Department of Energy, Environmental & Chemical Engineering

Opportunities for Undergraduate Students

>> eece.wustl.edu
Most students have the eventual goal of securing a career in industry or research. An important step in attaining that goal is to experience on-the-job training during the summer months. A summer internship in industry or a research laboratory is a good way to expand your classroom experience.

**Internship Search Tips**

- Utilize on campus resources such as the Career Center, located in the Danforth University Center and Lapata Hall.
- Search early for summer employment. Many students begin their searches as early as November of the previous year.
- Use the information and contacts in this brochure (back cover) as a beginning for your search.
- Consider a co-op if you can dedicate more than the summer months to a company.
- Contact faculty or academic advisors to learn more about opportunities for on campus research projects.
- Consider a collaborative internship with Johns Hopkins University or our department’s International Experience Class. These programs are detailed in this brochure.
- Engage in an Industry Plant Tour. The department offers two plant tours each fall.

Cover: Australia, 2013, at Oxy-coal power plant
International Experience Class

The international experience class (E33 EECE 401, 3 credits) is designed for undergraduate students in the Department of Energy, Environmental, and Chemical Engineering. The highlight of the class is a visit to McDonnell Academy partner universities.

**Highlights**
- pre-visit orientation meetings and pre-program seminars
- summer international travel for two weeks
- classes at partnering universities
- field trips to local industries, regulatory agencies and laboratories
- cultural and social programs
- analysis of experience, projects, discussions, presentations and research papers

**Requirements**
- Undergraduate students must be in good standing with a minimum overall GPA of 3.0.
- Application deadline is October 15 of each fall. Acceptance is announced in December. Students and faculty traveled to Beijing, China, in 2008, to South Korea in 2009, to India in 2010, to Hong Kong in 2011 and Brazil in 2012, Australia in 2013, Singapore in 2014 and they will travel to Turkey in 2015.

Summer 2015: Turkey

**International Experience in Energy, Environmental & Chemical Engineering**

Register for this Fall 2015 3-credit class and visit Turkey during the summer of 2015. This is an approved engineering elective class in the Department of Energy, Environmental, and Chemical Engineering.

**Highlights**
- students will visit Bogazici University, Istanbul and Middle East Technical University in Ankara for two weeks
- projects will focus on solar energy and environmental engineering science
- interact with students
- socio-cultural programs
- internship opportunities
- continue project work in fall semester at Washington University in St. Louis

**Requirements**
- undergraduate students must be in good standing with a minimum overall GPA of 3.0
- applications with essay due October 15

Email Ray Ehrhard at rehrhard@wustl.edu for more information

**Washington D.C. Summer Program**

Undergraduate students can earn credit towards the Humanities & Social Science Elective requirements through an internship experience in Energy and Environmental Policy. Past interns have worked for several U.S. Government Federal Agencies, Brookings Institution and World Resources Institute. Contact the WUSTL Director of DC Programs: Steven Jackson, sjackson@wustl.edu

**Undergraduate Students Pursuing a CHE Degree Can Earn One of Two Minors:**

**Environmental Engineering Science & Energy Engineering**

EECE offers two minors available to students pursuing a 35 degree in Chemical Engineering. The 21-22 unit Environmental Engineering Science minor prepares students to seek an entry-level position as an environmental engineer, scientist or analyst. The 18-unit Energy Engineering minor provides students with a broad coverage of courses in Energy Engineering, and engage in energy related research underway at WUSTL. Requirements are listed on our website: ece.wustl.edu

**Senior Undergraduate Resume Book**

A senior undergraduate resume book is prepared by the department in September every year to assist students in obtaining placement. This book is forwarded to more than 100 potential employers. For details, contact Rose Baxter (rbaxter@wustl.edu).

**Washington University Master of Engineering in EECE & MBA**

This coursework based master’s program requires 30 credits and is a pathway for EECE students to prepare themselves for a professional engineering career in industry. Students can choose a set of electives to obtain certificates in the following specialized tracks:

- Advanced Energy Technologies
- Environmental Engineering Science
- Technology for Environmental Public Health & International Development
- Energy & Environmental Nanotechnology
- Energy & Environmental Management

A joint MEng-MBA degree is also available.
Industry Opportunities

The following companies have hired students from our department for various internship experiences. Students can directly contact company representatives listed below. For more information, contact the Career Center: careers.wustl.edu. Sue Kruessel, suekruessel@wustl.edu, can assist you with placement for Internships and jobs.

Abengoa Bioenergy  
bioenergy.abengoa.com

Anheuser-Busch  
www.anheuser-busch.com

Boeing  
www.boeing.com

Burns & McDonnell  
www.burnsmcd.com

Corning Corporation  
www.corning.com

DuPont  
www.dupont.com

Emerson  
www.emerson.com

Environmental Quality Management, Inc.  
www.eqm.com

Exxon Mobil  
www.exxonmobil.com

Jacobs  
www.jacobs.com

L’Oréal Inc.  
www.loreal.com

McKinsey & Company  
www.mckinsey.com

MEMC  
www.memc.com

Monsanto Enviro-Chem Systems, Inc.  
meccglobal.com

National Corn-to-Ethanol Research Center  
www.ethanolresearch.com

Pfizer  
www.pfizer.com

Poe Energy  
www.poenergy.com

Proctor & Gamble  
pg.com

Sigma Aldrich  
www.sigmaaldrich.com

On Campus Research

Our professors are engaged in cutting edge research in a variety of areas. For more information, visit the department Web site (eece.wustl.edu). Students can directly contact faculty members for more specific information.

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National Laboratories & Government Agencies

Department of Energy  
Science Undergraduate Laboratory Internship (SULI)  
www.sciied.science.doe.gov

United States Environmental Protection Agency  
EPA Intern Program  
www.epa.gov/ohr/eip.html

National Science Foundation  
Research Experience for Undergraduates  
www.nsf.gov