CERTIFICATE IN POWER ENGINEERING

This program provides power engineers with a solid foundation in the design and analysis of large-scale power systems and state-of-the-art power conversion systems, including power systems control, power electronics, motor drives, design of fault-tolerant systems, power markets, and fundamentals of power system operation and planning.

Gainful Employment Disclosure for Certificate in Power Engineering

Curriculum

Code	Title	Credit Hours
Required Courses		(3-4)
Select a minimum of one course from the following:		3-4
ECE 411	Power Electronics	4
ECE 412	Hybrid Electric Vehicle Drives	4
ECE 418	Power Systems Analysis	3
ECE 419	Power Systems Analysis w/Lab	4
ECE 420	Analyt. Methods for Power Syst	3
Elective Courses		(9)
Select a minimum of three courses from the following:		9
ECE 417	Power Dist Engring	3
ECE 430	Fund of Semiconductor Devices	3
ECE 533	Robust Control	3
ECE 538	Renewable Energies	3
ECE 539	Cmpt Aided Dsgn Elec Machines	3
ECE 540	Reliblty Theory Syst Implntn	3
ECE 548	Energy Harvesting	3
ECE 549	Motion Control Syst Dynamics	3
ECE 550	Power Elect Dynmcs Control	3
ECE 551	Advanced Power Electronics	3
ECE 552	Adjustable Speed Drives	3
ECE 553	Power System Planning	3
ECE 554	Power Systems Relaying	3
ECE 555	Power Market Operations	3
ECE 556	Power Mkt Ecnmcs Security	3
ECE 557	Fault Tolerant Power Systems	3
ECE 558	Power System Reliability	3
ECE 559	High Voltage Power Trans	3
ECE 560	Power Syst Dynamics Stability	3
ECE 561	Deregulated Power Systems	3
ECE 562	Power Syst Tran Management	3
ECE 563	Comptl Intllgnc Engineering	3
ECE 564	Cntrl Oprtn Elect Power Systs	3
ECE 579	Oper/Plan/Dist Power Grid	3
ECE 580	Elements of Sustainable Energy	3
ECE 581	Elements of Smart Grid	3
ECE 582	Microgrid Design and Operation	3
Total Credit Hours		12-13