

UNIVERSITY OF JOHANNESBURG

Process, Energy and  
Environmental Technology  
Station (UJ PEETS)

# ENERGY

Renewable Energy Solutions

Energy Efficiency

Waste to Energy Conversion

Energy Micro-Grids & Mini-Grids

Energy Storage



## Short Learning Programme (SLP) Applied Renewable Energy

### INTRODUCTION

With general popular interest and growth of solar energy applications combined with a wide range of technological depth and its application in research and industry, the course provides a sound useful knowledge base for a wide range of skills while contributing to the broad renewable energy industry.

The SLP contributes to growing green energy applications and its green energy academic offerings.

### CANDIDATE REQUIREMENTS

Minimum of a first four year degree in a relevant engineering field (mechanical, electrical, chemical, industrial), or other four year degree pitched on NQF level 8 in a related field.

### TOPICS

- Sources and availability of renewable energy.
- Scientific and technological background to energy available from:
  - Photovoltaic cells.
  - Solar thermal (water, air, drying).
  - Wind.
  - Sea (wave and tidal).
  - Hydroelectric storage and single discharge.
  - Biomass (conversion processes).
  - Solar illuminance systems and day lighting.
- Economic considerations.

### INFORMATION

In person: 40 hours

Self Study: 40 hours

Preparation and Assignment Completion: 70 hours

Total: 150 hours

Duration: ±4 weeks.

### WHO SHOULD APPLY

Candidates can vary from technical staff to postgraduate applications in research and product development in the alternative energy space.

On successful completion of the SLP students will be able to:

- Identify and quantify various renewable energy sources.
- Specify and evaluate equipment and plant for extracting a number of renewable energies.
- Evaluate the technological feasibility of renewable energy systems.
- Evaluate the economic feasibility of various renewable energy systems.

Complete the the sign-up form [HERE](#).

For further enquiries send an email to [peetstraining@uj.ac.za](mailto:peetstraining@uj.ac.za)

