

# COMPUTER ENGINEERING

CALIFORNIA STATE UNIVERSITY, FRESNO

## 2025-2026 CATALOG

The suggested program of study on this page is for general information and academic planning purposes and is not a substitute for the University Catalog. Consult the 2025-2026 University Catalog for more detailed information.

### FIRST SEMESTER

<b>ENGR 1. Intro to Engineering</b>	<b>1</b>
Area A1 Comm 3, 7, 8	3
Area A2 Engl. 10 Comp. or 5A&B	3
Area B4 Math 75 Math. Analysis I	4
Area B2 Biol 10 (life science)	3
	<b>14</b>

### SECOND SEMESTER

<b>ECE 1 Intro to EE and CompE.</b>	<b>1</b>
<b>ECE 72 Intro to EE/CompE Tools</b>	<b>2</b>
Math 76 Mathematical Analysis II	4
Phys 4A Mechanics	3
PLSci (Grad Reuirment)	3
Area C2 Phil <sup>3</sup>	3
	<b>16</b>

### THIRD SEMESTER

<b>ECE71/or CSci 40 Intro. to Prog.</b>	<b>4</b>
ECE 85 Digital Logic Design	3
ECE 85L Digital Logic Design Lab	1
Math 77 Mathematical Analysis III	4
Phys 4B Elect., Magn. and Heat	3
Phys 4BL Elect., Magn. and Heat Lab	1
ECE 103 Professional Dev. Skills	1
	<b>17</b>

### FOURTH SEMESTER

<b>CSCI 41 Data Structures</b>	<b>4</b>
ECE 90 Prin. of Electrical Circuits	3
ECE 90L Prin. of Elect. Circuits Lab	1
ECE 106 Switching Theory	3
ECE 118 Microp. Arch. And Prog.	3
ECE 118L Microcontroller Lab	1
Math 81/Engr 101	3
	<b>18</b>

### FIFTH SEMESTER

<b>ECE 102 Advanced CKT Analysis</b>	<b>3</b>
ECE 128 Electronics I	3
ECE 128L Electronics I lab.	1
<b>ECE 141 Algorithmic Computations</b>	<b>3</b>
<b>ECE 141L Algorithmic Comp Lab</b>	<b>1</b>
Technical Area Course <sup>1</sup>	3
	<b>14</b>

### SIXTH SEMESTER

ECE 125 Probabilistic Engr. Sys. Analy.	3
<b>ECE 146 Computer Networks.</b>	<b>3</b>
ECE 176 Adv. Digital Design Design	3
Technical Area Course <sup>1</sup>	3
<b>Area B1</b> Chem. 3A General Chem.	4
	<b>16</b>

### SEVENTH SEMESTER

ECE 186A Senior Design I	1
<b>ECE 144 Embedded OS</b>	<b>3</b>
ECE 178 Embedded Systems	4
Technical Area Course <sup>1</sup>	3
Area D1 <b>Hist 11, 12</b>	<b>3</b>
Area D2: Econ 40 or 50	<b>3</b>
	<b>17</b>

### EIGHTH SEMESTER

ECE 174 Computer Architecture	3
Area IB ECE 186B Senior Design II	3
Technical Area Course <sup>1</sup>	3
<b>Area F<sup>2</sup> – Ethnic Studies</b>	<b>3</b>
	<b>12</b>

**Total units for the program**

**124**

<sup>1</sup> Upper Division ECE and CSCI courses (maximum 6 CSCI units).

<sup>2</sup> Interdisciplinary and comparative study of race and ethnicity- Foundation, Breath, and Integration - Lower division GE

<sup>3</sup> Area C2: Phil 1 or 2 or 10 or 20

<sup>4</sup> Select from: ECE 122L, 155L, ECE 119L, ECE 121L; ECE 134L, ECE 136L

## **General Education**

Area A1: Communication 3, 7, or 8

Area A2: Engl 10 or Engl 5A and 5B

**Area A3: Exempt**

Area B1: Chem 3A

Area B2: Bio 10 or 1A

Area B3: Phys 4BL

Area B4: Math 75 (*A student who has earned 15 units will get a warning pop-up if not passed or not registered in the B4 course.*

*A student who has earned 30 units and has not passed or not registered in the B4 course will get the hold pop-up at the time of registration.)*

**Area C1: Exempt**

Area C2: Phil 1 or 2 or 10 or 20

Area D1: Hist 11 or 12

Area D2: Econ 40 Or 50

**Area E: Exempt**

**Area F: Any upper or lower division GE area F**

**Area IB:** Exempt/ECE 186B

**Area IC:** Exempt

**Area ID:** Exempt/ECE 118

**Graduation Requirement:** PLCI 2