

Appendix G – Graduate Courses for the Primary Area

The list below was revised on August 2011. An up-to-date graduate course list is available on the ECE Graduate website. Note the following abbreviation for primary areas: Automatic Control, Robotics and System (AC); Communication and Signal Processing (CS); Computer Engineering (CE); and VLSI and Circuit Design (VC).

Course Number/Title	AC	CS	CE	VC	Semester Offered
ECE 510 Introduction to Biometrics		X	X		Spring
ECE 515 Software Engineering for Embedded Systems			X		Fall
ECE 532 Computational Methods for Power System Analysis	X				Spring
ECE 536 Introduction to Computational Intelligence	X		X		Infrequent
ECE 537 Multimedia Applications		X	X		Fall
ECE 538 Digital Signal Processing I		X			Spring
ECE 544 Introduction to Digital Communications		X			Spring even years
ECE 547 Introduction to Computer Communication Networks		X	X		Fall
ECE 554 Electronic Instrumentation and Control Circuits				X	Infrequent
ECE 559 MOS VLSI Design				X	Fall
ECE 565 Computer Architecture			X		Spring
ECE 569 Introduction to Robotics	X				Unavailable
ECE 573 Optimizing Compilers			X		Infrequent
ECE 580 Optimization Methods for Systems and Control	X				Fall
ECE 595 Automotive Control	X				Fall
ECE 595 Computer Relaying for Power Systems	X				Infrequent
ECE 595 Computer Security		X	X		Fall odd yrs.
ECE 595 DSP Processors		X			Unavailable
ECE 595 Foundations of Adv. Eng. I		X	X		Summer
ECE 595 Integrated Nanosystem Processes & Device				X	Spring
ECE 595 Intro. to 2D & 3D Image Proc.		X			Spring
ECE 595 Intro. to Discrete Event Dynamic Sys.	X				Spring
ECE 595 Nanosystem Principles				X	Fall
ECE 595 Adv. Multimedia & Mobile Computing		X	X		Fall
ECE 595 Real-Time Operating Systems and Applications			X		Fall
ECE 595 ADV ELECT/HYBRID VEHICLE SYST	X				Unavailable
ECE 595 MODELING/DESIGN-SMART DEVICES		X	X		Unavailable
ECE 600 Random Variables and Signals		X			Fall
ECE 602 Lumped System Theory	X				Fall
ECE 604 Electro Magnetic Field Theory				X	Infrequent
ECE 606 Solid-State Devices				X	Infrequent
ECE 608 Computational Models and Methods			X	X	Spring
ECE 610 Energy Conversion	X				Spring
ECE 627 Cryptography & Intro. to Secure Comm.		X	X		Fall even yrs.
ECE 637 Digital Image Processing I		X			Unavailable
ECE 647 Advanced Topics in Communication Networks		X	X		Infrequent
ECE 648 Wavelet, Time-Frequency, and Multirate Signal Processing		X			Unavailable
ECE 662 Pattern Recognition and Decision-Making Processes	X	X			Fall
ECE 680 Modern Automatic Control	X				Spring
ECE 684 Linear Multivariable Control	X				Unavailable
ECE 685 Introduction to Robust Control	X				Unavailable
ECE 695 Mobile Wireless Networks		X	X		Spring
ECE 695 Medical Image Analysis		X			Spring odd yrs

Unavailable = courses are offered, but at the time this document was constructed, the tentative offering schedule could not be determined. Consult with your adviser and/or the Schedule of Classes.

Infrequent = courses are offered irregularly.

Note: The above table represents a tentative frequency of courses offered. Students should rely on the current schedule of classes for courses offered in a given semester and should communicate with their advisers about potential changes in future years.