*if not already taken*) Free Elective College Core (2 units)
Year 4 (8 units)
CS Capstone (*Internship suggested, Fall*) CSC 435: Programming Languages (Fall) Free Elective (3 units) College Core (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 First Year Seminar World Language or College Core
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) CSC 345: Operating Systems or CS Option CSC 360 (Fall) or CSC 315 (Spring) STA 215: Statistical Inference MAT 205: Linear Algebra *(suggested)* or Science World Language or College Core Free Elective
Year 3 (8.25 units)
CSC 299: Junior Seminar (0.25 unit; Spring) CS Option or CSC 345: Operating Systems (*if not already taken*) CSC 415: Software Engineering CSC 445: Theory of Computation (Spring) CS Capstone (*Mentored Research suggested*) Science Free Elective *(Mentored Research 1 or 2 with intent to publish suggested)* College Core (2 units)
Year 4 (8 units)
CS Option (*CSC 435 suggested, Fall*) Free Elective *(Mentored Research 1 or 2 with intent to publish suggested)* Science (*if not already taken*) Free Elective (2 units) College Core (3 units)

Suggested Sequence for Computer Science Majors

The diagram shows the Computer Science core, advanced core and optional courses. Arrows indicate prerequisites.

Computer Science Major Requirements and Course Prerequisite Structure



(All course prefixes are CSC)

Legend

Black: Required CS Courses
Blue: Required Selection
Green: Required Capstone
Purple: Major Elective
Red: Required Math

Updated 07/05/2022