

ELECTRIC POWER ENGINEERING

PROFESSIONAL SCIENCE MASTER'S DEGREE

Washington State University's online **Electric Power Engineering Professional Science Master's (PSM)** prepares graduates for successful careers as leaders in this growing field. Students will be provided with technical background as well as the professional skills necessary for advancement in the electric power engineering industry.

program overview

The Electric Power Engineering PSM provides core technical education in power systems analysis, transmission and distribution systems and power system economics and electricity markets. You can supplement this core technical work with elective courses in areas ranging from power electronics to power system protection to smart grid communication.

Complementing this technical education is a wide selection of elective courses in areas ranging from quantitative methods to management and communication, and an industry based internship project. The goal is to produce graduates who have both a thorough knowledge of the electric power system and the professional skills needed to advance in both technical and management careers within the industry.

faculty

WSU has one of the largest and highest ranked groups of power engineering faculty in the U.S. and includes recognized experts in all areas of power engineering. They are extensively experienced, widely published and have received many significant honors for their work. Given this, their services have been in demand by public and private electric utilities, the industries that support these utilities and government agencies.

careers

Graduates of the PSM degree program who are already employed in the electric power industry will become more valuable to their companies. Others will be in demand by electric utilities, supporting industries and government agencies.

websites

- esic.wsu.edu
- vcea.wsu.edu/graduatestudy/PSM
- gradschool.wsu.edu/degrees
- online.wsu.edu/grad

admission requirements

Applicants for this program are required to have a BS degree in Electrical Engineering (EE) or equivalent. The program director will determine if a non-EE degree is equivalent.

- A complete application, including \$75 application fee.
- A letter of intent and introduction, outlining areas of interest in Electric Power Engineering, career objectives, and any academic or professional experiences that recommend you as an applicant.
- Three original letters of recommendation from persons qualified to speak to your academic qualifications and potential.
- Official copies of transcripts (including all colleges or universities from which you have earned or expect to earn a degree, and all colleges or universities at which you have taken graduate level course work; transcripts for coursework taken at Washington State University are not required). Official transcripts are those mailed directly from the registrar of the institution(s) you attended.
- Official TOEFL score (for international applicants).

accreditation

Washington State University is accredited by the Northwest Commission on Colleges and Universities.

Electrical Engineering at Washington State University has been in existence for more than 100 years and electric power engineering has always been an important component of its curriculum. Its importance was enhanced in 1972 with the establishment of the Power Professorship Program. The main objective of this program and its successor, the Power Engineering Partnership program, is to enhance the power engineering component of the department's offerings.

program requirements

The program requires 30 credits.

Applicants should apply by **July 1** to be considered for the fall semester and **November 1** for the spring semester.

For more information please contact:

Dr. Robert Olsen
PO Box 642752
Pullman, WA 99164-2752
bgolsen@wsu.edu
509-335-4950

REQUIRED COURSES

[9 CREDITS]

- E E 521 – Analysis of Power Systems
- E E 526 – High Voltage Overhead Transmission Lines
- E E 536 – Power System Economics and Electricity Markets

ELECTIVES

[9 CREDITS; COURSES ARE 3 CREDITS, UNLESS OTHERWISE NOTED; NO MORE THAN TWO 400-LEVEL COURSES]

- E E 486 – Power Electronics
- E E 491 – Performance of Power Systems
- E E 492 – Renewable Energy Sources
- E E 493 – Protection of Power Systems I
- E E 511 – Protection of Power Systems II
- E E 522 – High Voltage Engineering
- E E 523 – Power System Stability and Control
- E E 525 – Advanced Power Electronics

Up to two other relevant courses may be substituted, upon departmental approval.

PROFESSIONAL CORE AREAS

[9 CREDITS; NO MORE THAN TWO FROM EACH AREA]

1. QUANTITATIVE METHODS

- A. E M 526 – Constraints Management
- B. E M 545 – Technical Decision Analysis

2. ETHICS

- A. MGTOP 587 – Professional Ethics and Practice in Business

3. MANAGEMENT

- A. E M 501 – Management of Organizations
- B. E M 564 – Project management
- C. E M 575 – Performance management in Technical Organizations

4. COMMUNICATION

- A. ENGL 595 – Rhetoric in Science and Technology: Communicating in Science, Technology, Engineering and Mathematics
- A. E M 508 – Legal Concepts for Engineering and Technical Managers
- B. E M 505 – Finance for Technical Systems

INTERNSHIP

[3 CREDITS]

- E E 702 – Master's Special Problems, Directed Study, and/or Examination

Washington State University online degree programs

Van Doren Hall ■ PO Box 645220 ■ Pullman, WA 99164-5220 ■ online.wsu.edu ■ 800-222-4978