

Electrical Engineering (M.E. and M.S.) 10 courses/30 credits						
Y E A R 1	Choose ONE math course (3 credits)	<input type="checkbox"/> EE 602 Analytical Methods in Electrical Engineering		<input type="checkbox"/> EE 605 Probability and Stochastic Processes I		
	Choose FOUR core courses (12 credits)	<input type="checkbox"/> EE 548 Digital Signal Processing	<input type="checkbox"/> EE 575 Introduction to Control Theory	<input type="checkbox"/> EE 603 Linear Systems Theory	<input type="checkbox"/> EE 608 Applied Modeling and Optimization	<input type="checkbox"/> EE 609 Communication Theory
Y E A R S 1 & 2	Concentrations	Communications	Power Engineering	Robotics and Automation Systems	Microelectronics and Photonics	Artificial Intelligence
	Choose THREE concentration courses from one topic (9 credits)	<input type="checkbox"/> EE 510 Introduction to Radar Systems <input type="checkbox"/> EE 568 Software-Defined Radio <input type="checkbox"/> EE 582 Wireless Networking: Architecture, Protocols and Standards <input type="checkbox"/> EE 583 Wireless Communications <input type="checkbox"/> EE 585 Physical Design of Wireless Systems	<input type="checkbox"/> EE 575 Introduction to Control Theory <input type="checkbox"/> EE 589 Introduction to Power Engineering <input type="checkbox"/> EE 590 Smart Grid <input type="checkbox"/> EE 629 Internet of Things <input type="checkbox"/> CPE 679 Computer and Information Networks <input type="checkbox"/> CPE 691 Information Systems Security	<input type="checkbox"/> EE 553 Engineering Programming: C++ <input type="checkbox"/> EE 575 Introduction to Control Theory <input type="checkbox"/> EE 621 Nonlinear Control <input type="checkbox"/> EE/CPE 631 Cooperating Autonomous Mobile Robots <input type="checkbox"/> CPE 521 Introduction to Autonomous Mobile Robots <input type="checkbox"/> CPE 645 Image Processing and Computer Vision	<input type="checkbox"/> EE/PEP 503 Introduction to Solid State Physics <input type="checkbox"/> EE/PEP 509 Intermediate Waves and Optics <input type="checkbox"/> PEP 515 Photonics I <input type="checkbox"/> PEP 516 Photonics II <input type="checkbox"/> CPE 690 Introduction to VLSI Design	<input type="checkbox"/> AAI 551 Engineering Programming: Python <input type="checkbox"/> AAI 627 Data Acquisition, Modeling and Analysis: Big Data Analytics <input type="checkbox"/> AAI 628 Introduction to Deep Learning for Engineering <input type="checkbox"/> AAI 646 Pattern Recognition and Classification <input type="checkbox"/> AAI 672 Applied Game Theory and Evolutionary Algorithms <input type="checkbox"/> AAI 695 Applied Machine Learning
	Degrees	Master of Engineering			Master of Science	
M.E. or M.S. degree specific courses (6 credits)	Any TWO approved EE/CPE courses or up to TWO approved relevant courses outside the ECE department.			<input type="checkbox"/> Project: ONE 3-credit EE 800 Special Problems and ONE 3-credit elective <input type="checkbox"/> Thesis: EE 900 Thesis in EE (TWO 3-credit theses in the last two terms)		

Computer Engineering (M.E. and M.S.) 10 courses/30 credits						
Y E A R 1	Choose ONE math course (3 credits)	<input type="checkbox"/> CPE 602 Applied Discrete Mathematics		<input type="checkbox"/> EE 605 Probability and Stochastic Processes I		
	Choose FOUR core courses (12 credits)	<input type="checkbox"/> CPE 517 Digital and Computer Systems Architecture	<input type="checkbox"/> CPE 555 Real-Time and Embedded Systems	<input type="checkbox"/> CPE 593 Applied Data Structures and Algorithms	<input type="checkbox"/> CPE 690 Introduction to VLSI Design	<input type="checkbox"/> EE 608 Applied Modeling and Optimization
Y E A R S 1 & 2	Concentrations	Artificial Intelligence		Embedded Systems	Software & Data Engineering	Networks and Security
	Choose THREE concentration courses from one topic (9 credits)	<input type="checkbox"/> AAI 551 Engineering Programming: Python <input type="checkbox"/> AAI 627 Data Acquisition, Modeling and Analysis: Big Data Analytics <input type="checkbox"/> AAI 628 Introduction to Deep Learning for Engineering <input type="checkbox"/> AAI 646 Pattern Recognition and Classification <input type="checkbox"/> AAI 672 Applied Game Theory and Evolutionary Algorithms <input type="checkbox"/> AAI 695 Applied Machine Learning		<input type="checkbox"/> CPE 517 Digital and Computer Systems Architecture <input type="checkbox"/> CPE 555 Real-Time and Embedded Systems <input type="checkbox"/> CPE 556 Computing Principles for Embedded Systems <input type="checkbox"/> CPE 690 Introduction to VLSI Design <input type="checkbox"/> EE 629 Internet of Things	<input type="checkbox"/> CPE 593 Applied Data Structures & Algorithms <input type="checkbox"/> CPE 810 Special Topics in CPE: GPU and Multicore Programming <input type="checkbox"/> EE 551 Engineering Programming: Python <input type="checkbox"/> EE 552 Engineering Programming: Java <input type="checkbox"/> EE 553 Engineering Programming: C++ <input type="checkbox"/> EE 627 Data Acquisition, Modeling and Analysis: Big Data Analytics <input type="checkbox"/> EE 628 Introduction to Deep Learning for Engineering <input type="checkbox"/> EE 629 Internet of Things	<input type="checkbox"/> CPE/CS 579 Foundations of Cryptography <input type="checkbox"/> CPE 654 Design and Analysis of Network Systems <input type="checkbox"/> CPE 679 Computer and Information Networks <input type="checkbox"/> CPE 691 Information Systems Security <input type="checkbox"/> EE 584 Wireless Systems Security
	Degrees	Master of Engineering			Master of Science	
	M.E. or M.S. degree specific courses (6 credits)	Any TWO approved EE/CPE courses or up to TWO approved relevant courses outside the ECE department.			<input type="checkbox"/> Project: ONE 3-credit CPE 800 Special Problems and ONE 3-credit elective <input type="checkbox"/> Thesis: CPE 900 Thesis in CPE (TWO 3-credit theses in the last two terms)	

