

Minor in Computer Science

Why should you do a Computer Science Minor?

- Learn skills and knowledge that could help you get a job in one of the fast growing careers
- You do not have to take physics courses
- A CSE Major Advisor will help to put your schedule together
- You get to use our computer science labs that are otherwise open only to CSE Students
- Students help one another in the labs gathering in a warm and inviting environment
- Most recruiters at recent career fairs are only looking for students with a computer science background
- Will set you apart from others when applying to jobs

New handout with full descriptions

Program Description

The Computer Science Minor Program is designed to provide basic proficiency in computer science. The requirements focus on programming methodology and skills, computer organization, relevant mathematical skills, structure techniques, laboratory courses with programming projects, and design and analysis of algorithms. Completing these requirements provides a strong foundation in computer science.

Required CSE Courses

- CSE 8B or CSE 11: Intro Computer Science and Object-Oriented: Java
- CSE 12: Data Structures and Object-Oriented Programming
- CSE 20: Discrete Mathematics
- CSE 21: Math/Algorithms and Systems Analysis
- CSE 30: Computer Organization and Systems Programming
- CSE 100: Advanced Data Structures
- CSE 101: Design and Analysis of Algorithms
- Two CSE upper division courses

CS Minor Academic Planning for student taking CSE 8A		
Fall	Winter	Spring
CSE 8A/8AL	CSE 8B	CSE 12
CSE 20	CSE 21	CSE 30
CSE 100	CSE 101	CSE Elective
CSE Elective	-	-

CS Minor Academic Planning for student taking CSE 8A (Accelerated Plan)		
Fall	Winter	Spring
CSE 8A/8AL	CSE 8B and CSE 20	CSE 12 and CSE 21
CSE 30	CSE 100	CSE 101
CSE Elective	CSE Elective	-

CS Minor Academic Planning for student taking CSE 11		
Fall	Winter	Spring
CSE 11	CSE 20	CSE 12
CSE 21	CSE 30	CSE 100
CSE 101	CSE Elective	CSE Elective

CS Minor Academic Planning for student taking CSE 11 (Accelerated Plan)		
Fall	Winter	Spring
CSE 11	CSE 12 and CSE 20	CSE 30 and CSE 21
CSE 100	CSE 101	CSE Elective
CSE Elctive	-	-

CSE Minor Requirements and Declaration

- 1) Submit a for approval to enroll into CSE 8A/8AL or CSE 11
- 2) Lower Division: Complete CSE 8B or 11, CSE 12, CSE 20, CSE 21 and CSE 30 with an average GPA of 2.5 or higher
- 3) Upper Division: Complete CSE 100 and CSE 101, plus two additional CSE upper division courses listed below
- 4) All lower and upper division courses must be taken for a letter grade
- 5) All lower division grades must be C- or better
- 6) After completion of the lower division courses submit a copy of grades to the CSE Student Affairs Office for review and calculation of GPA (a printout from TritonLink is acceptable)
- 7) Students must achieve at least a 2.0 average GPA in the upper division courses for the minor to be awarded

The remaining 2 upper division courses can be selected from this list:

CSE 102, CSE 103, CSE 105, CSE 111, CSE 120, CSE 132A, CSE 134A, CSE 134B, CSE 135, CSE 140, CSE 150, CSE 151, CSE 152, CSE 160, CSE 166, and CSE 167.

Selective Areas of Focus for your four upper division courses

- Theory: CSE 100, CSE 101, CSE 105, CSE 107
- Programming Languages: CSE 100, CSE 101, CSE 105, CSE 130
- Software Design and Engineering: CSE 100, CSE 101, CSE 111, CSE 112
- Operating Systems: CSE 100, CSE 101, CSE 120, CSE 121
- Computer Networks: CSE 100, CSE 101, CSE 120, CSE 123
- Networked Systems: CSE 100, CSE 101, CSE 120, CSE 124
- Video Game Design: CSE 100, CSE 101, CSE 120, CSE 125
- Security and Cryptography: CSE 100, CSE 101, CSE 120, CSE 127
- Concurrency: CSE 100, CSE 101, CSE 120, CSE 128
- Databases: CSE 100, CSE 101, CSE 132A, CSE 132B
- Web Server Languages: CSE 100, CSE 101, CSE 134A, CSE 134B
- Web Applications: CSE 100, CSE 101, CSE 135, CSE 136
- Computer Architecture: CSE 100, CSE 101, CSE 140, CSE 141
- Computer Graphics: CSE 100, CSE 101, CSE 167, CSE 168
- Computer Animation: CSE 100, CSE 101, CSE 167, CSE 169

Computer Science Minor Policies

1. Students in the Jacob's School of Engineering CANNOT minor in CSE.
2. Students in Math/CS major in the Mathematics Department CANNOT minor in CS.
3. Due to requirement changes to the CSE Minor Program, students should be careful to follow requirements in place the year that they are admitted to UCSD.