

COMPUTER ENGINEERING 2023-24

Units

PREPARATION FOR THE MAJOR

| | |
|---|----|
| CMPSC 16 | 4 |
| CMPSC 24 | 4 |
| CMPSC 32 | 4 |
| CMPSC 40 | 5 |
| ECE 1A-1B | 2 |
| ECE 5 | 4 |
| ECE 10A, 10AL, 10B, 10BL, 10C, 10CL | 15 |
| ECE 15A | 4 |
| MATH 2A-B or 3A-B, 4A-B, 6A | 20 |
| PHYS 7A, 7B, 7C, 7D, 7L | 16 |

UPPER DIVISION MAJOR 68

| | |
|---|------|
| CMPSC 130A | 4 |
| ECE 139 or PSTAT 120A | 4 |
| ECE 152A | 5 |
| ECE 154A | 4 |
| ENGR 101 | 3 |
| CMPSC 189 A-B* / ECE 189+ A-B-C | 8-12 |

* Prerequisite to CMPSC 189A is CMPSC 156
 + Prerequisite to ECE 189A is ECE 153B (offered twice per year)

Computer Engineering electives selected from the following list: 36-40

Prior approval of the student's departmental electives must be obtained from the student's faculty adviser.

Must include at least 2 sequences. See ECE Department student office for list of approved sequences.

| | | |
|-------------------------|-----------------------|---------------------|
| CMPSC 130B | CMPSC 177 | ECE 154B |
| CMPSC 138 | CMPSC 178 | ECE 157A-B |
| CMPSC 153A/ ECE 153A | CMPSC 181/ ECE 181 | ECE 160 |
| CMPSC 156 | ECE 122A-B | ECE 178 |
| CMPSC 160 | ECE 123 | ECE 179D, 179P |
| CMPSC 162 | ECE130A-B-C | ECE 180 |
| CMPSC 165A-B | ECE 133 | ECE 194AA- 194ZZ |
| CMPSC 170 | ECE 147A-B | (except 194R) |
| CMPSC 171 | ECE 149 | |
| CMPSC 174A | ECE 150 | |
| CMPSC 176A-B-C | ECE 153B | |

Computer Engineering electives taken: _____

To satisfy major requirements, courses taken inside or outside the Department of Electrical and Computer Engineering, must be taken for a letter grade.

UNIVERSITY REQUIREMENTS

UC Entry Level Writing Requirement: English Composition
 Must be fulfilled within three quarters of matriculation

American History and Institutions – (one 4-unit course, may be counted as G.E. if selected from approved list)

GENERAL EDUCATION

General Subject Areas

Area A: English Reading & Comprehension – (2 courses required)

A-1: _____ **A-2:** _____

Area D: Social Science
 (2 courses minimum)

Area E: Culture and Thought
 (2 courses minimum)

Area F: The Arts
 (1 course minimum)

Area G: Literature
 (1 course minimum)

Special Subject Areas

Ethnicity (1 course): _____

European Traditions
or World Cultures (1 course): _____

Writing (4 courses required):

NON-MAJOR ELECTIVES

Free Electives taken:

TOTAL UNITS REQUIRED FOR GRADUATION 191

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This grid is intended to serve as a guide and should be adjusted for individual circumstances in consultation with academic advisors.
Course availability subject to change. Changes will be announced by the department.

FRESHMAN YEAR

| FALL | units | WINTER | units | SPRING | units |
|-------------------------------|--------------|----------------|--------------|------------------|--------------|
| ECE 3 or CMPSC 8 ¹ | 4 | CMPSC 16 | 4 | CMPSC 24 | 4 |
| ECE 5 ² | 4 | ECE 1A | 1 | ECE 1B | 1 |
| MATH 3A | 4 | MATH 3B | 4 | MATH 4A | 4 |
| WRIT 1E or 2E | 4 | PHYS 7A | 4 | PHYS 7B | 4 |
| | | WRIT 2E or 50E | 4 | WRIT 50E or G.E. | 4 |
| TOTAL | 16 | | 17 | | 17 |

SOPHOMORE YEAR

| FALL | units | WINTER | units | SPRING | units |
|-----------------------|--------------|---------------|--------------|------------------------------------|--------------|
| ECE 10A | 3 | ECE 10B | 3 | ECE 10C | 3 |
| ECE 10AL | 2 | ECE10BL | 2 | ECE 10CL | 2 |
| MATH 4B | 4 | ECE 15A | 4 | ECE 139 or PSTAT 120A ⁴ | 4 |
| CMPSC 32 ³ | 4 | PHYS 7C | 4 | ECE 152A | 5 |
| CMPSC 40 ³ | 5 | MATH 6A | 4 | PHYS 7D | 3 |
| | | | | PHYS 7L | 1 |
| TOTAL | 18 | | 17 | | 18 |

JUNIOR YEAR

| FALL | units | WINTER | units | SPRING | units |
|-----------------|--------------|-----------------|--------------|-----------------|--------------|
| ECE 154A | 4 | CMPSC 130A | 4 | CMPEN Electives | 8 |
| CMPEN Electives | 8 | CMPEN Electives | 8 | G.E. | 8 |
| G.E. | 4 | G.E. | 4 | | |
| TOTAL | 16 | | 16 | | 16 |

SENIOR YEAR

| FALL | units | WINTER | units | SPRING | units |
|---|--------------|-----------------------|--------------|----------------------------|--------------|
| ECE 189A ⁵ / CMPSC 189A ⁶ | 4 | ECE 189B/ CMPSC 189B | 4 | ECE 189C or CMPEN Elective | 4 |
| CMPEN Electives | 8 | ENGR 101 ⁷ | 3 | CMPEN Elective | 4 |
| G.E. | 4 | CMPEN Elective | 4 | G.E. | 4 |
| | | G.E. | 4 | | |
| TOTAL | 16 | | 15 | | 12 |

¹ Students with no prior computer programming background should take either ECE 3 or CMPSC 8.

² ECE 5 is also offered in winter quarter.

³ CMPSC 32 is also offered in spring quarter. CMPSC 40 is also offered in winter and spring quarters.

⁴ PSTAT 120A is offered each quarter. ECE 139 is offered only in the spring quarter and is better suited for future upper division electives for the Computer Engineering major.

⁵ ECE 153B is the prerequisite to ECE 189A. ⁶ CMPSC 156 is the prerequisite for CMPSC 189A.

⁷ ENGR 101 may be taken any quarter of the senior year.