DEPARTMENT OF ELECTRICAL & COMPUTER ENGINEERING
SCHOOL OF ENGINEERING
2025-2026

COURSE CODE	COURSE TITLE	ECTS	TEACHING METHOD (Lectures/Tutoring)	SEM
Winter Semester				
ECE119	Digital Design (Core)	6	Lectures	WS 1ST
ECE317	Artificial Intelligence (Elective)	6	Tutoring	WS 5TH
ECE321	Concurrent Programming (Elective)	6	Lectures	WS 5TH
ECE325	Digital Signal Processing (Elective)	6	Lectures	WS 5TH
ECE327	Digital Systems VLSI (Elective)	6	Tutoring	WS 5TH
ECE329	Education Technologies (Elective)	6	Tutoring	WS 5TH
ECE331	Electrical Machines (Elective)	6	Tutoring	WS 5TH
ECE333	Digital Systems Lab (Elective)	6	Tutoring	WS 5TH
ECE337	Linear Programming (Elective)	6	Lectures	WS 5TH
ECE339	Applied Statistics (Elective)	6	Tutoring	WS 5TH
ECE341	Advanced Electronics (Elective)	6	Tutoring	WS 5TH
ECE411	Power Systems II (Elective)	6	Tutoring	WS 7TH
ECE415	High Performance Computing Systems (Elective)	6	Lectures	WS 7TH
ECE419	Logical and Functional Programming (Elective)	6	Lectures	WS 7TH
ECE425	Testing and Verification of Digital Circuits (Elective)	6	Lectures	WS 7TH
ECE431	CAD Algorithms (Elective)	6	Lectures	WS 7TH
ECE439	Special Topics/ Projects (Elective)	6	Tutoring	WS 7TH
ECE445	Parallel and Distributing Computing (Elective)	6	Lectures	WS 7TH
ECE447	Neuro-Fuzzy Computing (Elective)	6	Lectures	WS 7TH
ECE461	Machine Learning for Data Science and Analytics (Elective)	6	Tutoring	WS 7TH
ECE463	Telecommunications Systems II (Elective)	6	Tutoring	WS 7TH
ECE513	Circuit Simulation Algorithms (Elective)	6	Lectures	WS 9TH
ECE515	Mobile and Pervasive Computing (Elective)	6	Lectures	WS 9TH
ECE541	Database Management Systems II (Elective) (Elective)	6	Tutoring	WS 9TH
ECE553	Design Thinking (Elective)	6	Tutoring	WS 9TH
ECE555	Advanced Topics in Computer Networks (Elective)	6	Tutoring	WS 9TH
ECE557	Manufacturing of Semiconductor Devices (Elective)	6	Lectures	WS 9TH
ECE561	Formal Verification of Cryptosystems (Elective)	6	Lectures	WS 9TH
ECE563	Radar Systems and Remote Sensing (Elective)	6	Tutoring	WS 9TH
ECE565	Special Topics/ Projects (Elective)	6	Tutoring	WS 9TH
Spring Semester				
ECE314	Electromagnetic Fields I (Elective)	6	Tutoring	SS 6TH
ECE316	Power Systems I (Core) (Elective)	6	Tutoring	SS 6TH

ECE318	Operating Systems (Elective)	6	Lectures	SS 6TH
ECE320	Measurement Systems (Elective)	6	Tutoring	SS 6TH
ECE324	Introduction to the Theory of Computation (Elective)	6	Tutoring	SS 6TH
ECE326	Object Oriented Programming (Elective)	6	Tutoring	SS 6TH
ECE334	Pattern Recognition (Elective)	6	Lectures	SS 6TH
ECE338	Parallel Computer Architecture (Elective)	6	Lectures	SS 6TH
ECE340	Embedded Systems (Elective)	6	Lectures	SS 6TH
ECE348	Distributed Systems (Elective)	6	Lectures	SS 6TH
ECE350	Electrotechnical Materials (Elective)	6	Tutoring	SS 6TH
ECE352	Image Processing (Elective)	6	Lectures	SS 6TH
ECE354	Introduction to Nanoelectronics (Elective)	6	Tutoring	SS 6TH
ECE356	Special Topics/ Projects (Elective)	6	Tutoring	SS 6TH
ECE414	Applied Stochastic Processes (Elective)	6	Tutoring	SS 8TH
ECE416	Network Optimization (Elective)	6	Tutoring	SS 8TH
ECE418	Blockchain Technologies and Decentralized Applications (Elective)	6	Lectures	SS 8TH
ECE420	Game Architecture and Development (Elective)	6	Tutoring	SS 8TH
ECE422	Data Mining (Elective)	6	Tutoring	SS 8TH
ECE424	Multiagent Systems (Elective)	6	Tutoring	SS 8TH
ECE434	Complex Networks (Elective)	6	Lectures	SS 8TH
ECE436	Wireless Communications (Elective)	6	Tutoring	SS 8TH
ECE444	Physical CAD Algorithms (Elective)	6	Lectures	SS 8TH
ECE450	Computer Networks II (Elective)	6	Tutoring	SS 8TH
ECE456	Control and Stability of Power Systems (Elective)	6	Tutoring	SS 8TH
ECE458	Special Topics/ Projects (Elective)	6	Tutoring	SS 8TH
ECE460	Advanced Data Management (Elective)	6	Tutoring	SS 8TH
ECE468	Network and Information System Security (Elective)	6	Lectures	SS 8TH
ECE470	Software Engineering (Elective)	6	Lectures	SS 8TH
ECE472	Industrial Automation and Control (Elective)	6	Tutoring	SS 8TH
ECE474	Special Topics of Electrical Installations (Elective)	6	Tutoring	SS 8TH
ECE484	Radhard Circuit Design (Elective)	6	Tutoring	SS 8TH
ECE486	Electroacoustics (Elective)	6	Tutoring	SS 8TH
ECE488	Design of Quantum Computers (Elective)	6	Lectures	SS 8TH
ECE492	Introduction to Robotics (Elective)	6	Tutoring	SS 8TH
ECE494	Processor Design (Elective)	6	Tutoring	SS 8TH