EECS TRACKS

Electrical Engineering Track Subjects

**Biomedical Systems**

6.4800 Biomedical Systems: Modeling and Inference

**And one of the following subjects:**

6.4810 Celluar Neurophysiology and Computing
6.4820 Quantitative and Clinical Physiology
6.4830 Fields, Forces and Flows in Biological Systems
6.4860 Medical Device Design (CI-M)

**Communications and Networks**

6.7411 Principles of Digital Communication

**And one of the following subjects:**

6.1800 Computer Systems Engineering (CI-M)
6.3000 Signal Processing
6.3010 Signals, Systems and Inference

**Computer Architecture**

6.1920 Constructive Computer Architecture
6.2050 Digital Systems Laboratory (CI-M)
6.2060 Microcomputer Project Laboratory (CI-M)
6.5931 Hardware Architecture for Deep Learning

**Devices, Circuits, and Systems**

*One of the following subjects:*

6.2040 Analog Electronics Laboratory (CI-M)
6.2080 Introduction to Electronic Circuits
6.2090 Solid-State Circuits

*And one of the following subjects:*

6.2040 Analog Electronics Laboratory (CI-M)
6.2050 Digital Systems Laboratory (CI-M)
6.2060 Microcomputer Project Laboratory (CI-M)
6.2080 Introduction to Electronic Circuits
6.2090 Solid-State Circuits
6.2220 Power Electronics Laboratory (CI-M)
6.2300 Electromagnetics Waves and Applications

6.2500 Nanoelectronics and Computing Systems

**Electromagnetics and Photonic Systems**

6.2210 Electromagnetic Fields, Forces and Motion
6.2300 Electromagnetics Waves and Applications
6.2370 Modern Optics Project Laboratory (CI-M)
6.6331 Fundamentals of Photonics

**Embedded Systems**

6.1820 Mobile and Sensor Computing
6.2050 Digital Systems Laboratory (CI-M)
6.2060 Microcomputer Project Laboratory (CI-M)
6.4510 Engineering Interactive Technologies

**Energy Systems**

6.2200 Electric Energy Systems

*And one of the following:*

6.2210 Electromagnetic Fields, Forces and Motion
6.2220 Power Electronics Laboratory (CI-M)

**Hardware Design**

6.1920 Constructive Computer Architecture
6.2050 Digital Systems Laboratory (CI-M)
6.2060 Microcomputer Project Laboratory (CI-M)

**Hardware and Software**

6.1800 Computer Systems Engineering (CI-M, CI-M)

*And of the following subjects:*

18.404 Theory of Computation
6.1040 Software Design
6.1060 Software Performance Engineering
6.1100 Computer Language Engineering
6.1120 Dynamic Computer Language Engineering
6.1220 Design and Analysis of Algorithms
6.1400 Computability and Complexity Theory
6.1420 Fixed Parameter and Fine-grained Computation
6.1600 Foundations of Computer Security
6.1810 Operating System Engineering
6.1820 Mobile and Sensor Computing
### EECS Tracks

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>6.1850</td>
<td>Computer Systems and Society (CI-M)</td>
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<tr>
<td>6.4510</td>
<td>Engineering Interactive Technologies</td>
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<td>6.4530[J]</td>
<td>Principles and Practice of Assistive Technology</td>
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<td>Interactive Music Systems</td>
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<td>6.5081</td>
<td>Multicore Programming</td>
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<td>6.5831</td>
<td>Database Systems</td>
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<td>6.C35[J]</td>
<td>Interactive Data Visualization and Society</td>
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<td>6.2500</td>
<td>Nanoelectronics and Computing Systems</td>
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<td>6.2540</td>
<td>Nanotechnology: From Atoms to Systems</td>
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<td>6.2400</td>
<td>Introduction to Quantum Systems Engineering</td>
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<td>Quantum Engineering Platforms</td>
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<td>6.3000</td>
<td>Signal Processing</td>
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<td>6.3010</td>
<td>Signals, Systems and Inference</td>
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<td>6.3260[J]</td>
<td>Networks</td>
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<td>6.3720</td>
<td>Introduction to Statistical Data Analysis</td>
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<td>Introduction to Machine Learning</td>
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<td>6.4110</td>
<td>Representation, Inference, and Reasoning in AI</td>
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<td>6.4210</td>
<td>Robotic Manipulation (CI-M)</td>
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<td>6.7201</td>
<td>Optimization Methods</td>
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<td>6.8301</td>
<td>Advances in Computer Vision (CI-M)</td>
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</table>

1. In the Computer Architecture track, students can take 6.2050 or 6.2060, but not both.
2. Credit cannot be awarded without simultaneous completion of a 6-unit disciplinary module. Consult advisor.