

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 Boot Camp (annual each fall)
- ❖ Power Trips (local and regional field trips)
- ❖ Energy Week at Duke (annual each fall)

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 & Environment 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 and environment 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.

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 for 2019-2020 projects.

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 919-613-1311 to speak with Bryan Koen, Senior 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 \(ENV 452L/EGR 424L\)](#)
- [Sustainable Energy Project: Engineering Design and Communication \(EGR 95FS\)](#)

Energy Depth Courses

Energy Technologies, Systems, and Science Courses

- [Energy in the 21st Century and Beyond \(PHYSICS 137S\)](#)
- [Nuclear Energy \(PHYSICS 139S\)](#)
- [Electricity & Magnetism \(PHYSICS 362\)](#)
- [Energy, Engineering, and the Environment \(ME 461\)](#)
- [Climate Change \(ENV 89S\)](#)
- [Energy and Society \(ENERGY 89S\)](#)
- [Emerging Materials and Technologies for Energy Future \(EGR 95S\)](#)
- [Modern Energy Systems for a Changing World \(EGR 95FS\)](#)
- [History of Energy Use and Power Generation \(ENERGY 190FS.01\)](#)
- [Sustainable Cities and Urban Design \(ENV 590.37\)](#)
- [Intro to Solar Project Development \(ENERGY/ENV 590.50\)](#)
- [Petroleum Exploration \(ENV 590.51\)](#)
- [Transportation and Energy \(ENV 630\)](#)
- [Energy Technology and Impact on the Environment \(ENV 631\)](#)
- [The Climate System \(EOS 511\)](#)
- [Water Quality and Health \(EOS 524\)](#)
- [Renewable Energy Technologies \(ENRGYEGR 490\)](#)
- [Modern Power Systems \(ENRGYEGR 490\)](#)
- [Transportation Energy \(ENRGYEGR 490\)](#)
- [Power for Mechanical Systems \(ENRGYEGR 490\)](#)

Energy Economics and Business Courses

- [Energy Finance \(ENERGY 620\)](#)
- [Economic Analysis of Energy Issues \(ECON 325S\)](#)
- [Extractive Economies \(HISTORY 390S\)](#)
- [Resource and Environ. Econ. I \(ENV 520/ECON 530/PUBPOL 576\)](#)

Energy Policy and Law Courses

- [Energy Economics and Policy \(ENERGY/ENV 635\)](#)
- [Green Germany \(GER/ENERGY 364S/HIST 250/ENV 366\)](#)
- [Impact Evaluation: Energy and Development \(PUBPOL/ENERGY 590S.03\)](#)
- [The Politics of Climate Change \(ENV 290S\)](#)
- [Ethics and Resource Extraction \(ENERGY 390S\)](#)
- [Energy Policy Analysis and Writing \(ENERGY 390S\)](#)

Energy Modeling and Assessment Courses

- [Environmental Life Cycle Analysis and Decision \(ENV/ENERGY 638L\)](#)
- [Modeling Environmental, Chemical, Biological & Energy Processes \(CEE 490\)](#)
- [Building Energy Modeling and Performance Simulation \(ENRGYEGR 490\)](#)

- ❖ Courses that are underlined signify a hyperlink to the syllabus or more information 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.