

Duke University Energy Initiative

Energy education at Duke capitalizes on the University's broader Energy Initiative, a university-wide interdisciplinary collaboration focused on advancing an accessible, affordable, reliable, and clean energy system. Duke students—at all levels—will gain the training, skills, and experiences needed to play leadership roles in a rapidly evolving energy future. For more details see energy.duke.edu.

Undergraduate Curricular Offerings

Register for an Energy Gateway course, go deeper with an Energy Depth course, or enroll in a curricular program, such as the undergraduate Energy and Environment certificate, or the Energy Engineering minor. For more details see reverse side and energy.duke.edu/education.

Co-Curricular Activities

Participate in the many energy events and activities:

- ❖ Energy Speaker Series (visiting guest speakers)
- ❖ Power Lunches (lunchtime seminars)
- ❖ Energy Mix (social networking events)
- ❖ Duke University Energy Conference (annual each fall)
- ❖ Energy Industry Fundamentals (annual each fall)
- ❖ Power Trips (local and regional field trips)
- ❖ Energy Mentoring Conversations (group chats with industry professionals)

Visit energy.duke.edu for details on our events and campus energy activities, and to sign up for energy news by email.

Undergraduate Student Energy Clubs

Join a student club engaged in energy-related learning, including:

- ❖ Duke Undergraduate Energy Club
- ❖ Smart Home Student Club

For more details see our [Student Energy Clubs page](#).

About Bass Connections

Bass Connections in Energy offers a unique team based learning opportunity for students and faculty by crossing boundaries through problem-focused education—boundaries among disciplines, educational levels, and schools; geographic boundaries; and boundaries between the university, business, civil society, and government. Bass Connections is fully integrated with other energy education programming at Duke.

Project Teams

Project teams connect undergraduate and graduate students, faculty, and external experts to pursue energy problems requiring cross-disciplinary solutions. Teams for 2016-2017 will become active during the Fall semester.

Each project team will establish three core connections:

- ❖ Between the academy and the broader world,
- ❖ Across disciplinary expertise, and
- ❖ Across learner levels.

Visit energy.duke.edu/education/bass-connections to learn more about the new project teams and how to apply.

Register for course credit through ENERGY 395/396 (see reverse side) or a departmental project course.

Contact Information

- ❖ Website: energy.duke.edu/education
- ❖ Email: energyinitiative@duke.edu
- ❖ Phone: 919-613-1305 for general information or call 919-684-1394 to speak with Stacy Peterson, Energy Education Program Coordinator
- ❖ Location: Gross Hall; on the corner of Science and Towerview Drive

Undergraduate Energy Curriculum

Energy-related Curricular Programs

- Certificate in Energy and Environment, Trinity College of Arts & Sciences and Pratt School of Engineering
- Minor in Energy Engineering, Pratt School of Engineering

Energy Gateway Courses

- [Energy and the Environment \(EOS/ENV/ENERGY 231\)](#)

Energy Project Courses

- [Connections in Energy: Project \(ENERGY 395/396\)](#)
- Energy and Environmental Design: Capstone Project (ENV 452L/EGR 424L)

Energy Depth Courses

Energy Technologies, Systems, and Science Courses

- Special Topics in Chemistry: ENERGY SCI & ENG PART I (CHEM 590)
- Energy in the 21st Century and Beyond (PHYSICS 137S)
- [Environmental Engineering \(CEE 462L\)](#)
- Energy, Engineering, and the Environment (ME 461)
- Solar Cells (ECE 496)
- Climate Change (ENV 89S)
- Food-Water-Energy Nexus (ENV 190S)
- [Sustainable Cities and Urban Design \(ENV 590.37\)](#)
- [Petroleum Exploration \(ENV 590.51\)](#)
- [Transportation and Energy \(ENV 630\)](#)
- [Energy Technology \(ENV 631\)](#)
- [Air Pollution: From Sources to Health Effects \(ENV 642\)](#)
- [The Climate System \(EOS 511\)](#)
- [Water Quality and Health \(EOS 524\)](#)
- Intro. to Energy Generation, Delivery, Conversion & Efficiency (ENRGYEGR 310)
- [Bioenergy \(ENRGYEGR 490\)](#)
- Renewable Energy Technologies (ENRGYEGR 490)
- Energy for the Built Environment (ENRGYEGR 490)
- [Intro to Electrical Energy Conversion \(ENRGYEGR 490\)](#)
- [Modern Power Systems \(ENRGYEGR 490\)](#)
- Transportation Energy (ENRGYEGR 490)
- [Our Changing Atmosphere: From Air Pollution to Climate Change \(ENV/ENERGY 239\)](#)
- Applied Big Data Science: Energy Data Analytics and Policy (PUBPOL/ENERGY 590.08)
- Computational Modeling for the Sciences (COMPSCI 224)

Energy Economics and Business Courses

- [Energy Finance \(ENERGY 620\)](#)
- [Economic Analysis of Current Energy Issues \(ECON 325S\)](#)
- [Environmental Economics and Policy \(ECON 339/ENV 363\)](#)
- [Resource and Environ. Econ. I \(ENV 520/ECON 530/PUBPOL 576\)](#)
- [Climate Change Economics \(ENV 640/PUBPOL 585\)](#)
- [Applied Energy Economics \(PUBPOL/ENERGY 590S\)](#)

Energy Policy and Law Courses

- [Energy Economics and Policy \(ENERGY/ENV 635\)](#)
- U.S. Environmental Policy (ENV 212/PUBPOL 275)
- [Environmental Politics \(ENV 577\)](#)
- Energy and U.S. National Security (PUBPOL/ENV 583S)
- Climate Change Policy (ENV 590.55)
- [Green Germany \(GER/ENERGY 364S/HIST 250/ENV 366\)](#)

Energy Modeling and Assessment Courses

- Environmental Life Cycle Assessment (ENV 638)

Experiential Energy Courses

- Israel Experience: Environment, Science, Technology, and Innovation (EOS 406)

❖ Courses that are underlined signify a hyperlink to the syllabus for this course, available online.

Course offerings change, so students should consult the current university course schedule for updated listings and for information regarding pre-requisites.

For an online listing of these and other classes, please visit energy.duke.edu/education/energy-courses.

