EECS SUBJECT GROUPINGS

Advanced Graduate Subjects

16.420	Planning Under Uncertainty	12
18.435[J]	Quantum Computation	12
2.111[J]	Quantum Computation	12
6.1852	Computer Systems and Society	12
6.2092	Solid-State Circuits	12
6.2222	Power Electronics Laboratory	15
6.2532	Nanoelectronics	12
6.3102	Dynamical System Modeling and Control Design	12
6.3702	Introduction to Probability	12
6.3722	Introduction to Statistical Data Analysis	12
6.3732[J]	Statistics, Computation and Applications	12
6.3952	AI, Decision Making, and Society	12
6.4132[J]	Principles of Autonomy and Decision Making	12
6.4212	Robotic Manipulation	12
6.4812[J]	Cellular Neurophysiology and Computing	12
6.4822[J]	Quantitative and Clinical Physiology	12
6.4832[J]	Fields, Forces, and Flows in Biological Systems	12
6.4842[J]	Molecular, Cellular, and Tissue Biomechanics	12
6.4861[J]	Medical Device Design	12
6.5060	Algorithm Engineering	12
6.5080	Multicore Programming	12
6.5110	Foundations of Program Analysis	12
6.5120	Formal Reasoning About Programs	12
6.5150	Large-scale Symbolic Systems	12
6.5160[J]	Classical Mechanics: A Computational Approach	12
6.5210[J]	Advanced Algorithms	15
6.5220[J]	Randomized Algorithms	12
6.5230	Advanced Data Structures	12
6.5240	Sublinear Time Algorithms	12
6.5250[J]	Distributed Algorithms	12
6.5310	Geometric Folding Algorithms: Linkages, Origami, Polyhedra	12
6.5320	Geometric Computing	12
6.5340	Topics in Algorithmic Game Theory	12
6.5350	Matrix Multiplication and Graph Algorithms	12
6.5400[J]	Theory of Computation	12
6.5410[J]	Advanced Complexity Theory	12
6.5420	Randomness and Computation	12
6.5430	Quantum Complexity Theory	12
6.5610	Applied Cryptography	12
6.5620[J]	Foundations of Cryptography	12
6.5630	Advanced Topics in Cryptography	12
6.5660	Computer Systems Security	12
6.5810	Operating System Engineering	12
6.5820	Computer Networks	12
6.5830	Database Systems	12
6.5840	Distributed Computer Systems Engineering	12
6.5850	Principles of Computer Systems	12
6.5900	Computer System Architecture	12
6.5910	Complex Digital Systems Design	12
6.5920	Parallel Computing	12
6.5930	Hardware Architecture for Deep Learning	12
6.5940	TinyML and Efficient Deep Learning Computing	12
6.5950	Secure Hardware Design	12
6.6000	CMOS Analog and Mixed-Signal Circuit Design	12
6.6010	Analysis and Design of Digital Integrated Circuits	12
6.6020	High-Frequency Integrated Circuits	12
6.6220	Power Electronics	12
6.6280	Electric Machines	12
6.6300	Electromagnetics	12
6.6310	Optics and Photonics	12
6.6320	Silicon Photonics	12
6.6330	Fundamentals of Photonics	12
6.6340[J]	Nonlinear Optics	12
6.6370	Optical Imaging Devices, and Systems	12
6.6400	Applied Quantum and Statistical Physics	12
6.6410[J]	Quantum Computation	12
6.6420[J]	Quantum Information Science	12
6.6500[J]	Integrated Microelectronic Devices	12
6.6510	Physics for Solid-State Applications	12
6.6520	Semiconductor Optoelectronics: Theory and Design	12
6.6530	Physics of Solids	12

