

Module Three: Renewable Energy Technology, Design, Evaluation, Feasibility and Assessment

Course Description

This module provides a more in-depth review of selected renewable technologies. It includes conversion efficiencies, technology assessment, evaluation and choice. This module also includes an introduction to renewable technology evaluation software, RETscreen allowing a comparison between technology and feasibility assessment of the technical and economics of renewable energy projects..

Prerequisites

Computer literate, some financial, mathematical or technical background.

Learning Outcomes

Upon successful completion of the Renewable Energy Technology, Design, Evaluation, Feasibility and AssessmentModule course, students will have demonstrated the ability to:

1. Identify and compare the components of a range of renewable energy systems.
2. Have an understanding of renewable energy generating evaluation software RETscreen and to be aware of the impact that model parameters used in the software have on both technical and economic feasibility studies.
3. Be able to produce a complete analysis of renewable energy projects for a range of renewable technologies, including hydro, solar, wind and biomass.

Delivery

This module will be comprised of 4 weeks of 1- 2 hour lectures dealing with energy related topics.

Assessment

Assessment of this module will be in the form of assignments and a single report to be submitted at the end of module.