

# EGY 145 - GEOTHERMAL TECHNOLOGY

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## Course Description

This course introduces the basic principles of geothermal energy production and technology. Essentials on how to utilize geothermal technology as an energy source will be analyzed and demonstrated. Examples of residential and commercial applications will be shown and reviewed. Group 2 course.

## Credit Hours

3

## Contact Hours

4

## Lecture Hours

2

## Lab Hours

2

## Required Prerequisites

HVA 105

## Recommended Prerequisites or Skills Competencies

MTH 23 or placement into MTH 111, ENG 111

## Course Learning Outcomes

### Knowledge:

- Explain basic geothermal operation.
- Identify the basic geothermal components.

### Application:

- Calculate the impact of geothermal on home and business utility bills.
- Show the environmental impact of geothermal installations.

### Integration:

- Incorporate a hands-on practice of geothermal operation.
- Discuss the installation of geothermal for both residential and commercial applications.

### Human Dimension:

- Question the feasibility of neighborhood/community geothermal systems.

### Caring - Civic Learning:

- Defend the use of sustainable energy sources and environmental conservancy.

### Learning How to Learn:

- Judge the practicality of using geothermal in real-life.