

## TITLE

# Operation & Maintenance (O&M-Operation & Maintenance) of PV Plants

## COURSE OVERVIEW

Detailed presentation of steps for planned maintenance and effective repair of a PV system.  
Methods of troubleshooting and avoiding malfunctions to maximize the return for the end investor.  
Presentation of a complete maintenance technical file, review of initial design and comparison with current and future operation of a PV project.  
Presentation of a maintenance contract and indicative maintenance/repair/failure repair/remediation cost estimates together with an audit of equipment warranties and insurance coverage.

## COURSE DURATION

6 hours

## DELIVERY FORMAT

Classroom & Online

## LOCATION

Classroom: 188 Syngrou Andrea Avenue, 17671 Kallithea Attica & e-class platform

## COURSE OUTCOME

You will receive an ARKIAS ACADEMY Certificate.

## COURSE CONTENT

- Introduction
- Report on the state of maintenance of PV systems (Ground & Building)
- Situation of the market situation of PV installations in Greece and abroad
- Prospects for maintenance of PV systems
- Technical characteristics of PV installations (PV Frames – Inverter - Support)
- Technical characteristics of peripheral materials for PV installations (Cables - Panels - Ducting Materials – Accumulators etc.)
- Maintenance requirements in accordance with the material manufacturer
- Tools and basic measuring instruments
- Equipment warranties and replacement time of equipment for PV systems
- Basic instructions for maintenance of Ground and Building PV installations
- Maintenance methodologies and specificities between Ground and Building installations
- Main points of the maintenance contract
- Maintenance periodicity
- Basic electrical and mechanical inspection
- Basic control of support bases, panels, inverters and grounding control
- Frame cleaning
- Troubleshooting of faults and deficiencies in PV installations (Ground and Building installation)
- Installation inspection
- Remote monitoring – Telemetry
- Fault diagnosis & Troubleshooting
- Warranty and replacement of equipment for PV installations
- Possibilities for improving PV production – Retrofit & Repowering
- Benefits of maintenance – certification of PV installations
- Key risks in the operation of a PV installation
- Protective – Protection Measures
- Necessity of proper & frequent maintenance

- Insurance requirements for PV plant during operation
- Benefits of certification
- Financial assessment of maintenance of PV installations