| COURSE | COURSE NAME | GROUP | HRS | OFFERED |
|---|---|---|---|---|
| ECEN600 DL | Experimental Optics | DSN | 2-7 | Every other year |
| ECEN601 DL | Mathematical Methods in Signal Processing | ISLS | 3-0 | Every year |
| ECEN602 DL | Computer Communication and Networking | CE | 3-0 | Every year |
| ECEN605 DL | Linear Multivariable Systems | ISLS | 3-0 | Every other year |
| ECEN606 | Nonlinear Control Systems | PWR | 3-0 | Offered occasionally |
| ECEN607 DL | Advanced Analog Circuit Design Techniques | AMS | 3-2 | Every year |
| ECEN608 DL | Modern Control | ISLS | 3-0 | Offered occasionally |
| ECEN609 DL | Adaptive Control | ISLS | 3-0 | Offered occasionally |
| ECEN610 DL | Mixed-Signal Interfaces | AMS | 3-2 | Every year |
| ECEN611 | General Theory of Electromechanical Motion Devices | PWR | 3-0 | Every other year |
| ECEN612 | Computer Aided Design of Electromechanical Motion Devices | PWR | 3-3 | Offered occasionally |
| ECEN613 DL | Rectifier and Inverter Circuits | PWR | 3-0 | Every year |
| ECEN614 DL | Power System State Estimation | PWR | 3-0 | Offered occasionally |
| ECEN615 DL | Methods of Electric Power Systems Analysis | PWR | 3-0 | Every year |
| ECEN616 | Power System Electromagnetic Transients | PWR | 3-0 | Offered occasionally |
| ECEN619 | Internet Protocols and Modeling | CE | 3-0 | Every year |
| ECEN620 DL | Network Theory | AMS | 3-0 | Every year |
| ECEN621 | Mobile Wireless Networks | CE | 3-0 | Every year |
| ECEN622 DL | Active Network Synthesis | AMS | 3-0 | Offered occasionally |
| ECEN625 | Millimeter-wave Integrated Circuits | AMS | 3-0 | Offered occasionally |
| ECEN626 | Antenna Theory and Technique | EM | 2-3 | Offered occasionally |
| ECEN628 DL | Robust and Optimal Control | ISLS | 3-0 | Offered occasionally |
| ECEN629 DL | Applied Convex Optimization | ISLS | 3-0 | Every year |
| ECEN630 | Analysis of Power Electronic Systems | PWR | 3-0 | Offered occasionally |
| ECEN632 DL | Motor Drive Dynamics | PWR | 3-0 | Offered occasionally |
| ECEN635 DL | Electromagnetic Theory | EM | 3-0 | Every year |
| ECEN636 DL | Phased Arrays | EM | 3-0 | Offered occasionally |
| ECEN637 DL | Numerical Methods in Electromagnetics | EM | 3-0 | Offered occasionally |
| ECEN638 DL | Antennas and Propagation | EM | 3-0 | Offered occasionally |
| ECEN639 | Microwave Circuits | EM | 3-0 | Offered occasionally |
| ECEN640 | Thin Film Science and Technology | DSN | 3-1 | Every year |
| ECEN641 | Microwave Solid-State Integrated Circuits | EM | 3-0 | Offered occasionally |
| ECEN642 DL | Digital Image Processing | ISLS | 3-0 | Every other year |
| ECEN643 | Electric Power System Reliability | PWR | 3-0 | Offered occasionally |
| ECEN644 DL | Discrete-Time Systems | ISLS | 3-0 | Offered occasionally |

| COURSE | COURSE NAME | GROUP | HRS | OFFERED |
|---|---|---|---|---|
| ECEN646 | Probability and Random Processes for Information Science | ISLS | 3-0 | Every year |
| ECEN647 DL | Information Theory | ISLS | 3-0 | Offered occasionally |
| ECEN648 | Principles of Magnetic Resonance Imaging | BIO | 3-0 | Offered occasionally |
| ECEN649 DL | Pattern Recognition | BIO | 3-0 | Every other year |
| ECEN651 | Microprogrammed Control of Digital Systems | CE | 3-3 | Every year |
| ECEN653 | Computer Arithmetic Unit Design | CE | 3-0 | Every year |
| ECEN654 | Very Large Scale Integrated Systems Design | CE | 3-3 | Offered occasionally |
| ECEN658 | Low-Noise Electronic Design | DSN | 3-0 | Every other year |
| ECEN660 | BioMEMS and Lab-on-a-Chip | BIO | 3-0 | Offered occasionally |
| ECEN662 | Estimation and Detection Theory | ISLS | 3-0 | Offered occasionally |
| ECEN664 | Nanotechnology Fabrication | DSN | 3-0 | Offered occasionally |
| ECEN665 DL | Integrated CMOS RF Circuits and Systems | AMS | 3-2 | Every year |
| ECEN666 | Power System Faults and Protective Relaying | PWR | 3-0 | Offered occasionally |
| ECEN667 DL | Power System Stability | PWR | 3-0 | Offered occasionally |
| ECEN668 | High Voltage Direct Current (HVDC) Transmission | PWR | 3-0 | Offered occasionally |
| ECEN669 DL | Engineering Applications in Genomics | BIO | 3-0 | Offered occasionally |
| ECEN671 | Solid State Devices | DSN | 3-0 | Every year |
| ECEN676 DL | Advanced Computer Architecture | CE | 3-0 | Every year |
| ECEN679 | Computer Relays for Electric Power Systems | PWR | 3-0 | Offered occasionally |
| ECEN681 | Seminar | | | Every term |
| ECEN683 | Wireless Communication Systems | ISLS | 3-0 | Offered occasionally |
| ECEN684 | Professional Internship | | | Every term |
| ECEN685 | Directed Studies | | | Every term |
| ECEN686 | Electric and Hybrid Vehicles | PWR | 3-0 | Every other year |
| ECEN687 DL | Introduction to VLSI Physical Design Automation | CE | 3-0 | Offered occasionally |
| ECEN688 | IC MEMS and Sensor Fabrication | DSN | 3-3 | Every year |
| ECEN689 | Special Topics in... | | | Every term |
| ECEN691 | Research | | | Every term |
| ECEN694 | Nanobiotechnology | DSN | 3-0 | Offered occasionally |
| ECEN704 DL | VLSI Circuit Design | AMS | 3-3 | Every year |
| ECEN711 | Sustainable Energy and Vehicle Engineering | PWR | 3-0 | Offered occasionally |
| ECEN714 DL | Digital Integrated Circuit Design | CE | 2-2 | Every term |
| ECEN715 DL | Physical and Economical Operations of Sustainable Energy Systems | PWR | 3-0 | Every year |
| ECEN720 DL | High-Speed Links Circuits and Systems | AMS | 3-3 | Offered occasionally |
| ECEN721 DL | Optical Interconnects Circuits and Systems | AMS | 3-0 | Offered occasionally |
| ECEN722 DL | Field Programmable Gate Arrays Information Processing Systems | CE | 3-2 | Every year |
| ECEN732 | Online Decision Making and Learning | CE | 3-0 | Offered occasionally |
| ECEN733 | Advanced Micromachining Technologies for the Informational Era | DSN | 3-0 | Every year |

