

Electric Power Systems Engineering (MS)

Master of Science Degree Requirements

Code	Title	Hours
Core Courses		18
ECE 550	Power System Operation and Control	
ECE 551	Smart Electric Power Distribution Systems	
ECE 552	Renewable Electric Energy Systems	
ECE 583	Electric Power Engineering Practicum I	
ECE 584	Electric Power Engineering Practicum II	
ECE 534	Power Electronics	
	or ECE 587 Power System Transients Analysis	
Elective Courses		12
Select a minimum of four of the following:		
ECE 516	System Control Engineering	
ECE 534	Power Electronics	
ECE 535	Design of Electromechanical Systems	
ECE 554	Electric Motor Drives	
ECE 581	Electric Power System Protection	
ECE 585	The Business of the Electric Utility Industry	
ECE 586	Communication and SCADA Systems for Smart Grid	
ECE 587	Power System Transients Analysis	
ECE 589	Solid State Solar and Thermal Energy Harvesting	
ECE 592	Special Topics In Electrical Engineering	
ECE 726	Advanced Feedback Control	
ECE 732	Dynamics and Control of Electric Machines	
ECE 736	Power System Stability and Control	
ECE 753	Computational Methods for Power Systems	
CE 578	Energy and Climate	
Total Hours		30

Accelerated Bachelor's/Master's Degree Requirements

The Accelerated Bachelors/Master's (ABM) degree program allows exceptional undergraduate students at NC State an opportunity to complete the requirements for both the Bachelor's and Master's degrees at an accelerated pace. These undergraduate students may double count up to 12 credits and obtain a non-thesis Master's degree in the same field within 12 months of completing the Bachelor's degree, or obtain a thesis-based Master's degree in the same field within 18 months of completing the Bachelor's degree.

This degree program also provides an opportunity for the Directors of Graduate Programs (DGPs) at NC State to recruit rising juniors in their major to their graduate programs. However, permission to pursue an ABM degree program does not guarantee admission to the Graduate School. Admission is contingent on meeting eligibility requirements at the time of entering the graduate program.

Faculty

Full Professors

Mesut E. Baran
 Subhashish Bhattacharya
 Aranya Chakraborty
 Iqbal Husain
 Ning Lu
 Srdjan M. Lukic
 Daryoosh Vashaee
 John Victor Veliadis
 Wenye Wang

Associate Professors

Amay Jairaj Bhandodkar
 Zeljko Pantic

Assistant Professors

Spyridon Pavlidis
 Wenyan Tang

Practice/Research/Teaching Professors

Douglas C. Hopkins
 David Lee Lubkeman
 Leonard Wilson White
 Wensong Yu