

## Certified PV Professional

### COURSE OVERVIEW

The Certified PV (Photovoltaic) Professional course is designed to equip people with the technical information, practical abilities, and industry expertise vital to layout, installation, keep, and troubleshoot photovoltaic (sun power) structures. This comprehensive program covers key components of sun energy, including machine additives, electric fundamentals, website assessment, strength garage, and safety standards. Participants will have hands-on experience via sensible applications, case studies, and simulation of physical activities, ensuring they're well-organized for real-world sun energy tasks.

### WHO SHOULD ATTEND?

This course is tailored for electricians, engineers, energy auditors, facility managers, and technicians aiming to deepen their expertise in solar PV systems. Entrepreneurs and business owners can use the training to enter or grow within the renewable energy sector. Government officials, policymakers, and regulators will gain valuable insights into compliance and strategies for solar adoption, while academics, researchers, and students can expand their understanding of photovoltaic technology. Participants will acquire in-demand skills to transition into the thriving solar energy industry or apply PV systems for personal and small-scale projects.

### COURSE OUTCOMES

Delegates will gain knowledge and skills to:

- Understand the principles of solar energy and photovoltaic technology.
- Identify and analyze different types of PV system components and their applications.
- Perform site assessments, system sizing, and energy yield calculations.
- Design grid-tied and off-grid PV systems based on industry standards.
- Install, test, and commission photovoltaic systems safely and effectively.
- Troubleshoot and maintain PV systems to ensure optimal performance.
- Comply with relevant electrical codes, safety protocols, and industry regulations.
- Explore economic and environmental impacts of solar energy adoption.

### KEY COURSE HIGHLIGHTS

At the end of the course, you will understand:

- How to design, install, and maintain grid-tied and off-grid PV systems
- Core system components: modules, inverters, charge controllers, and storage
- How to conduct site assessments, sun-path analysis, and shading studies
- Sizing methods using tools like **PV\*Sol**, **PVsyst**, or manual calculations
- Wiring, grounding, and system protection in line with IEC and NEC standards
- Step-by-step commissioning, testing, and fault diagnosis procedures
- How to comply with electrical codes, fire safety, and permitting requirements
- Real-world applications in homes, businesses, and rural electrification projects

All our courses are dual-certificate courses. At the end of the training, the delegates will receive two certificates.

1. A GTC end-of-course certificate
2. Continuing Professional Development (CPD) Certificate of completion with earned credits awarded