

Sustainable Energy (NRGY)

Courses

NRGY 101 Introduction to Sustainable Energy

Credits: 3

Term: (Currently not offered)

Prerequisite: ETEC 220, ELCT 250, ETEC 245, & ETEC 231 with a C- or higher.

This course provides an overview of sustainable energies including solar, wind, hydro, biomass, and geothermal. Students will learn the basic principles of each technology. Students will also investigate renewable resources and their associated technologies.

NRGY 110 Fundamentals of Hydraulic/Pneumatic Systems

Credits: 3

Term: (Currently not offered)

This course introduces basic hydraulic concepts, formulas, and applications of hydraulic components used for directional, flow and pressure control of circuits. Students will identify and explain safety rules, precautions, test procedures, common components, and operating principles for hydraulic and pneumatic systems commonly found in the energy industry.

NRGY 120 Industrial Safety and Rigging

Credits: 3

Term: (Currently not offered)

This course provides an overview of safe industrial practices and basic rigging techniques.

NRGY 130 Fundamentals of Mechanical Systems

Credits: 3

Term: (Currently not offered)

This course covers energy industry mechanical systems at the component level. Topics covered include repairing a basic mechanical system, familiarity with basic tooling, and understanding gears and rotational relationships.

NRGY 210 Wind Technician Safety

Credits: 4

Term: (Currently not offered)

Prerequisite: ETEC 220, ELCT 250, ETEC 245, & ETEC 231 with a C- or higher.

This course builds on the safety topics covered in the Industrial Safety and Rigging course and focuses on safety requirements and techniques common in wind energy technician jobs.

NRGY 230 Wind Turbine Operations and Maintenance

Credits: 3

Term: (Currently not offered)

Prerequisite: ETEC 220, ELCT 250, ETEC 245, & ETEC 231 with a C- or higher.

This course exposes students to real-world scenarios that may be encountered in the workplace. Practice of installation, operation, maintenance, troubleshooting, and repair of wind turbine electro-mechanical systems are all included in this course.