| COURSE | COURSE NAME | GROUP | HRS | OFFERED |
|---|---|---|---|---|
| ECEN735 | Electromagnetic Field Theory | EM | 3-0 | Offered occasionally |
| ECEN738 | Power Electronics | PWR | 3-3 | Every year |
| ECEN741 | Electronic Motor Drives | PWR | 3-3 | Every year |
| ECEN742 | DSP Based Electromechanical Motion Control | PWR | 2-3 | Every year |
| ECEN743 DL | Reinforcement Learning | ISLS | 3-0 | Every other year |
| ECEN740 DL | Machine Learning Engineering | CE | 3-0 | Every year |
| ECEN744 | Scientific Machine Learning | CE | 3-0 | Every year |
| ECEN748 | Data Stream Algorithms and Applications | CE | 3-0 | Offered occasionally |
| ECEN749 DL | Microprocessor Systems Design | CE | 2-2 | Every term |
| ECEN750 DL | Design and Analysis of Communication Networks | CE | 3-0 | Offered occasionally |
| ECEN752 | Advances in VLSI Circuit Design | CE | 3-0 | Every other year |
| ECEN753 | Theory and Applications of Network Coding | CE | 3-0 | Every other year |
| ECEN754 | Optimization for Electrical and Computer Engineering Applications | CE | 3-0 | Offered occasionally |
| ECEN755 | Stochastic Systems | CE | 3-0 | Offered occasionally |
| ECEN756 DL | Game Theory | CE | 3-0 | Offered occasionally |
| ECEN757 DL | Distributed Systems and Cloud Computing | CE | 3-0 | Every year |
| ECEN758 DL | Data Mining and Analysis | CE | 3-0 | Every year |
| ECEN759 DL | Hardware Security | CE | 3-0 | Offered occasionally |
| ECEN760 DL | Introduction to Probabilistic Graphical Models | BIO | 3-0 | Every year |
| ECEN761 | Biosensors Lab | BIO | 2-2 | Offered occasionally |
| ECEN762 | Advanced Ultrasound Imaging Techniques | BIO | 3-0 | Offered occasionally |
| ECEN763 | Magnetic Resonance Engineering | BIO | 2-3 | Every year |
| ECEN764 | Medical Imaging | BIO | 3-2 | Offered occasionally |
| ECEN765 | Machine Learning with Networks | BIO | 3-0 | Every year |
| ECEN766 DL | Algorithms in Structural Bioinformatics | BIO | 3-0 | Every other year |
| ECEN767 | Harnessing Solar Energy: Optics, Photovoltaics and Thermal Systems | DSN | 3-3 | Every year |
| ECEN768 | Bioelectronics | BIO | 3-0 | Offered occasionally |
| ECEN769 | Materials Informatics | BIO | 3-0 | Offered occasionally |
| ECEN771 | Fluctuations and Noise Electronics | DSN | 3-0 | Offered occasionally |
| ECEN772 | Introduction to Microelectromechanical Devices and Systems | DSN | 3-0 | Every year |
| ECEN773 | Introduction to Nanophotonics | DSN | 3-0 | Offered occasionally |
| ECEN774 | Laser Principles and Applications | DSN | 3-0 | Every other year |
| ECEN776 | Unconditionally Secure Electronics | DSN | 3-0 | Every year |
| ECEN777 | Photonics: Fiber and Integrated Optics | DSN | 3-3 | Every year |

**Please note that this is not a guarantee of course offerings, but rather a tentative guide.**

**DL denotes a course that is available through distance learning.**

TEXAS A&M UNIVERSITY
Department of Electrical & Computer Engineering