

Key	
	Offered
	Not Offered

7/14/2023

Course Number	Course Name	Fall 2021	Spring 2022	Fall 2022	Spring 2023	Fall 2023	Spring 2024	Fall 2024
EC311	Introduction to Logic Design							
EC327	Introduction to Software Engineering							
EC330	Applied Algorithms for Engineers							
EC400	Topics in Software Design							
EC400	Acoustics Mt Ee							
EC400	Engineering Light							
EC401	Signals and Systems							
EC402	Control Systems							
EC410	Introduction to Electronics							
EC412	Analog Electronics							
EC413	Computer Organization							
EC414	Introduction to Machine Learning							
EC415	Software Radios							
EC417	Electric Energy Systems: Adapting to Renewable Resources							
EC418	Introduction to Reinforcement Learning							
EC440	Introduction to Operating Systems							
EC441	Introduction to Computer Networking							
EC444	Smart and Connected Systems							
EC447	Software Design							
EC455	Electromagnetic Systems I							
EC456	Electromagnetic Systems II							

EC463	Senior Design Project I							
EC464	Senior Design Project II							
EC471	Physics of Semiconductor Devices							
EC500	Introduction to Online Learning							
EC500	Foundations of Probabilistic Machine Learning							
EC500	Medical Imaging with AI							
EC500	Hardware Security							
EC500	Plasma Engineering and Technologies							
EC500	Principles of Software At Scale							
EC501	Dynamic System Theory							
EC503	Introduction to Learning from Data was EC500)							
EC504	Advanced Data Structures							
EC505	Stochastic Processes							
EC512	Enterprise Client-Server Software Systems Design							
EC513	Computer Architecture							
EC516	Digital Signal Processing							
EC517	Introduction to Information Theory							
EC518	Robot Learning							
EC519	Speech Processing by Humans and Machines							
EC520	Digital Image Processing and Communication							
EC521	Cybersecurity							
EC522	Computational Optical Imaging (was EC500/700)							
EC523	Deep Learning (was EC500)							
EC524	Optimization Theory and Methods							
EC525	Optimization for Machine Learning (was EC500)							
EC526	Parallel Programming for High Performance Computing							
EC527	High Performance Programming with Multicore and GPUs							

EC528	Cloud Computing (was EC500)							
EC530	Software Engineering Principles (was EC500)							
EC533	Advanced Discrete Mathematics							
EC534	Discrete Stochastic Models							
EC535	Introduction to Embedded Systems							
EC541	Computer Communication Networks							
EC543	Sustainable Power Systems: Planning, Operation and Markets							
EC544	Networking the Physical World							
EC545	Cyber-Physical Systems							
EC551	Advanced Digital Design with Verilog and FPGA							
EC552	Computational Synthetic Biology for Engineers							
EC555	Introduction to Biomedical Optics							
EC556	Optical Spectroscopic Imaging							
EC560	Introduction to Photonics							
EC562	Engineering Optics (was EC500 Fourier Optics)							
EC565	Electromagnetic Fundamentals							
EC568	Optical Fibers and WaveGuides							
EC570	Lasers and Applications							
EC571	Digital VLSI Circuit Design							
EC572	Comp Methods MS							
EC573	Solar Energy Systems							
EC574	Phy Smcndct Mat							
EC575	Semiconductor Devices							
EC577	Electronic Optical and Magnetic Properties of Materials							
EC578	Fabrication Technology for Integrated Circuits							
EC579	Nano/microelectronic Device Technology							

EC580	Analog VLSI Circuit Design							
EC582	RF/Analog IC Design Fundamentals							
EC583	Power Electronics for Energy systems							
EC585	Quantum Engineering & Technology (QET)							
EC591	Photonics Lab I							
EC601	Product Design in Electrical and Computer Engineering							
EC602	Design by Software							
EC605	Computer Engineering Fundamentals							
EC674	Optimization Theory II							
EC700	Advanced Topics in Computer Architecture							
EC700	Silicon Photonics							
EC700	IoT Security							
EC700	Vulnerability, Malware, and Defensive Systems							
EC700	Malware, Online Abuse and Cybercrime							
EC700	Foundations of Signal Representation and Estimation							
EC700	Introduction to Reinforcement Learning							
EC700	Advanced Computer Networking							
EC700	Cyber-Physical Systems and Autonomous Vehicles							
EC700	High Dimensional Probability							
EC701	Optimal and Robust Control							
EC702	Recursive Estimation and Optimal Filtering							
EC707	Radar Remote Sensing							
EC710	Dynamic Programming and Stochastic Control							
EC713	Advanced Computer Systems & Architecture							
EC716	Advanced Digital Signal Processing							
EC717	Image Reconstruction and Restoration							
EC719	Statistical Pattern Recognition							

EC720	Digital Video Processing							
EC724	Advanced Optimization Theory and Methods (was EC700)							
EC732	Combinatorial Optimization and Graph Algorithms							
EC733	Discrete Event and Hybrid Systems							
EC734	Hybrid Systems							
EC754	Computer-Aided Verification and Synthesis							
EC762	Quantum Optics							
EC763	Nonlinear and Ultrafast Optics							
EC770	Guided-wave Optoelectronics							
EC774	Semiconductor Quantum Structures and Photonic Devices							
EC777	Nanostructure Optics							
EK103	Computational Linear Algebra							
EK121	Introduction to Programming for Engineers							
EK131/2	The Electric Guitar as a Gateway to Electroacoustics							
EK131/2	Photonics E3– Engineering with light							
EK210	Introduction to Engineering Design							
EK307	Electric Circuits							
EK381	Probability, Statistics, and Data Science for Engineers							
EK481	Introduction to Nanotechnology							
EK500	Probability with Statistical Applications							
EK501	Mathematical Methods I: Linear Algebra and Complex Analysis							