

# PV System Designer and Installer

## Description

This course covers theoretical and practical aspects for trainees to develop skills and understanding on the design and installation of both grid-connected and stand-alone photovoltaic (PV) systems alongside with new and innovative topics such as self-consumption, smart meters, storage and PV applications.

The main topics covered throughout the course also include initial site assessments of the installation area using site-survey equipment, risk assessment, system design, installation and basics of commissioning, maintenance and troubleshooting systems. Emphasis will also be given to all the requirements of a grid-connected PV system according to international standards with main focus the design qualification and type approval requirements of PV modules, as outlined in IEC 61215 and 61646.

Candidates will have the opportunity to operate professional state-of-the-art equipment (located only in a few places globally) and to be trained by worldwide renowned personnel.

## Outcome

- Upon completion trainees are expected to be able to:
- Design, install and commission both grid-connected and stand-alone PV systems
- Demonstrate ability to conduct performance assessment for grid-connected PV systems
- Troubleshoot and maintain PV systems (as well as systems that utilise storage) according to the standards and methodologies based on electrical regulations

## Teaching methodology

Guided Learning: Seminar presentation 5 Days (40 hours)

Practical Work: Experimental work 3 Day (15 hours)

Intended for:

- PV installers and designers
- Qualified technicians and engineers
- Students of engineering

## Duration

8 Days (55 hours)

## Practical Assessment

Practical work comprises of the following experiments:

- Experiment 1:** Design of stand-alone and grid-connected PV systems using the latest software tools
- Experiment 2:** Site-survey, installation and commissioning of stand-alone and grid-connected PV systems
- Experiment 3:** PV performance characterization (indoor and outdoor testing)

## contact us

University of Cyprus  
PV Technology Laboratory  
75 Kallipoleos Avenue  
P.O. 20537  
1678 Nicosia,  
Cyprus

Phone: +357 22 894397  
Fax: +357 22 895370  
E-mail: [pvtech@ucy.ac.cy](mailto:pvtech@ucy.ac.cy)  
Website: [www.pvtechnology.ucy.ac.cy](http://www.pvtechnology.ucy.ac.cy)