

CONST 165 : Introduction to Alternative Energy

Credits 5

Students will learn about sustainable alternative energy and examine, in detail, solar, wind, and mini-hydro electricity. Perform an energy audit and analyze current energy usage. Explore components, efficiency, and requirements of each type of system and design a grid tied or an off grid sustainable alternative energy system for a single family residence. This class may include students from multiple sections. (Formerly GRBD 165)

Course Outcomes

1. Define terminology and concepts related to Sustainable Alternative Energy.
2. Perform an energy audit to determine household energy requirements.
3. Compare and contrast Solar, Wind, and Mini-Hydro Sustainable Alternative Energy options.
4. Develop and design a Sustainable Alternative Energy System plan that adequately meets the energy requirements of a single family residence, as determined by an energy audit.
5. Compare cost, efficiency, and reliability of Solar, Wind, Mini-Hydro, and Grid Power for a given location.