

# Minor in Energy Engineering

Energy engineering is interdisciplinary and requires many different types of engineers. The Undergraduate Minor in Energy Engineering includes core courses which cover topics foundational to energy engineering. Several tracks allow for specialization within energy engineering to fit career interests.

## Requirements

The minor requires completion of 18 credit hours between the core and the tracks.

### Required Core Courses:

CH_ENG 4318	Energy Technology and Sustainability	3
ENGINR 2100 or ECE 2100	Circuit Theory for Engineers Circuit Theory I	3
MAE 2300 or CH_ENG 3261	Thermodynamics Chemical Engineering Thermodynamics I	3
ISE 2710	Engineering Economic Decision-Making	3

### Electric Utility Generation Track

ECE 4410	Power Electronics I	4
ECE 4460	Energy and Machines	3
ECE 3510	Electromagnetic Fields	3
MAE 4320	Design of Thermal Systems	3

### Electric Utility Transmission & Distribution Track

ECE 3510	Electromagnetic Fields	3
ECE 4410	Power Electronics I	4

### Energy Infrastructure and Efficiency Track

MAE 4320	Design of Thermal Systems	3
MAE 4340	Heating and Air Conditioning	3
MAE 4350	Industrial Energy Analysis	3

### Renewable Energy and Sustainability

ARCHST 4323	Sustainable Technologies and Systems	3
ARCHST 4325	Energy-Efficient Building Design	3
CV_ENG 4232	Water and Wastewater Treatment Facilities	3
CV_ENG 4250	Environmental Regulatory Compliance	3
ECE 4410	Power Electronics I	4
ECE 4440	Power Systems Analysis	3
ISE 4720	Introduction to Life Cycle Analysis	3