The Masters in Energy Science, Technology and Policy program is intended for students who seek a distinctive masters program that is based in engineering and informed by a broader perspective in economics and public policy.
Students enroll in the Energy Science, Technology and Policy (ESTP) program independent of a department, but select a disciplinary concentration within one of six different departments (MSE, ECE, CEE, ChemE, EPP and MechE) in the engineering college. The curriculum consists of 96 units and is designed to be completed in one academic year. Students in the program are self-funded and involved principally in coursework (project-based classes are permitted, but not required).

The ESTP program is interdisciplinary and draws instructors from all the departments of Carnegie Institute of Technology (CIT). It covers a wide range of issues, from the harvesting and conversion of energy to its distribution, demand and usage. The subjects will be covered from different aspects including:

- The fundamental underlying scientific principles governing and limiting energy conversion and transport
- The technological, regulatory and other barriers that exist today — and engineering challenges for enabling future power systems and infrastructure
- Sustainability and environmental issues
- The national and global socio-economic questions that govern energy policy and legislation

Students graduating from this program will have a unique education that is focused on energy, incorporating the different strengths that the various CIT departments offer. Most graduates will be interested in careers in utility companies, power plant design and manufacture, primary metals and other energy-intensive industries, consulting firms and government labs, as well as academic institutions.

**Degree Requirements and Curriculum**

The degree program requires satisfactory completion of 96 units of coursework, distributed across the following three categories:
Core classes required for all students (24 units)
1. 39-610 Energy Conversion and Supply (6 units)
2. 39-611 Energy Demand and Utilization (6 units)
3. 39-613 Energy Transport and Storage (6 units)
4. 39-612 Energy Policy and Economics (6 units)
These four mini courses treat energy supply, demand, distribution systems, policy and economics in an integrated fashion.

Disciplinary concentration (36 units)
Students must choose a disciplinary concentration. Participating academic departments have defined the classes that may be used to fulfill this requirement. The disciplinary concentration may include both required and elective components — and may vary in structure in each of the following departments:

- Disciplinary concentration in Chemical Engineering (ChemE)
- Disciplinary concentration in Civil and Environmental Engineering (CEE)
- Disciplinary concentration in Electrical and Computer Engineering (ECE)
- Disciplinary concentration in Engineering and Public Policy (EPP)
- Disciplinary concentration in Materials Science and Engineering (MSE)
- Disciplinary concentration in Mechanical Engineering (MechE)

To learn more about the options offered by each department, please visit the official ESTP Web site at http://neon.materials.cmu.edu/energy.

Breadth electives (36 units)
Any graduate-level CIT class or approved graduate class at Carnegie Mellon may be selected. Up to 12 units of upper-level undergraduate credit (400 or 500 level) can be applied toward this requirement, when this class is needed as preparation for a graduate class.

http://neon.materials.cmu.edu/energy
Graduate Application Information

How to Apply to the ESTP Graduate Program

Prospective students must have a BS degree in engineering or a related discipline from a recognized university. Admission is based on overall academic performance and potential, including transcripts, recommendation letters, GRE scores, TOEFL scores and the Statement of Purpose. The Graduate Admissions Committee thoroughly reviews each completed application.

To view a list of FREQUENTLY ASKED QUESTIONS and for application instructions, please visit the official ESTP program Web site at http://neon.materials.cmu.edu/energy.

ESTP Graduate Admissions Contact Information:
Phone: (412) 268-7672
Fax: (412) 268-7596
E-mail: energy@andrew.cmu.edu

http://neon.materials.cmu.edu/energy

Carnegie Mellon University does not discriminate and Carnegie Mellon University is required not to discriminate in admission, employment, or administration of its programs or activities on the basis of race, color, national origin, sex, or handicap in violation of Title VI of the Civil Rights Act of 1964, Title IX of the Educational Amendments of 1972, and Section 504 of the Rehabilitation Act of 1973, or other federal, state, or local laws or executive orders.

In addition, Carnegie Mellon University does not discriminate in admission, employment, or administration of its programs on the basis of religion, creed, ancestry, belief, age, veteran status, or sexual orientation, or in violation of federal, state, or local laws or executive orders. However, in the judgment of the Carnegie Mellon Human Relations Commission, the Department of Defense policy of “Don’t ask, don’t tell, don’t pursue” excludes openly gay, lesbian, and bisexual students from receiving ROTC scholarships or serving in the military. Nevertheless, all ROTC classes at Carnegie Mellon University are available to all students.

Inquiries concerning application of these statements should be directed to the Provost, Carnegie Mellon University, 5000 Forbes Avenue, Pittsburgh, PA 15213, telephone (412) 268-6684, or to the Vice President for Enrollment, Carnegie Mellon University, 5000 Forbes Avenue, Pittsburgh, PA 15213, telephone (412) 268-2056. Obtain general information about Carnegie Mellon University by calling (412) 268-2000.

Carnegie Mellon University publishes an annual campus security report describing the University’s security, alcohol and drug, and sexual assault policies, and containing statistics about the number and type of crimes committed on the campus during the preceding three years. You can obtain a copy by contacting the Carnegie Mellon Police Department at (412) 268-2323. The security report is also available at www.cmu.edu/security.

Carnegie Mellon University makes every effort to provide accessible facilities and programs for individuals with disabilities. For accommodations/services, please contact the Equal Opportunity Office at (412) 268-2012.