Graduate Courses Sequences

Electrophysics

Basic Courses - Taught every year
EE 5410 - Engineering Electromagnetics
EE 5430 - Electronic Materials
EE 5460 – Solid State Devices
EE 5xxx – Applied Optics and Photonics
EE 5xxx— Microwave Engineering

Advanced Courses - Taught (perhaps) every other year
EE 5480 - Advanced MEMs
EE 5xxx – Modeling of VLSI Interconnections
EE 5xxx – Antenna Engineering
EE 5xxx – Computational Electromagnetic Modeling
EE 5xxx – Techniques of Computer-Aided Circuit Analysis & Design

Computer Engineering

Basic Courses - Taught every year
EE 5711 – Research Tools for CpE
EE 5722 – Computer Networks
EE 5780 – Advanced VLSI computer-aided design
EE 57xx – VLSI modeling
EE 57yy – GPUs

Advanced Courses - Taught (perhaps) every other year
EE 5723 – Computer and Network Security
EE 5726 – Embedded Sensor Networks
EE 5750 – Distributed Embedded Control Systems
EE 5755 – Fault-tolerant Systems
EE 5495 – Design of multi-media Systems
Signals and Systems

**Basic Courses - Taught every year**
EE 5500 – Probability and Random Signal Analysis
EE 55xx – State Spaced Based Linear Systems
EE 5521 – Detection and Estimation Theory
EE 5527 – Digital Communications

**Advanced Courses - Taught (perhaps) every other year**
EE 5511 – Information Theory
EE 55xx – Advanced Imaging Systems
EE 55xx – Advanced topics in Signal and Image Processing
EE 55xx – Advanced topics in Communication Theory
EE 55xx – Linear Optimal Control
EE 55xx – Radar Systems I
EE 55xx – Radar Systems II

Power

**Basic Courses - Taught every year**
EE 5200 – Advanced Methods in Power Systems
EE 5221 – Advanced Electric Machinery and Drives
EE 5295 – Advanced Propulsion Systems for Hybrid Electric Drive Vehicles
EE 5296 – Advanced Propulsion Systems for Hybrid Electric Drive Vehicles Lab

**Advanced Courses - Taught (perhaps) every other year**
EE 5220 – Transient Analysis Methods
EE 5223 – Power System Protection
EE 5224 – Power System Protection Lab
EE 5227 – Advanced Power Electronics
EE 5240 – Computer Modeling of Power Systems
EE 5250 – Distribution Engineering