GRADUATE CERTIFICATE IN ELECTRICAL POWERENGINEERING

Electrical and Computer Engineering

Course Matrix

Mapping of the Program Goals to the Core Courses

Program Goals	ECE a) a strong background in theories and a good knowledge of the latest technologies in the electrical and computer engineering disciplines (tag: theory and knowledge)	ECE b) an ability to conduct research in advanced engineering fields. The students will possess appropriate skills in formulating problems, designing experiments, collecting, processing, analyzing and interpreting data, designing a system, component, or process to meet desired requirements, and evaluating the system performances. (tag: research & adv. Engineering)	ECE c) an ability to learn the latest research advancements, use advanced techniques and modern engineering tools in engineering practice, evaluate different strategies to derive a feasible solution (tag: problem solving)
ECE-5421: Grid Communication and System (pending approval)	X	X	X
ECE-5422: Grid Protection (pending approval)	X	X	X
ECE-5423: Advanced Grid Protection (pending approval)	X	X	X
ECE-415: Power Electronics	X		X
ECE-4361: Electric Machines and Drives	X		X
ECE-541: Introduction to Electrical Energy Systems	X	X	X
ECE-542: Introduction to Power Management and Reliability	X	X	X
ECE-530: Energy Storage Systems	X	X	X
ECE-5424: Data Analytics and Machine Learning for Power Systems (pending approval)	X	X	X