6.6600[J]	Nanostructure Fabrication	12
6.6630[J]	Control of Manufacturing Processes	12
6.7000	Discrete-Time Signal Processing	12
6.7010	Digital Image Processing	12
6.7020	Array Processing	12
6.7100[J]	Dynamic Systems and Control	12
6.7121	Principles of Modeling, Computing and Control for Decarbonized Electric Energy Systems	12
6.7210[J]	Introduction to Mathematical Programming	12
6.7220[J]	Nonlinear Optimization	12
6.7230[J]	Algebraic Techniques and Semidefinite Optimization	12
6.7240	Game Theory with Engineering Applications	12
6.7260	Network Science and Models	12
6.7300[J]	Introduction to Modeling and Simulation	12
6.7310[J]	Introduction to Numerical Methods	12
6.7320[J]	Parallel Computing and Scientific Machine Learning	12
6.7330[J]	Numerical Methods for Partial Differential Equations	12
6.7340[J]	Fast Methods for Partial Differential and Integral Equations	12
6.7410	Principles of Digital Communication	12
6.7420	Heterogeneous Networks: Architecture, Transport, Proctocols, and Management	12
6.7430	Optical Networks	12
6.7440	Principles of Wireless Communication	12
6.7450[J]	Data-Communication Networks	12
6.7460	Essential Coding Theory	12
6.7470	Information Theory	12
6.7480	Information Theory: From Coding to Learning	12
6.7700[J]	Fundamentals of Probability	12
6.7710	Discrete Stochastic Processes	12
6.7720[J]	Discrete Probability and Stochastic Processes	12
6.7800	Inference and Information	12
6.7810	Algorithms for Inference	12
6.7830	Bayesian Modeling and Inference	12
6.7900	Machine Learning	12
6.7910[J]	Statistical Learning Theory and Applications	12
6.7920[J]	Reinforcement Learning: Foundations and Methods	12
6.7930[J]	Machine Learning for Healthcare	12
6.7940	Dynamic Programming and Reinforcement Learning	12
6.7960	Deep Learning	12
6.8110[J]	Cognitive Robotics	12
6.8200	Sensorimotor Learning	12
6.8210	Underactuated Robotics	12
6.8300	Advances in Computer Vision	12
6.8370	Advanced Computational Photography	12
6.8410	Shape Analysis	12
6.8420	Computational Design and Fabrication	12
6.8510	Intelligent Multimodal User Interfaces	12
6.8530	Interactive Data Visualization	12
6.8610	Quantitative Methods for Natural Language Processing	12
6.8620[J]	Spoken Language Processing	12
6.8630[J]	Natural Language and the Computer Representation of Knowledge	12
6.8700[J]	Advanced Computational Biology: Genomes, Networks, Evolution	12
6.8710[J]	Computational Systems Biology: Deep Learning in the Life Sciences	12
6.8720[J]	Principles of Synthetic Biology	12
6.8800[J]	Biomedical Signal and Image Processing	12
6.8810[J]	Data Acquisition and Image Reconstruction in MRI	12
6.8830[J]	Signal Processing by the Auditory System: Perception	12
6.8850[J]	Clinical Data Learning, Visualization, and Deployments	12
6.9350[J]	Financial Market Dynamics and Human Behavior	9

6.C51 & 1.C51 & 10.C51[J] & 2.C51 & 20.C51[J] & 22.C51 & 3.C51[J] & C51 & 7.C51 & SCM.C51	Modeling with Machine Learning: from Algorithms to Applications and Machine Learning for Sustainable Systems and Machine Learning for Molecular Engineering and Physical Systems Modeling and Design Using Machine Learning and Machine Learning for Molecular Engineering and Modeling with Machine Learning: Nuclear Science and Engineering Applications and Machine Learning for Molecular Engineering and Modeling with Machine Learning: from Algorithms to Applications and Machine Learning in Molecular and Cellular Biology and Machine Learning Applications for Supply Chain Management	6
6.C57[J]	Optimization Methods	12
6.C67[J]	Computational Imaging: Physics and Algorithms	12
6.C85[J]	Interactive Data Visualization and Society	12
6.S890	Special Subject in Electrical Engineering and Computer Science	12
6.S892	Special Subject in Electrical Engineering and Computer Science	
6.S894	Special Subject in Electrical Engineering and Computer Science	
6.S896	Special Subject in Electrical Engineering and Computer Science	12
8.370[J]	Quantum Computation	12
9.660	Computational Cognitive Science	12