Master of Engineering in Energy, Environmental & Chemical Engineering

CORE COURSES

Technical Core (choose 2)
• Transport Phenomena
• Aerosol Science & Technology
• Environmental Chemistry
• Kinetics & Reaction Engineering Principles

Social, Legal & Policy Aspects (choose 1)
• Environmental Policy
• Energy & Environmental Economics & Risk Management Decision-Making
• Environmental Law Clinic

Project Management
• Energy, Environmental & Chemical Engineering Project Management

Mathematics (choose 1)
• Mathematics of Modern Engineering
• Systems Dynamics Approach to Designing Sustainable Policies & Programs
• Statistical Computation

Entrepreneurship or Leadership Training (choose a total of 3.0 credit hours)
1.5 credit hours
• Negotiation & Conflict Management
• Leading Change
• Management & Corporate Social Responsibility
• Managing the Innovation Process

3.0 credit hours
• Introduction to Entrepreneurship
• The Basics of Bio-Entrepreneurship

Pathways (Electives)
1) Advanced Energy Technologies
2) Energy & Environmental Nanotechnology
3) Environmental Engineering Science
4) Technology for Environmental Public Health & International Development
5) Energy & Environmental Management

Students pursuing the MEng/MBA option may, of course, choose whichever core courses and pathway electives they prefer for the MEng. However, we expect many will choose to pursue the Energy & Environmental Management Pathway, which will complement the MBA course work. Both MEng and MBA degrees will be awarded simultaneously at the completion of the program.

Please visit the website for latest listing of courses.

http://eece.wustl.edu/MEng

For further information and to apply:
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eece.wustl.edu

INTERNATIONAL EXPERIENCE

Michael Craig driving a hydrogen fuel cell electric car at Yonsei University, Seoul, South Korea
First-of-their-kind in the Nation

The Department of Energy, Environmental & Chemical Engineering (eece.wustl.edu) at Washington University in St. Louis is the first in the nation to focus on the fundamental relationship among environmental engineering, energy systems, and chemical engineering and the global challenges they present. The innovative, integrated professional graduate programs establish and strengthen the skills required for today’s and tomorrow’s practice of professional engineering.

In addition to course work, our graduate programs include the opportunity to:

- Attend monthly seminars, which feature leaders in industry, consulting, and public service organizations and offer networking opportunities.
- Participate in our International Experience, which provides a firsthand global perspective and promotes teamwork and leadership skill development.

http://eece.wustl.edu/InternationalExperience

The Master of Engineering in Energy, Environmental & Chemical Engineering (MEng) enhances the fundamental engineering education of a student whose professional career is heading for state-of-the-art practice in environmental engineering, energy systems, and chemical engineering. The master’s degree provides students with critical scientific and engineering skill sets; leadership training for management, economics, and policy decisions; and the opportunity to specialize in one of five pathways.

The Master of Engineering in Energy, Environmental & Chemical Engineering/Master of Business Administration (MEng/MBA) continues Washington University’s tradition of offering symbiotic, unique, advantageous dual-degree programs at the graduate level. In recent years, student interest has grown rapidly in the intersection between engineering and business approaches to issues of sustainability, energy, the environment, and corporate social responsibility. An interdisciplinary approach will be necessary to address these issues with innovative, critical thinking, leading to practical, effective solutions.

The Olin MBA curriculum offers a comprehensive set of required and elective courses built upon a foundation of critical-thinking and leadership skills. Olin MBAs are able to shape the curriculum to meet their unique personal objectives, incorporating the MEng degree requirements.

Our dual degree between the Olin Business School and the School of Engineering & Applied Science capitalizes on two programs well positioned to address this critical intersection. See http://eece.wustl.edu/MEngMBA for details.