Applied Artificial Intelligence (M.E. and M.S.) 10 courses/30 credits										
Y E A R 1	Choose ONE math course (3 credits)	<input type="checkbox"/> EE 602 Analytical Methods in Electrical Engineering				<input type="checkbox"/> EE 605 Probability and Stochastic Processes I				
	Choose FOUR core courses (12 credits)	<input type="checkbox"/> AAI 646 Pattern Recognition and Classification	<input type="checkbox"/> AAI 695 Applied Machine Learning	<input type="checkbox"/> EE 608 Applied Modeling and Optimization	<input type="checkbox"/> AAI 627 Data Acquisition, Modeling and Analysis: Big Data Analytics	<input type="checkbox"/> AAI 628 Introduction to Deep Learning for Engineering	<input type="checkbox"/> AAI 672 Applied Game Theory and Evolutionary Algorithms			
Y E A R S 1 & 2	Concentrations	Electrical Engineering	Computer Engineering	Data Engineering	Software Engineering	Biomedical Engineering	Systems Biology	Mechanical Engineering	AI in Design & Construction	
	Choose THREE concentration courses from one topic (9 credits)	<input type="checkbox"/> EE 548 Digital Signal Processing <input type="checkbox"/> EE 575 Introduction to Control Theory <input type="checkbox"/> EE 582 Wireless Networking: Architecture, Protocols and Standards <input type="checkbox"/> EE 603 Linear Systems Theory <input type="checkbox"/> EE 608 Applied Modeling & Optimization <input type="checkbox"/> EE 609 Communication Theory	<input type="checkbox"/> CPE 517 Digital and Computer Systems Architecture <input type="checkbox"/> CPE 555 Real-Time and Embedded Systems <input type="checkbox"/> CPE 593 Applied Data Structures & Algorithms <input type="checkbox"/> CPE 679 Computer and Information Networks <input type="checkbox"/> CPE 690 Introduction to VLSI Design <input type="checkbox"/> EE 608 Applied Modeling & Optimization	<input type="checkbox"/> CPE 593 Applied Data Structures & Algorithms <input type="checkbox"/> AAI 551 Engineering Programming: Python <input type="checkbox"/> AAI 627 Data Acquisition, Modeling and Analysis: Big Data Analytics <input type="checkbox"/> AAI 628 Introduction to Deep Learning for Engineering	<input type="checkbox"/> CPE 593 Applied Data Structures & Algorithms <input type="checkbox"/> CPE 810 Special Topics in CPE: GPU and Multicore Programming <input type="checkbox"/> AAI 551 Engineering Programming: Python <input type="checkbox"/> EE 552 Engineering Programming: Java <input type="checkbox"/> EE 553 Engineering Programming: C++ <input type="checkbox"/> AAI 627 Data Acquisition, Modeling and Analysis: Big Data Analytics	<input type="checkbox"/> BME 504/CPE 585 Medical Instrumentation and Imaging <input type="checkbox"/> BME 558 Introduction to Brain Computer Interface <input type="checkbox"/> BME 810 Biomedical Digital Signal Processing	<input type="checkbox"/> BIO 668 Computational Biology <input type="checkbox"/> BIO 687 Molecular Genetics <input type="checkbox"/> CH 580 Biochemistry I	<input type="checkbox"/> ME 598 Introduction to Robotics <input type="checkbox"/> ME 621 Introduction to Modern Control <input type="checkbox"/> ME 644 Computer Integrated Design & Manufacturing	<input type="checkbox"/> CM 530 Strategic Responses to Cyclical Environments <input type="checkbox"/> CM 560 Sustainable Design <input type="checkbox"/> OE 511 Urban Oceanography	
	Degrees	Master of Engineering				Master of Science				
	M.E. or M.S. degree specific courses (6 credits)	Any TWO approved EE/CPE courses or up to TWO approved relevant courses outside the ECE department.				<input type="checkbox"/> Project: ONE 3- credit AAI 800 Special Problems and ONE 3-credit elective <input type="checkbox"/> Thesis: AAI 900 Thesis in AAI (TWO 3-credit theses in the last two terms)				