

Module One: Introduction to Energy Principles

Course Description

This module provides an overview of the whole energy system. It includes an introduction to the energy supply chain, transmission and distribution systems, energy use, energy policy and the environment and methods of generation. Assessment, management and remediation of energy production is a global issue, which will ultimately impact all walks of life, business, industry and future infrastructure.

Prerequisites

Completed Bachelors Degree, background in electrical or physics with math capabilities

Corequisites

None

Learning Outcomes

Upon successful completion of the Introduction to Energy Principles Module course, students will have demonstrated the ability to:

1. List and describe in detail the components of the energy system.
2. Have an understanding of transmission and distribution systems and the implications and limitation of each.
3. Demonstrate effective evaluation of energy use in both national and international markets.
4. Provide an objective view of energy policy and its potential impact on energy production systems.
5. Consider the environment and the potential impacts of a range of generating sources.

Delivery

This module will be comprised of 4 weeks of 1-2 hour lectures dealing with energy related topics.

Assessment

Assessment of this module will be in the form of assignments and a single report to be submitted at the end of module.