# Planned Course Offerings Fall 2023 to Spring 2026

Department of Electrical and Computer Engineering, University of Hawaii at Manoa

The following are planned course offerings from Fall 2023 to Spring 2026. These may be subject to change.

*Last updated 10/26/2024 by the Department of Electrical and Computer Engineering.*

*Notations:*
* at least one of these courses will be offered in the semester indicated
** at least two of these courses will be offered in the semester indicated

## ECE Core

| Course Number | Credits | Course Title | Fall 2023 | Spring 2024 | Fall 2024 | Spring 2025 | Fall 2025 | Spring 2026 |
|---|---|---|---|---|---|---|---|---|
| ECE 160 | 4 | Programming for Engineers | F23 | S24 | F24 | S25 | F25 | S26 |
| ECE 211 | 4 | Basic Circuit Analysis I | F23 | S24 | F24 | S25 | F25 | S26 |
| ECE 213 | 4 | Basic Circuit Analysis II | F23 | S24 | F24 | S25 | F25 | S26 |
| ECE 260 | 4 | Introduction to Digital Design | F23 | S24 | F24 | S25 | F25 | S26 |
| ECE 296 | 1 | Sophomore Project | F23 | S24 | F24 | S25 | F25 | S26 |
| ECE 315 | 3 | Signal and Systems Analysis | F23 | S24 | F24 | S25 | F25 | S26 |
| ECE 323 | 3 | Microelectronic Circuits I | - | S24 | F24 | S25 | - | S26 |
| ECE 323L | 1 | Microelectronic Circuits I Lab | - | S24 | - | S25 | - | S26 |
| ECE 324 | 3 | Physical Electronics | F23 | - | F24 | - | F25 | - |
| ECE 342 | 3 | Probability and Statistics | F23 | S24 | F24 | S25 | F25 | S26 |
| ECE 371 | 3 | Engineering Electromagnetics I | F23 | - | F24 | - | F25 | - |
| ECE 396 | 2 | Junior Project | F23 | S24 | F24 | S25 | F25 | S26 |
| ECE 495 | 1 | Ethics in Electrical Engineering | F23 | S24 | F24 | S25 | F25 | S26 |
| ECE 496 | 3 | Capstone Design Project | F23 | S24 | F24 | S25 | F25 | S26 |
| **Total:** | 39 | | | | | | | |

## Computer Engineering

### Computer Engineering Core

| Course Number | Credits | Course Title | Fall 2023 | Spring 2024 | Fall 2024 | Spring 2025 | Fall 2025 | Spring 2026 |
|---|---|---|---|---|---|---|---|---|
| ECE 205 | 3 | Object Oriented Programming | - | S24 | - | S25 | - | S26 |
| ECE 361 | 3 | Digital Systems and Computer Design | F23 | - | F24 | - | F25 | - |
| ECE 361L | 1 | Digital Systems and Computer Design Lab | F23 | - | F24 | - | F25 | - |
| ECE 362 | 3 | Discrete Math for Engineers | F23 | - | F24 | - | F25 | - |
| ECE 367 | 3 | Computer Data Structures and Algorithms | - | S24 | - | S25 | - | S26 |
| ECE 367L | 1 | Computer Data Structures and Algorithms Lab | - | S24 | - | S25 | - | S26 |
| ECE 468 | 3 | Introduction to Operating Systems | F23 | - | F24 | - | F25 | - |
| **Total:** | 17 | | | | | | | |

### Computer Engineering Electives

| Course Number | Credits | Course Title | Fall 2023 | Spring 2024 | Fall 2024 | Spring 2025 | Fall 2025 | Spring 2026 |
|---|---|---|---|---|---|---|---|---|
| ECE 368 | 3 | Cyber Physical Systems | - | - | F24 | - | F25 | - |
| ECE 369 | 3 | Computational Media Systems | - | S24 | - | S25 | - | - |
| ECE 406 | 3 | Introduction to Computer and Network Security | F23 | - | F24 | - | F25 | - |
| ECE 469 | 3 | Wireless Data Networks | F23 | - | - | - | - | - |

## Electrophysics Track

### Electrophysics Track Core

| Course Number | Credits | Course Title | Fall 2023 | Spring 2024 | Fall 2024 | Spring 2025 | Fall 2025 | Spring 2026 |
|---|---|---|---|---|---|---|---|---|
| ECE 326 | 3 | Microelectronic Circuits II | F23 | - | F24 | - | F25 | - |
| ECE 326L | 1 | Microelectronic Circuits II Lab | F23 | - | F24 | - | F25 | - |
| ECE 327 | 3 | Theory and Design of IC Devices | - | S24 | - | S25 | - | S26 |
| ECE 372 | 3 | Engineering Electromagnetics II | - | S24 | - | S25 | - | S26 |
| ECE 372L | 1 | Engineering Electromagnetics Lab | - | S24 | - | S25 | - | S26 |
| **Total:** | 11 | | | | | | | |

### Electrophysics Track Electives

| Course Number | Credits | Course Title | Fall 2023 | Spring 2024 | Fall 2024 | Spring 2025 | Fall 2025 | Spring 2026 |
|---|---|---|---|---|---|---|---|---|
| ECE 328/426* | 3/3 | Microcircuit Fabrication / Adv Si IC and Devices | - | - | - | S25 | - | - |
| ECE 435 | 3 | Electric Power Systems | F23 | - | F24 | - | F25 | - |
| ECE 438 | 3 | Renewable Energy | - | S24 | - | S25 | - | S26 |
| ECE 471 | 3 | Computational Electromagnetics | - | S24 | - | - | - | - |
| ECE 470/473/474/ 475/477 * | 3 | Physical Optics / Microwave Eng / Antennas / Optical Communications / Radar, Sonar, & Nav Syst | - | S24 | F24 | S25 | F25 | S26 |
| ECE 480 | 3 | Intro to Biomed & Clinic Eng | - | - | F24 | - | F25 | - |

## Systems and Data Science Track

### Systems and Data Science Track Core

| Course Number | Credits | Course Title | Fall 2023 | Spring 2024 | Fall 2024 | Spring 2025 | Fall 2025 | Spring 2026 |
|---|---|---|---|---|---|---|---|---|
| ECE 343 | 3 | Introduction to Communication Systems | F23 | - | F24 | - | F25 | - |
| ECE 343L | 1 | Introduction to Communication Systems Lab | F23 | - | F24 | - | F25 | - |
| ECE 351 | 3 | Feedback-Control Systems | - | S24 | - | S25 | - | S26 |
| ECE 351L | 1 | Feedback-Control Systems Lab | - | S24 | - | S25 | - | S26 |
| ECE 415 | 4 | Digital Signal Processing | F23 | - | F24 | - | F25 | - |
| **Total:** | 12 | | | | | | | |

### Systems and Data Science Track Electives

| Course Number | Credits | Course Title | Fall 2023 | Spring 2024 | Fall 2024 | Spring 2025 | Fall 2025 | Spring 2026 |
|---|---|---|---|---|---|---|---|---|
| ECE 417/442/445 ** | 3 | Introduction to Optimization / Digital Communications / Machine Learning | - | S24 | - | S25 | - | S26 |
| ECE 435 | 3 | Electric Power Systems | F23 | - | F24 | - | F25 | - |

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** at least two of these courses will be offered in the semester indicated