

## Suggested Sequence for Computer Science Majors with Data Science Specialization

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.

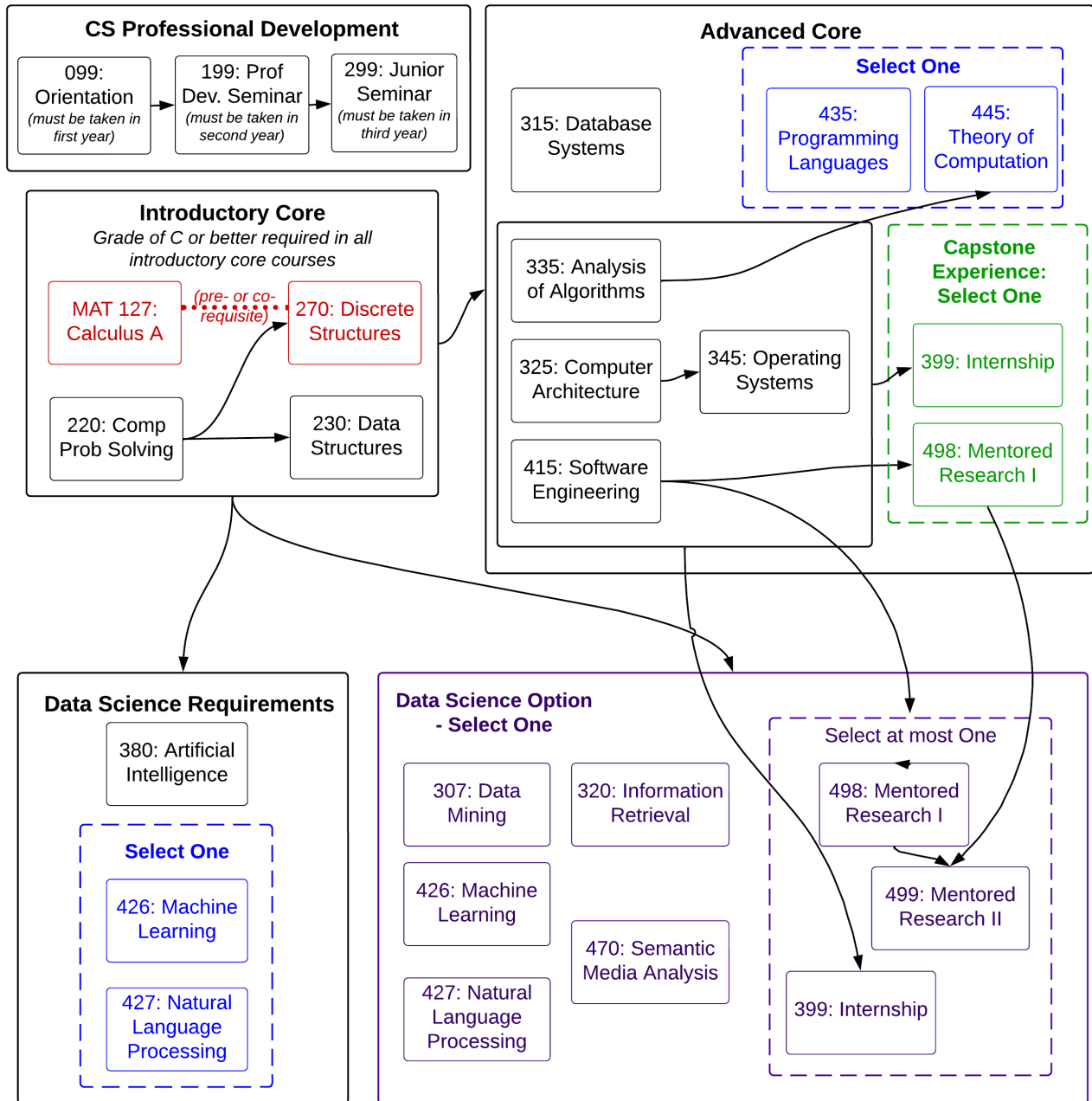
- Green indicates Computer Science courses;
- Blue indicates Math or Science correlate courses;
- Orange indicates liberal learning courses, including the world language requirement.
- Black indicates free elective courses.

<b>Year 1 (8 units)</b>	
Fall	Spring
CSC 099: Orientation to CS (0 unit; Fall) CSC 220: Computational Problem Solving (Fall) MAT 127: Calculus A First Year Seminar (Fall) World Language 1	CSC 230: Data Structures (Spring) CSC 270: Discrete Structures (Spring) STA 215: Statistical Inference World Language 2
<b>Year 2 (8.25 units)</b>	
CSC 199: Prof. Dev. Seminar (0.25 unit; Fall) CSC 325: Computer Architecture CSC 335: Analysis of Algorithms CSC 345: Operating Systems CSC 315 (Spring)	MAT 205: Linear Algebra STA 305: Regression Analysis STA 306: Multivariate Statistics World Language 3 (if needed) <u>or</u> Liberal Learning
<b>Year 3 (8.25 units)</b>	
CSC 299: Junior Seminar (0.25 unit; Spring) CSC 380: Artificial Intelligence CSC 426: Machine Learning <u>or</u> CSC 427: Natural Language Processing CSC 415: Software Engineering	CS Option (from approved list of CS Options for Data Science) Science (2 units) Liberal Learning (2 units)
<b>Year 4 (8 units)</b>	
CSC 399: Internship <u>or</u> CSC 498: Mentored Research CSC 435: Programming Languages <u>or</u> CSC 445: Theory of Computation Liberal Learning (2-3 units as needed) Free Elective (3 units) – recommended to take courses from lists of CS Options or additional courses approved for Data Science	

# Suggested Sequence for Computer Science Majors with Data Science Specialization

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

## Computer Science Major with Data Specialization Course Prerequisite Structure



(All course prefixes are CSC, unless otherwise specified)

Legend:

Black: Required Core

Blue: Required Selection

Green: Required Capstone

Purple: Major Elective

Red: Required Math

Effective Fall 2020