### Core Computer Engineering Courses

#### Lower Division
- EECS 12: Introduction to Programming
- EECS 20: Computer Systems and Programming in C
- EECS 22: Advanced C Programming
- EECS 22L: Software Engineering Project in C Language
- EECS 31: Introduction to Digital Systems
- EECS 31L: Introduction to Digital Logic Laboratory
- EECS 40: Object-Oriented Systems and Program
- EECS 50: Discrete-Time Signals and Systems
- EECS 55: Engineering Probability
- EECS 70A and 70LA: Network Analysis I and Lab
- EECS 70B and 70LB: Network Analysis II and Lab

#### Upper Division
- EECS 111: System Software
- EECS 112: Organization of Digital Computers Lab
- EECS 112L: Organization of Digital Computers
- EECS 113: Processor Hardware/Software Interfaces
- EECS 114: Engineering Data Structures and Algorithms
- EECS 115: Introduction to Knowledge Management for Software and Engineering
- EECS 119: VLSI
- EECS 148: Computer Networks
- EECS 170A and 170LA: Electronics I and Lab
- EECS 170B and 170LB: Electronics II and Lab
- EECS 114: Engineering Data Structures and Algorithms
- EECS 118: Introduction to Knowledge Management for Software and Engineering
- EECS 119: VLSI
- EECS 148: Computer Networks
- EECS 170A and 170LA: Electronics I and Lab
- EECS 170B and 170LB: Electronics II and Lab
- EECS 114: Engineering Data Structures and Algorithms
- EECS 118: Introduction to Knowledge Management for Software and Engineering

Students must complete a minimum of three courses of technical electives. Technical Electives must be courses not used for the CPE degree.

For more details on major requirements go to: [http://catalogue.uci.edu/](http://catalogue.uci.edu/)

### Potential Careers
- Computer Hardware Engineer
- Computer Network Architect
- Network & Computer Systems Administrators
- Big Data
- Cyber Security
- Computer Design

### Student Involvement Opportunities

**Engineering Campus Resources**
- **CAMP:** California Alliance of Minority Participation
  - [https://camp.uci.edu/](https://camp.uci.edu/)
  - Mentorship Program
  - Scholarship Opportunities
- **OAI:** Office of Access and Inclusion
  - Free Engineering Course Tutoring
  - Mentorship Program

**Engineering Student Organizations**
- **ESC:** Engineering Student Council
  - [http://esc.ukulele.uci.edu/](http://esc.ukulele.uci.edu/)
- **IEEE:** Institute of Electrical and Electronic Engineers
  - [http://iee.eu.uci.edu/home](http://iee.eu.uci.edu/home)


### Sample Program of Study

#### Freshmen Year

<table>
<thead>
<tr>
<th>Fall</th>
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<tbody>
<tr>
<td>MATH 2A</td>
<td>MATH 2B</td>
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<tr>
<td>EECS 12</td>
<td>EECS 31</td>
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<td>PHYSICS 7LC</td>
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#### Sophomore Year

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<tr>
<td>MATH 3A</td>
<td>MATH 3D</td>
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<td>MATH 11</td>
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#### Junior Year

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<td>EECS 114</td>
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<td>EECS 112</td>
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<td>EECS 145</td>
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#### Senior Year

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Note: Course offerings subject to change. Courses subject to prerequisite requirements.

### Undergraduate Research Opportunities
- Independent Study (199 course)
- Student Project Experiments
  - Image to Braille Converter
  - Sign Language Translator
  - Project SkyHawk: Parking Assistant Drone System
  - Autonomous Racecar Project
  - Smart Speed Limit Sign
- Additional student projects can be found on [projects.eng.uci.edu](http://projects.eng.uci.edu)
- Undergraduate Research Opportunities Program (UROP)

### Potential Research Areas
- Circuits and Devices
- Microelectronics
- Nanotechnology
- Photonics
- Power Electronics, Power Systems
- Renewables
- Smart Grid
- Communications
- Information Theory

### Connect with Industry

- **Handshake:** Job & Internship Search Tool: [career.uci.edu/students/zotlink.html](http://career.uci.edu/students/zotlink.html)
- Find Employers based on major: [career.uci.edu/students/undergraduate/find-an-internship/buzzfile-company-search-tool/](http://career.uci.edu/students/undergraduate/find-an-internship/buzzfile-company-search-tool/)
- Career Fairs: [career.uci.edu/students/career-fairs.html](http://career.uci.edu/students/career-fairs.html)

Additional Major Info

- Fall STEM Career Fair
- Fall Career Fair
- Winter Internship & Career Fair
- Winter E-Week EngiTECH Career Fair
- Spring Career Fair

Undergraduate Student Affairs Office | 305 Rockwell Engineering Center
949-824-4334 | uengr@uci.edu | engineering.uci.edu