



OLD DOMINION UNIVERSITY

FRANK BATTEN COLLEGE OF
ENGINEERING AND TECHNOLOGY

IDEA FUSION

Energy Engineering Interdisciplinary Minor

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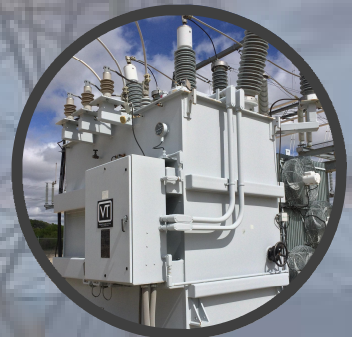


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Visit www.odu.edu/eng
for more information and to apply.

Overview

The Interdisciplinary Minor is for students who would like to learn about energy engineering fundamentals, socio-environmental impacts of energy systems, renewable energy, and novel energy engineering technologies. The Minor will enhance their abilities to integrate knowledge from different disciplines with concepts used in energy engineering and offer the students the opportunity to be recognized for study in this growing interdisciplinary field.

The Minor program will:

- ✓ Expose students to energy engineering fundamentals and a system approach to energy systems and their sociological, economic, and environmental impacts
- ✓ Enhance students' ability to integrate knowledge in relation to various energy technologies and primary resource vectors such as fossil, nuclear, and renewables
- ✓ Expose students to novel energy engineering concepts and technologies such as smart grids, integrated generation systems, storage, transmission, and distribution systems
- ✓ Foster a better understanding of public policies to provide greater momentum to the energy industry
- ✓ Teach the environmental impacts of the various energy systems

Eligibility

- The Minor is open to students in all Majors, and will be especially applicable to those in Engineering, Physics, Chemistry, Ocean and Earth Sciences, and Environmental Health

Course Requirements

- Twelve credit hours at the 300 or 400 level.
- A 2.00 or better grade point average in all Minor courses

Select four courses from the following list of 3 credit hour courses. Only one (1) course can be applied to both the student's Major course of study and to the Minor.

CEE	459	<i>Biofuels Engineering</i>
CET	355	<i>Sustainable Building Practices</i>
ECE	303	<i>Introduction to Electrical Power</i>
ECE	403	<i>Power Electronics</i>
ECE	471	<i>Introduction to Solar Cells</i>
ECON	447W	<i>Natural Resource and Environmental Economics</i>
EET	340	<i>Transmission Networks</i>
EET	370T	<i>Energy and Environment</i>
EET	485	<i>Electrical Power Systems</i>
ENGN	411	<i>Energy Management and Policy</i>
ENGN	412	<i>Fundamentals of Energy Conversion and Transmission</i>
MAE	411	<i>Mechanical Engineering Power Systems Theory and Design</i>
MAE	413	<i>Energy Conversions</i>
MAE	416	<i>Introduction to Solar Energy Engineering</i>
MAE	430	<i>Solar Thermal Engineering</i>
MET	300	<i>Thermodynamics</i>
MET	450	<i>Energy Systems</i>
MET	471	<i>Nuclear Systems</i>
OEAS	415	<i>Waves and Tides</i>
PHYS	415	<i>Introductions to Nuclear and Particle Physics</i>