

Electrical Engineering Technical Elective Courses

EEE 3396C Solid-State Electronic Devices 4 Credits

EEE 3773 Introduction to Machine Learning 4 Credits

EEE 4210 Introduction to Biophotonics 3 Credits

EEE 4222 Resonant MEMS 3 Credits

EEE 4260C Bioelectrical Systems 4 Credits

EEE 4306 Electronic Circuits II 3 Credits

EEE 4310 VLSI Circuits and Technology 1 3 Credits

EEE 4329 Future of Microelectronics Technology 3 Credits

EEE 4331 Microelectronic Fabrication Technologies 3 Credits

EEE 4373 Radio Frequency Integrated Circuits 1 3 Credits

EEE 4404 Mixed Signal IC Testing I 3 Credits

EEE 4414 Modern Memory Device Technologies 3 Credits

EEE 4420 Introduction to Nanodevices 3 Credits

EEE 4511C Real Time Digital Signal Processing Applications 4 Credits

EEE 4701 Automated Hardware/Software Verification 3 Credits

EEE 4714 Introduction to Hardware Security and Trust 3 Credits

EEE 4720 Acoustics 3 Credits

EEE 4773 Fundamentals of Machine Learning 3 Credits

EEE 4800 Neural Signals, Systems, and Technology 3 Credits

EEL 3211C Basic Electric Energy Engineering 4 Credits

EEL 3402 Remote Sensing in Engineering: Science, Sensors and Applications 3 Credits

EEL 3472C Fundamentals of Electromagnetic Fields

EEL 4242C Power Electronic Circuits 3 Credits

EEL 4248 Fundamentals of RF and Power Electronic Devices 3 Credits

EEL 4251 Power System Analysis 3 Credits

EEL 4271 Power System Protection 3 Credits

EEL 4287 Smart Grid for Sustainable Energy 3 Credits

EEL 4403 Computational Photography 3 Credits

EEL 4412 Applied Magnetics and Magnetic Materials 3 Credits

EEL 4421 RF/Microwave Passive Circuits 3 Credits

EEL 4440 Optical Communication Systems 3 Credits

EEL 4446 Laser Theory and Design 3 Credits

EEL 4458 Fundamentals of Photonics 3 Credits

EEL 4461 Antenna Systems 3 Credits

EEL 4473 Electromagnetic Fields and Applications 3 Credits

EEL 4495 Lightning (3)

EEL 4514C Communication Systems and Components (4)

EEL 4516 Noise in Devices and Communication Systems 3 Credits

EEL 4523 Audio Engineering (3)

EEL 4540 Introduction to Radar (3)

EEL 4598 Computer Communications 3 Credits

EEL 4599 Wireless and Mobile Networks 3 Credits

EEL 4610 State Variable Methods in Linear Systems 3 Credits

EEL 4657C Linear Control Systems 4 Credits

EEL 4665C Intelligent Machines Design Laboratory 4 Credits

EEL 4713C Digital Computer Architecture 4 Credits

EEL 4720 Reconfigurable Computing 3 Credits.

EEL 4732 Advanced Systems Programming 3 Credits

EEL 4736 Principles of Computer System Design 3 Credits

EEL 4744C Microprocessor Applications 4 Credits

EEL 4745C Microprocessor Applications 2 (4) Credits

EEL 4750 Foundations of Digital Signal Processing 3 Credits

EEL 4853 Cross-Layered System Security 3 Credits

EEL 4905 Individual Problems in Electrical Engineering 1-4 Credits

EGN4951 Integrated Product and Process Design 1 3 Credits

EGN4952 Integrated Product and Process Design 2 3 Credits

EEL 4930 Special Topics in Electrical Engineering (1-4)

EEL 4948 Practical Work in Electrical and Computer Engineering (3)

EEL 4949 Co-op Work Experience (1)

EGN 4912 Engineering Directed Independent Research (0-3)

EEE5000 Level or Higher

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