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
6.4830[J]	Fields, Forces and Flows in Biological Systems	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 [1]

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
6.2500	Nanoelectronics and Computing Systems	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

6.1820[J]	Mobile and Sensor Computing	12
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
6.1220[J]	Design and Analysis of Algorithms	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
6.1820[J]	Mobile and Sensor Computing	12

6.1850	Computer Systems and Society (CI-M)	12
6.4510	Engineering Interactive Technologies	12
6.4530[J]	Principles and Practice of Assistive Technology	12
6.4550[J]	Interactive Music Systems	12
6.4590[J]	Foundations of Information Policy (CI-M)	12
6.5081	Multicore Programming	12
6.5831	Database Systems	12
6.C35[J]	Interactive Data Visualization and Society [2]	12

Nanoelectronics

6.2500	Nanoelectronics and Computing Systems	12
And of of the following:		
6.2540	Nanotechnology: From Atoms to Systems	12
6.2600[J]	Micro/Nano Processing Technology (CI-M)	12

Quantum Systems Engineering

6.2400	Introduction to Quantum Systems Engineering	12
6.2410	Quantum Engineering Platforms	12

Systems Science

6.3000	Signal Processing	12
6.3010	Signals, Systems and Inference	12
6.3260[J]	Networks	12
6.3720	Introduction to Statistical Data Analysis	12
6.3900	Introduction to Machine Learning	12
6.4110	Representation, Inference, and Reasoning in AI	12
6.4200[J]	Robotics: Science and Systems (CI-M)	12
6.4210	Robotic Manipulation (CI-M)	15
6.7201	Optimization Methods	12
6.8301	Advances in Computer Vision (CI-M)	15

[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.*