<table>
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<tr>
<th>Course Number &amp; Title (units)</th>
<th>Prerequisites†</th>
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**Complete ALL of the following required core courses:**

- ECS 122A: Algorithm Design & Analysis (4)
  - ECS 20, ECS 32B or 36C
- ECS 124: Theory & Practice of Bioinformatics (4)
  - ECS 32A or 36A or ENG 6; STA 12 or 13 or 13Y or 32 or 100 or 131A or MAT 135A or BIM 100; BIS 2A or MCB 10

**Complete 12 units of electives:**

**Complete at least ONE of the following biology courses: (4 units minimum)**

- □ BIS 101: Genes & Gene Expression (4)
  - a ‘C-’ or better in BIS 2A or BIS 2B; CHE 8A or CHE 11B or CHE 12B or CHE 128A; either STA 13 or 13Y or 100 or 130A
- □ BIS 104: Cell Biology (3)
- □ BIS 122: Population Biology & Ecology (3)
- □ ECE 100: Introduction to Evolution (4)
- □ EVE 101: Introduction to Ecology (4)
- □ EVE 102: Population & Quantitative Genetics (4)
- □ EVE 103: Phylogeny, Speciation, & Macroevolution (4)
- □ EVE 131: Human Genetic Variation & Evolution (3)
- □ MCB 121: Advanced Molecular Biology (3)
- □ MCB 124: Macromolecular Structure & Function (4)
- □ MCB 182: Principles of Genomics (3)
- □ BIS 101

**Complete at least ONE of the following computational or statistics courses:**

- □ BIT 150: Applied Bioinformatics (4)*
  - BIS 101; ECS 10 or ECS 15 or PL S 21; PL S 120 or STA 12 or STA 13 or STA 13Y or STA 100
- □ ECS 130: Scientific Computation (4)
- □ ECS 132: Probability & Statistical Modeling for Computer Science (4)
- □ ECS 140A: Programming Languages (4)
- □ ECS 145: Scripting Languages & their Applications (4)
- □ ECS 158: Programming on Parallel Architectures (4)
- □ ECS 160: Software Engineering (4)
- □ ECS 165A: Database Systems (4)
- □ ECS 170: Introduction to Artificial Intelligence (4)
- □ ECS 171: Machine Learning (4)
- □ ECS 177: Scientific Visualization (4)
- □ STA 130A: Mathematical Statistics: Brief Course (4)
- □ STA 141A: Fundamentals of Statistical Data Science (4)
- □ STA 141B: Data & Web Technologies for Data Analysis (4)
- □ STA 141C: Big Data & High Performance Statistical Computing (4)
  - a ‘C-’ or better in ECS 32A or 36A or ENG 6; MAT 22A or 27A or 67
  - a ‘C-’ or better in STA 13 or 13Y or STA 100 or 130A
  - a ‘C-’ or better in STA 106 or STA 10B
  - a ‘C-’ or better in STA 141A
  - a ‘C-’ or better in STA 141B, or a ‘C-’ or better in STA 141A and ECS 32A

**Complete at least ONE of the following computational biology and bioinformatics courses:**

- □ BIT 150: Applied Bioinformatics (4)*
  - BIS 101; ECS 10 or ECS 15 or PL S 21; PL S 120 or STA 12 or STA 13 or STA 13Y or STA 100
- □ BIM 117: Modeling Strategies for Biomedical Engineering (4)
  - a ‘C-’ or better in BIS 2A and MAT 22A
- □ ECS 129: Computational Structural Bioinformatics (4)
  - BIS 2A or MCB 10; ECS 32A or 36A

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1Prerequisites are subject to change; consult the University Catalog (https://catalog.ucdavis.edu/) for the most recent updates

*Please note you will only receive 2 units of credit for this course and will need to take additional coursework to reach the 20 upper division unit minimum

✓ Total units required for CS minor: 20-23