EECS TRACKS

Electrical Engineering Track Subjects

Biomedical Systems
6.4800 Biomedical Systems: Modeling and Inference 12
And one of the following subjects:
6.4810[J] Cellular Neurophysiology and Computing 12
6.4820[J] Quantitative and Clinical Physiology 12
6.4860[J] Medical Device Design (CI-M) 12

Communications and Networks
6.7411 Principles of Digital Communication 12
And one of the following subjects:
6.1800 Computer Systems Engineering (CI-M) 12
6.3000 Signal Processing 12
6.3010 Signals, Systems and Inference 12

Computer Architecture
6.1920 Constructive Computer Architecture 12
6.2050 Digital Systems Laboratory (CI-M) 12
6.2060 Microcomputer Project Laboratory (CI-M) 12
6.5931 Hardware Architecture for Deep Learning 12

Devices, Circuits, and Systems
One of the following subjects:
6.2040 Analog Electronics Laboratory (CI-M) 12
6.2080 Introduction to Electronic Circuits 12
6.2090 Solid-State Circuits 12
And one of the following subjects:
6.2040 Analog Electronics Laboratory (CI-M) 12
6.2050 Digital Systems Laboratory (CI-M) 12
6.2060 Microcomputer Project Laboratory (CI-M) 12
6.2080 Introduction to Electronic Circuits 12
6.2090 Solid-State Circuits 12
6.2220 Power Electronics Laboratory (CI-M) 12
6.2300 Electromagnetics Waves and Applications 12

Electromagnetics and Photonic Systems
6.2210 Electromagnetic Fields, Forces and Motion 12
6.2300 Electromagnetics Waves and Applications 12
6.2370 Modern Optics Project Laboratory (CI-M) 12
6.6331 Fundamentals of Photonics 12

Embedded Systems
6.2050 Digital Systems Laboratory (CI-M) 12
6.2060 Microcomputer Project Laboratory (CI-M) 12
6.4510 Engineering Interactive Technologies 12

Energy Systems
6.2200 Electric Energy Systems 12
And one of the following:
6.2210 Electromagnetic Fields, Forces and Motion 12
6.2220 Power Electronics Laboratory (CI-M) 12

Hardware Design
6.1920 Constructive Computer Architecture 12
6.2050 Digital Systems Laboratory (CI-M) 12
6.2060 Microcomputer Project Laboratory (CI-M) 12

Hardware and Software
6.1800 Computer Systems Engineering (CI-M, CI-M) 12
And of the following subjects:
18.404 Theory of Computation 12
6.1040 Software Design 18
6.1060 Software Performance Engineering 18
6.1100 Computer Language Engineering 12
6.1120 Dynamic Computer Language Engineering 12
6.1400[J] Computability and Complexity Theory 12
6.1420 Fixed Parameter and Fine-grained Computation 12
6.1600 Foundations of Computer Security 12
6.1810 Operating System Engineering 12

Nanoelectronics and Computing Systems
6.2500 Nanoelectronics and Computing Systems 12
### EECS Tracks

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tr>
<td>6.1850</td>
<td>Computer Systems and Society (CI-M)</td>
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<td>6.4510</td>
<td>Engineering Interactive Technologies</td>
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<tr>
<td>6.4530[J]</td>
<td>Principles and Practice of Assistive Technology</td>
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<td>6.4550[J]</td>
<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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<tr>
<td>6.C35[J]</td>
<td>Interactive Data Visualization and Society</td>
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**Nanoelectronics**

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<td>6.2500</td>
<td>Nanoelectronics and Computing Systems</td>
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<tr>
<td>6.2540</td>
<td>Nanotechnology: From Atoms to Systems</td>
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**Quantum Systems Engineering**

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<tr>
<td>6.2400</td>
<td>Introduction to Quantum Systems Engineering</td>
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<td>6.2410</td>
<td>Quantum Engineering Platforms</td>
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**Systems Science**

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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>6.3900</td>
<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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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.