# Grid Connected PV Systems Design and Installation

# **DCRP Certified Online Training**

# Overview:

This course covers fundamental principles behind working of a grid-connected PV system, use of different components in the system, methodology of sizing these components to create a well-functioning system, and methodology of evaluating financial performance of the system.

The course also includes a description of procedures to conduct site surveys for system sizing and installation and performing commissioning and maintenance activities in accordance with international standards relating to grid-connected solar PV systems.

<u>Target Audience</u>: Engineers or technical professionals having good exposure to solar PV and project design/ development

# Contents:

- Brief on different renewable energy sources
- Overview of Grid connected PV (GCPV) systems
- Solar radiation overview
- Solar PV Technology Overview
- Grid connected Inverter & Balance of system overview
- PV Mounting Systems & Foundations

- Site Assessments and planning
- Solar Energy Generation Estimation
- Grid integration and cost benefit analysis
- Permits, Clearances and Safety Aspects of GCPV systems
- Designing of a Grid connected Rooftop PV system
- Demonstration at site through online remote access
- GCPV system installation & commissioning
- Overview of MW scale PV project

<u>Delivery methodology</u>: Theory, Exercises & Assessments, Case studies, videos, survey checklists, live demonstration of site assessment software like Helioscope or Solar Lab.

#### **Deliverables:**

- Book on Grid Connected PV Systems Design and Installation
- Power point presentations, design tasks, energy yield exercises
- Course completion certificate.

# **Delivery Experience & Background:**

- A consortium of Renewable Energy System Engineers, Trainers, Designers and Installers, collectively having over 80 years of knowledge, skill and experience as consultants, advisors and trainers in the clean energy environment.
- Trainers have authored and co-authored several books and training manuals on solar PV system design installation, maintenance and inspection.

#### **Trainer:**

Mechanical Engineer with over 25 years of experience, having Masters in Renewable Energy and a practitioner of Solar Energy Design and Implementation projects. Adept in hands-on implementation. Successfully delivered many Solar Energy training programs across the world.



# For Registration: 99835738 / 98081304

Note: Candidates should connect using Laptop having stable internet connection

