

EGY 141 - SOLAR PHOTOVOLTAIC TECH I

Course Description

Through structured lecture and practical skill building, students will become familiar with Solar Photovoltaic applications, solar radiation, basics of a site survey, system components, system sizing, and preparation of a solar installation. Group 2 course.

Credit Hours

3

Contact Hours

3

Lecture Hours

3

Required Prerequisites

ELE 105

Recommended Prerequisites or Skills Competencies

MTH 23 or placement into MTH 111, ENG 111

Course Learning Outcomes

Knowledge:

- Identify basic components that make up a solar PV system.
- Describe types of configurations for a solar PV system.
- Show how to conduct a site survey.
- Tabulate the math involved in conducting an accurate system sizing.

Application:

- Find databases of equipment and components.
- Find current events pertaining to specific subjects.
- Design the placement of a solar PV system.

Integration:

- Develop a proposal for a customer integrating areas of planning, budgeting, and marketing.

Human Dimension:

- Illustrate the functionality of the product.
- Communicate with customers about energy savings and return on investment of a solar PV system.

Caring - Civic Learning:

- Assess the impact of fossil fuel development and its future.

Learning How to Learn:

- Reflect on weekly research done on topics of current events directly related to the reading.