

ELECTRICAL ENGINEERING: ELECTIVES

Electives List A

Code	Title	Units
ELEC 270	Discrete Mathematics with Computer Engineering App	3.50
ELEC 279	Introduction to Object Oriented Programming	4.00
ELEC 333	Electric Machines	4.25
ELEC 344	Sensors and Actuators	3.75
ELEC 345	Sensor Fabrication Technologies	3.25
ELEC 373	Computer Networks	3.50
ELEC 374	Digital Systems Engineering	4.25
ELEC 408	Biomedical Signal and Image Processing	3.00
ELEC 409	Bioinformatic Analytics	3.00
ELEC 421	Digital Signal Processing: Filters and System Design	4.00
ELEC 422	Digital Signal Processing: Random Models and Applications	3.50
ELEC 425	Machine Learning and Deep Learning	3.50
ELEC 431	Power Electronics	3.25
ELEC 433	Energy and Power Systems	3.50
ELEC 436	Electric Machines and Control	3.00
ELEC 443	Linear Control Systems	4.00
ELEC 444	Modeling and Computer Control of Mechatronic Systems	3.25
ELEC 448	Introduction To Robotics or MREN 348 Introduction to Robotics	3.50
ELEC 451	Digital Integrated Circuit Engineering	3.25
ELEC 454	Analog Electronics	3.25
ELEC 457	Integrated Circuits and System Application	3.50
ELEC 461	Digital Communications	3.50
ELEC 464	Wireless Communications	3.00
ELEC 470	Computer System Architecture	3.50
ELEC 472	Artificial Intelligence	3.50
ELEC 473	Cryptography and Network Security	3.00
ELEC 474	Machine Vision	3.50
ELEC 475	Computer Vision with Deep Learning	3.50
ELEC 481	Applications of Photonics	3.00
ELEC 483	Microwave and RF Circuits and Systems	4.25
ELEC 486	Fiber Optic Communication	3.75
ELEC 497	Research Project	3.50

Electives List B

Code	Title	Units
APSC 303	Professional Internship	3.50
APSC 400	Technology, Engineering & Management (TEAM)	7.00
APSC 401	Interdisciplinary Projects	4.50
CHEE 340	Biomedical Engineering	3.50
ENPH 460	Laser Optics	3.50
CMPE 3XX Any	Third Year Computing Science Course	3.00
CMPE 4XX Any	Fourth Year Computing Science Course	3.00
MTHE 337	Intro. To Operations Research	3.00
MTHE 367	Engineering Data Analysis	3.50
MTHE 430	Control Theory	4.00
MTHE 455	Stochastic Processes & Applications	3.50
MTHE 472	Optimization and Control of Stochastic Systems	3.50
MTHE 474	Information Theory	3.50
MTHE 477	Data Compression and Source Coding: Theory and Algorithms	3.00
MTHE 478	Topics In Communication Theory	3.00
MECH 228	Kinematics And Dynamics	3.50
MECH 328	Dynamics And Vibration	3.50
MECH 393	Biomechanical Product Developm	3.50
MECH 423	Introduction To Microsystems	3.50
MECH 455	Computer Integrated Manufacturing	3.50
MECH 465	Computer Aided Design	3.50
MECH 478	Biomaterials	3.50
MECH 494	Kinematics Of Human Motion	3.50
MINE 472	Mining Systems, Automation, and Robotics	3.50