UNIVERSITY OF WASHINGTON ELECTRICAL ENGINEERING

PROFESSIONAL PROGRAMS

SMART GRID TECHNOLOGIES (CERTIFICATE)

www.ee.washington.edu/admissions/pmp/certificates

NOT ADMITTING FOR FALL 2011

NEXT OFFERING OF SMART GRID CERTIFICATE TENTATIVELY FALL 2012

The Certificate in Smart Grid Technologies & Management in Electrical Engineering serves the growing need for engineers and scientists in the Puget Sound region to continue their education in specific areas of study. It offers an exceptional course structure for professionals seeking to expand their career opportunities in the field of electrical engineering.

This nine month certificate program provides an overview of Smart Grid Technologies & Management and examines three areas:

- customer and utility distribution and management
- bulk power and energy delivery
- renewable energy integration and operation

The certificate program consists of 12 graduate level credits offered Autumn, Winter & Spring quarters. Upon completion of the program, the 12 credits may be transferred into the Professional Master's Program.

Typical quarterly enrollment for certificate students (during Autumn, Winter, and Spring quarters) includes one 4-credit class. Courses in the certificate program are scheduled in the evening, and designed so that students generally need to come to campus only once per week.

Autumn Course:	Winter Course:	Spring Course:
 "Customer and Utility Distribution & Management" New concepts in protection Advanced distribution automation New system models & methods under smart grid paradigm New application software development AMI and smart metering Hardware and migration to middleware Planning & implementation Asset management Safety, maintenance & operations Data sensing, management, mining & exchange 	 <i>"Bulk Power and Energy</i> <i>Delivery"</i> New technologies New concepts in protection Direct digital control of smart grid Power system dynamics and control Next generation of EMS Cyber and physical security New system models and methods under smart grid New application software development Performance evaluation: efficiency, reliability, cost- benefit analysis Hardware and migration to middleware 	 <i>"Renewable Energy Integration</i> and Operation" Renewable energy landscape Wind energy Solar energy Hydrogen energy Hydroelectric Other renewable systems: geothermal, tidal & wave, and biomass Integration of renewable systems Renewable energy integration solutions

In addition to the Certificate in Smart Grid Technologies & Management, the Professional Programs Office also offers an evening Master of Science in Electrical Engineering. Certificate students have the option to later apply their credits to the full **Professional Master's Program (PMP)**.

Refer to www.ee.washington.edu/admissions/pmp for PMP information.

Enrollment Information

Admission is for Autumn quarter only, with a **September 1st priority application deadline**. *Applications received after the priority deadline will be considered on a space-available basis.*

Applicants must meet the following minimum qualifications:

- A bachelor's degree from an accredited institution in an engineering or science discipline
- Minimum of 3.0 GPA in your last 90 quarter (60 semester) hours is required for GNM status
- Basic background in energy and power systems
- Practicing engineers and other professionals seeking careers in power systems

Required Application Materials:

- Continuing Education Application Process
 - Certificate Application
 - Letter of Application (250 word maximum)
 - Résumé or CV
 - Transcripts (unofficial is acceptable)
 - o \$50.00 Non-Refundable Certificate Fee
 - o <u>http://www.pce.uw.edu/prog.aspx?id=3414</u>
- Graduate School Application Process (Online)
 - o Graduate Non-Matriculated Status Application (select MSEE evening)
 - o Résumé or CV
 - Transcripts (unofficial is acceptable)
 - o https://www.grad.washington.edu/appIForAdmiss

Tuition & Fees

Instructional fees are payable on a term-by-term basis. The instructional fees for the entire program are approximately \$8,340, excluding certificate program and registration fees and textbooks. There is a \$50 nonrefundable certificate program fee to apply to this program and a \$35 nonrefundable registration fee each term.

The first-term instructional fee of \$2,780, plus the nonrefundable registration fee, is due in **September 2012**. The University's Tuition Exemption Program does not apply to this certificate. All fees are subject to change.

Information on registration and refund policies and procedures is included with registration materials.

