The Department of Engineering and Public Policy at Carnegie Mellon University offers a doctoral program for students with technical backgrounds that addresses policy issues in which the science and engineering is of central importance. We are a highly interdisciplinary program, approaching critical problems with teams of faculty and students who contribute a variety of skills, insights and methods from different disciplines.

Our work influences how others think about and research tough policy issues, as well as how decision makers develop and implement policy in government agencies, corporations and non-government organizations in the US and internationally.

Research Areas

- **Risk Analysis and Risk Communication**
  Risk-related work in the department ranges from the analysis of new or under appreciated risks to studies of public perceptions and valuation, how best to improve public understanding of risks, how to facilitate public participation in risk-related decision making, and how to improve the management and regulation of risks.

- **Information and Communication Technology and Policy**
  The Information and Communication Research Program in EPP is probably the strongest research group in the country working on the policy aspects of advanced telecommunications and information technologies. New computer and information technologies are turning traditional telecommunications on its head.

- **Energy and Environmental Systems**
  The department has assembled one of the strongest groups in the world engaged in policy studies of energy and environmental systems. While some of the work involves single investigators or small groups, much of it is conducted as part of the activities of various Research Centers affiliated with the department.

- **Managing the Risks of Terror and Weapons of Mass Destruction**
  While terrorism topics involve technical issues, they also involve important social and behavioral dimensions. One of the strengths of the Department of Engineering and Public Policy is that it combines faculty with deep technical expertise with outstanding faculty in behavioral social science.

- **Technical Innovation**
  EPP research on technical innovation focuses on the role of government in technology development, the effect of location on the competitiveness of new technologies, sustainability and entrepreneurship in emerging economies, technological and organizational dimensions of innovation, management of research and development, and public policy strategies for new technology commercialization.

The Program

Our principal PhD program in Engineering & Public Policy requires a rigorous program of courses and research accomplishment. Our research advances how engineering policy problems are formulated, solved and interpreted for policy insight and development.

The program includes a series of core classes on fundamental approaches and methods for engineering and public policy; as well as classes in statistics and economics; electives in engineering, sciences, mathematics and the social sciences. Research efforts begin early in the academic program with the first journal-quality research paper at the third semester, and continue through the development of subsequent papers and the Ph.D. thesis.
Are engineers, scientists and mathematicians adept in technical areas that affect social and policy issues nationally and internationally in the environment, energy, risk, regulation, information technology, Internet commerce and security, telecommunications, engineering education, technology development and exchange, or economic development.

Recognize that the technical details matter in many policy issues, and wish to obtain or enhance advanced disciplinary skills in engineering and science.

Understand that the technical details are not all that matters, and want to learn and apply knowledge and methods in the social and behavioral sciences, economics, political science and law.

Our graduates work in world-class organizations

**Academia**

University of Alaska
UC Berkeley
University of Calgary
Carnegie Mellon University
University of Colorado
Colorado State University
Concordia University
Cornell University
University of Delaware
Drexel University
Duke University
EPIC (University of Chicago)
Erasmus University
University of Florida
George Mason University
George Washington University
Harvard University
Johns Hopkins University
University of Illinois
Indiana University
University of Maine
University of Maryland
Michigan State University
University of Minnesota
North Carolina State University
Peking University
University of Pennsylvania
Pennsylvania State University
University of Pittsburgh
Princeton University
University of Portland
Rensselaer Polytechnic Institute
Rochester Institute of Technology
Salen State University
Shady Side Academy
Singapore (several)
Smith College
Stanford University
State University of New York
Stevens Institute of Technology
University of Toronto
Tsinghua University
University of British Columbia
UCal (several)
UCLA
U.C. San Diego
U.C. Santa Barbara
U.C. London
USC
University of Texas at Austin
University of Virginia
University of Vermont
Washington University
University of Waterloo
Yale University

**Industry**

Aetna
AT&T
AES Energy Storage
BAE Systems
The Brattle Group
CLEAResult
Compaq
CONSOL
Customized Energy Solutions
CVS
DC Energy
EarthSpark
International
DNV GL
EADS
Eaton
Facebook
Fuel Tech
Gates Foundation
Genentech
GE
Google
Huawei
IIT Bombay
IBM
Kema
LDH Energy
Lucent
MasterCard
Meridian Energy
Microsoft
NERC
New England Financial
NiSource Corporation
Philips Health Care
PJM Interconnection
Raytheon
SAIC Energy
Environmental & Infrastructure, LLC
Tesla
Tetra Tech
TVA
ViaSat
Wellspring
Westinghouse
Windward
Environmental LLC
World Resources Institute
Worley-Parsons
Customized Energy Solutions
Lumina Systems

**Government, Labs, NGOs, and Consulting**

ABS Consulting
Army Corps of Engineers
State of Alaska
Booz Allen Hamilton
Boston E&E
Brattle Group
Brookings Institution
U.S. Army
California Air Resources Board
Carlyle Group
Collegiate Science and Technology Entry Program
Congressional Research Service
Department of Homeland Security
U.S. Department of Defense
U.S. Department of Energy
U.S. Department of State
U.S. Environmental Protection Agency
U.S. Federal Communications Commission
U.S. Food and Drug Administration
Florida Department of Environmental Protection
ICANN
IIASA (Austria)
McKinsey and Company
LBNL (USA)
MITRE Corporation
National Center for Atmospheric Research
Naval Air Warfare Center Research
National Institute of Standards and Technology
NOAA’s Earth Systems Research Laboratory
NERL (USA)
Noblis
OMB
U.S. Geological Survey (USGS)
National Library of Congress
RAND
SAIC Inc
S&T Policy Institute
SRI Inc
National Security
SII International

Sixty percent of graduates are in jobs in think tanks, government and the private sector. Over 30% hold academic jobs.

EPP faculty hold joint appointments with other departments across Carnegie Mellon, and include fellows in professional societies as well as members of the National Academy of the Sciences, the National Academy of Engineering and the Institute of Medicine.

Faculty routinely serve on, and chair, many government and industry advisory boards.

We maintain an office in Washington D.C. to facilitate interaction between students, faculty, and decision-makers.