ENRG - ENERGY TECHNOLOGY

ENRG 120 - Fundamentals of Energy Efficiency **Units: 3**
This course introduces students to techniques for the description, measurement, and analysis of energy use in building systems to maximize efficiency. It will include evaluation and recommendation of alternative energy solutions that will result in greater energy efficiency and energy cost savings.

ENRG 130 - Introduction to Solar Energy **Units: 3**
This course will introduce students to solar energy, its history, sun movement, regional climatological data, energy reflection, transmission and absorption, heat transfer, storage, collector systems, and sizing.

ENRG 132 - Solar Photovoltaic Technologies **Units: 3**
This course is designed to give students the basic knowledge of solar energy principles and photovoltaic applications. Topics will include PV markets and applications, safety, basic electrical, solar energy fundamentals, PV module fundamentals, system components, PV system sizing, PV system electrical and mechanical design, performance analysis, and troubleshooting.
Enrollment Requirements: Prerequisite: ENRG 130

ENRG 142 - Solar Thermal Technologies **Units: 3**
This course introduces students to solar hot water and space heating systems. Topics will include system selection, site analysis, design and sizing, component selection, installation, troubleshooting, maintenance, codes and safety. The course will explore the application of solar thermal systems in both residential and commercial settings.
Transferability: May not transfer towards an NSHE bachelor's degree
Enrollment Requirements: Prerequisite: ENRG 130.

ENRG 198 - Special Topics in Energy Technologies **Units: 0.05-6**
Various short course and experimental classes covering a variety of subjects. The course is variable credit of one-half to six credits depending on the course content and number of hours required. This course may be repeated for up to six credits.
Transferability: May not transfer towards an NSHE bachelor's degree

ENRG 215 - Electrical Distribution Systems **Units: 3**
This course will give students an overview of electrical distribution systems. Topics will cover power transmission over the grid, data collection and analysis, data communication, and networking.
Transferability: May not transfer towards an NSHE bachelor's degree