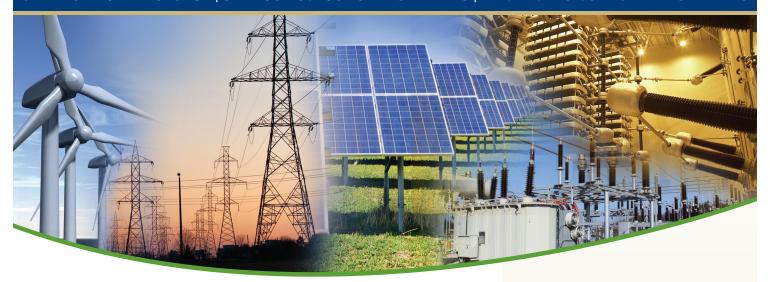
UNIVERSITY OF PITTSBURGH | SWANSON SCHOOL OF ENGINEERING | ELECTRICAL & COMPUTER ENGINEERING



Graduate Certificate in Electric Power Engineering

Online Interactive Program

OVERVIEW

The University of Pittsburgh Swanson School of Engineering has established an Electric Power Engineering Post-Baccalaureate/Graduate Certificate Program that rises to the challenge of meeting the nation's critical development needs for electrical energy professionals. This is the only online learning program in electric power engineering that allows students to attend classroom lectures in real time, and also allows synchronous participation remotely via the Internet. The program is deeply rooted in core electric power engineering principles and focuses on the expansion and enhanced reliability of electric power grid infrastructure through application of power electronics and advanced control technologies, as well as renewable energy integration, smart grids, relaying, microgrids, sustainable systems, and other energy areas. Program content - combined with innovative online learning delivery and collaborative program components - makes this program an attractive and unique choice in graduate engineering, particularly for individuals in industry/business.

ELECTRIC POWER ENGINEERING GRADUATE CERTIFICATE CURRICULUM

15 credit hours are required to complete the program.

Students may select any five of the following 3-credit courses:

ECE 2250	Power Electronics Circuits and Applications*
ECE 2646	Linear Control Systems Theory

ECE 2774 Power System Engineering and Analysis II*
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ECE 2778	Advanced	Power	Flectronics	$-F\Delta CTS$	and HVDC
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FCF 2780	Renewable	and Alterna	itive Energy	Systems
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ECE 2781 Smart Grid Technologies and Applications

ECE 2795 SPECIAL TOPICS

- Electric Distribution System Engineering II
 Power and Energy Industry Practices
- Circuit and Device Simulation
- · Microgrids and Distributed **Energy Resources**
- Protective Relaying and Automation

BS in electrical engineering from an ABETaccredited university program (no industry experience required),

ADMISSION REQUIREMENTS

OR

BS in engineering in any field, plus a minimum of three years of power industry experience (with program director permission).

FOR ADDITIONAL INFORMATION AND TO APPLY:

engineering.pitt.edu/ powercertificate



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Graduate Certificate in Electric Power Engineering

Online Interactive Program (continued)

ELECTRIC POWER ENGINEERING COURSE SCHEDULE

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Summer 2015	ECE 2795: Protective Relaying and Automation
Fall 2015	ECE 2646: Linear System Theory
	ECE 2778: Advanced Power Electronics – FACTS and HVDC
Spring 2016	ECE 2250: Power Electronics Circuits and Applications
	ECE 2774: Power Systems Analysis II
	ECE 2781: Smart Grid Technologies and Application
Summer 2016	ECE 2780: Renewable and Alternative Energy Systems
	ECE 2795: Electric Distribution System Engineering II
Fall 2016	ECE 2646: Linear System Theory
	ECE 2777: Power System Transients I
	ECE 2795: Circuit and Device Simulation
Spring 2017	ECE 2250: Power Electronics Circuits and Applications
	ECE 2774: Power Systems Analysis II
	ECE 2795: Microgrids and Distributed Energy Resources
Summer 2017	ECE 2795: Protective Relaying and Automation
	ECE 2795: Power and Energy Industry Practices
Fall 2017	ECE 2646: Linear System Theory
	ECE 2778: Advanced Power Electronics – FACTS and HVDC

For more information about the Graduate Certificate Program in Electric Power Engineering,please contact:

GREGORY REED, PhD

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Director, Center for Energy
Director, Electric Power Initiative
Professor, Electrical and Computer
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Swanson School of Engineering

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For more information about online learning at the Swanson School of Engineering, please contact:

JANET L. LITTRELL, EdD

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Center for ENERGY



ELECTRICAL & COMPUTER

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The information printed in this document was accurate to the best of our knowledge at the time of printing and is subject to change at any time at the University's sole discretion.