PROGRAM DESCRIPTION

Computer science plays a pivotal role in tackling every national and global challenge. Mobile computing, artificial intelligence, natural language processing, cybersecurity, big data, cloud computing, social networks, bioinformatics, sustainable computing, human computer interaction, robotics, wearable computing, game design/development, interactive entertainment and the Internet of Things are just a few examples of how computer science is shaping our society and directly helping the human race.

OUR MISSION

Cal Poly computer science educates students using our signature Learn by Doing paradigm allowing students to apply their education to solve practical problems in a socially responsible way. Our graduates are fully prepared for entry into industry, government, graduate school and private enterprise.

CONCENTRATIONS

The interactive entertainment concentration prepares students for technical-oriented careers relating to computer graphics, digital animation, video games and interactive experiences. While not formal concentrations, the computer science major offers a wide choice of technical electives that allow you to focus on particular areas of computer science, including databases, distributed computing, software engineering, programming languages, graphical user interfaces, operating systems, computer networks and artificial intelligence.

ASSOCIATED CLUBS

- Cal Poly App Development Club — polyappdev.club
- Cal Poly Game Development Club (CPGD) — cpgd.org/
- Cal Poly Linux Users Group (CPLUG) — cplug.org
- Cal Poly Robotics Club — calpolyrobotics.com
- Color Coded (Diversity in Tech) — www.colorcoded.cc
- SLOHacks — slohacks.com
- Society of Women Engineers — swe.calpoly.edu
- White Hat — thewhitehat.club
- Women Involved in Software & Hardware (WISH) — calpoly.edu/~wish
## B.S. in Computer Science

**Suggested Four-year Academic Flowchart - 2022-2026 Catalog**

### Major (92)
- **General Curriculum**
  - **Ethics, Science & Tech**
  - **Area B Elective**

### Technical Elective
- **CSC 321 (4)**
- **CSC 323 (4)**
- **CSC 325 (4)**

### Additional Science Support Elective
- **CSC 248 (4)**
- **CSC 307 (4)**
- **CSC 309 (4)**

### Life Science Support Elective
- **PHYS 142 (4)**
- **CHEM 124 (4)**

### MATH/STAT Support Electives
- **MATH 141, 142, 143, 241, 242, 243, 306, 334, 335, 437, 470, STAT 323, 324, 331, 334, 416, 418, 419, 434**

### Additional Science Support Elective
- **CSC 300 (4)**
- **CPE 309 (4)**
- **CSC/CPE 357 (4)**

### Physical Science Support Electives (12 units)**
- **PHYS 141 (4)**
- **CHEM 124 (4)**

### Life Science Support Elective
- **CHEM 125 (4)**

### Technical Elective
- **CSC 430 (4)**
- **CSC/CPE 453 (4)**
- **Statistical Methods for Engineers (4)**
- **Senior Project Lab I & II (2)**
- **Senior Project Lab I & II (2)**

### Research Senior Project I & II
- **CSC 497 (2)**
- **CPE 498 (2)**

### Intro to Computing
- **CPE/CSC 102 & 103 or 202 & 203; MATH 248; or CSC 248, 348**

### Calculus I
- **MATH 141 (4)**

### Calculus II
- **MATH 142 (4)**

### Calculus III
- **MATH 244 (4)**

### Expository Writing
- **ENGL 123/124 (4)**

### Reasearch, Argumentation, & Writing (A3)
- **COMS 126, 149, ENGL 145, 147, ES 145, PHIL 130, or WQWS 145 (4)**

### General Ed. (40)**

### TOTAL: 180

### Notes:
- **Most General Education Courses Can Be Taken in Any Order As Long As Prerequisites Are Met**
- **Cannot Double Count Units**
- **Can Be Taken Anytime Between Winter of Freshman and Winter of Sophomore Year**

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**Legend:**
- **Major (92)**
- **Support (48)**
- **General Ed. (40)**
- **[GE Area]**

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<th>Course # (Units)</th>
<th>(Prerequisite)</th>
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<tr>
<td>(Major)</td>
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<td>(Support)</td>
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<td>(General Ed.)</td>
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