

# COMPUTER ENGINEERING

CALIFORNIA STATE UNIVERSITY, FRESNO

## 2022-2023 CATALOG

This sheet is for general information and is not by any means a substitute for the University Catalog. You must consult the 2022-2023 University Catalog for more detailed information

### FIRST SEMESTER

ECE 1	Intro to EE and CompE	1
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 72</b>	<b>Intro to EE/CompE Tools</b>	<b>2</b>
Math 76	Mathematical Analysis II	4
Phys 4A	Mechanics	3
Area C2	Phil <sup>3</sup>	3
Area D2	PI Sci 2	3
		<b>15</b>

### THIRD SEMESTER

<b>ECE71/or CSci 40</b>	<b>Intro. to Prog.</b>	<b>3</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	2
		<b>17</b>

### FOURTH SEMESTER

<b>CSCI 41</b>	<b>Data Structures</b>	<b>4</b>
ECE 90	Prin. of Electrical Circuits	3
ECE 90L	Prin. of Elect. Circuits Lab	1
ECE 106	Advanced Digital design	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 124</b>	<b>Signals and Systems</b>	<b>3</b>
ECE 128	Electronics I	3
ECE 128L	Electronics I lab.	1
<b>ECE 141</b>	<b>Advanced Algorithm Design</b>	<b>3</b>
<b>ECE 141L</b>	<b>Algorithm Design Lab</b>	<b>1</b>
ECE 144	Embedded OS	3
		<b>14</b>

### SIXTH SEMESTER

ECE 125	Probabilistic Engr. Sys. Analy.	3
<b>ECE 146</b>	<b>Computer Networks.</b>	<b>3</b>
	Technical Area Course <sup>1</sup>	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
ECE 176	CAE in Digital Design	3
ECE 178	Embedded Systems	4
	Technical Area Course <sup>1</sup>	3
<b>Econ 40 or 50</b>		<b>3</b>
Area D1	<b>Hist 11, 12</b>	<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></b>	<b>Ethnic Studies</b>	<b>3</b>
ECE ____	Lab elective <sup>4</sup>	1
		<b>13</b>

**Total units for the program**

**124**

1 Upper Division ECE and CSCI courses (maximum 6 CSCI units).

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

3 Area C2: Phil11 or 10 or 20 or 25 or 45

4 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 10 or 20 or 25 or 45

Area D1: Hist 11 or 12

Area D2: PISci 2

**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