



# Electric Power Engineering Program

## Graduate Certificate

*Offered on-campus and online*

### WHY STUDY ELECTRIC POWER ENGINEERING AT THE UNIVERSITY OF PITTSBURGH?

The University of Pittsburgh Swanson School of Engineering proudly offers a Graduate Certificate Program in Electric Power Engineering (15-credits). This program meets our nation's critical development needs for electrical energy professionals and is an ideal program for both students interested in a career in electric power and for working professionals looking to further develop skills.

With over 50 years of industry experience, our Electric Power Program faculty have carefully and meticulously designed curriculum that 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, microgrids, sustainable, systems, and other energy areas. In combining Pitt's experienced faculty with an innovative online delivery, we provide students from around the globe the expertise of our region without ever setting foot on campus.

### WHY SWANSON ONLINE?

Pitt's state of the art online technology makes it possible to attend lectures alongside of our on-campus students. In combining our online and on-campus classes, we are able to create for you a collaborative learning environment of students with similar interests but diverse educational and professional backgrounds. The flexibility to attend an on-campus class, join a lecture online, or view a recorded lecture enables you to select the learning style that works best for you and your schedule.

### ADMISSION REQUIREMENTS

BS in electrical engineering from an ABET-accredited university program (no industry experience required),

#### 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](http://engineering.pitt.edu/powercertificate)

**PITT** | SWANSON  
ENGINEERING  
GRADUATE & ONLINE PROGRAMS

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## Electric Power Engineering Program

Graduate Certificate *(continued)*

Upon acceptance, each of you will be assigned a faculty advisor to help guide your studies. With limited formal credit requirements, you and your advisor can tailor the program to meet your educational goals. Students may select any five of the following 3-credit courses.

Performance dependent, if you intend to apply for the Master of Science Program in Electrical Engineering with an Electric Power Focus you can expect all 15 credits to transfer to the MS program if accepted. Admission to one of our certificates does not guarantee you admission into Pitt's Swanson School of Engineering Graduate School to pursue an advanced degree.

DELIVERY	TOTAL CREDITS	ENTRANCE EXAM	ADDITIONAL ADMISSIONS REQUIREMENTS
<ul style="list-style-type: none"> <li>On-Campus</li> <li>Online</li> </ul>	<ul style="list-style-type: none"> <li>Certificate – 15</li> </ul>	<ul style="list-style-type: none"> <li>None Required</li> </ul>	<ul style="list-style-type: none"> <li>Two Letters of Recommendation</li> <li>Unofficial Transcripts</li> </ul>

### Courses offered to satisfy 15-credit certificate

ECE 2250 Power Electronics Circuits & Applications

ECE 2646 Linear System Theory

ECE 2774 Power Systems Analysis II\*

ECE 2777 Power System Transients I\*

ECE 2778 Advanced Power Electronics – FACTS and HVDC

ECE 2780 Renewable and Alternative Energy Systems

ECE 2781 Smart Grid Technologies and Applications

ECE 2795 Special Topics – Continuous additions in line with industry opportunities and trends

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| <ul style="list-style-type: none"> <li>Advanced Electric Machines and Drives</li> <li>Electric Distribution System Engineering II</li> <li>Microgrids and Distributed Energy Resources</li> </ul> | <ul style="list-style-type: none"> <li>Protective Relaying and Automation</li> <li>Power Magnetics</li> </ul> |
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\*Prerequisite required (see [engineering.pitt.edu/powercertificate](http://engineering.pitt.edu/powercertificate) for details)

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

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UNIVERSITY OF PITTSBURGH  
*Center for*  
**ENERGY**

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**[engineering.pitt.edu/powercertificate](http://engineering.pitt.edu/powercertificate)**

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