



# AEDEI

## Entrepreneurship Solar Training



### FEES AND DURATION :-

**FEES : 15000 INR**

**DURATION: ONE MONTH**

**MODE: REGULAR AND EKEND**

**ADVANCE ELECTRICAL DESIGN  
& ENGINEERING INSITUTE  
(Registered under MSME& An  
ISO 9001:2008 CERTIFIED)**

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**Websites :**

**[www.advanceelectricaldesign.com](http://www.advanceelectricaldesign.com)**

**[www.solardesigntraining.co](http://www.solardesigntraining.co)**

## ABOUT US

Advance Electrical Design & Engineering Institute (AEDEI) , **Registered under MSME , An ISO 9001:2008** Certified Institute of Electrical Design & Engineering training programs for Dedicated to Electrical Engineers . AEDEI is latest venture for providing the quality education in the best possible facilities is a key aim of Skill developments for various verticals in Electrical Engineering design.

## OUR MISSION

Our Technical Institute offers a full range of training in electrical ,Electronics &Communication and mechanical design courses full fill requirement of current industries ,

These courses which encompass all aspects of core electricity from fundamentals to in-depth of design knowledge are based on several value adding pillars.

Our trainers share their know-how and design experience through demonstrations on dedicated equipment on industries. Courses include training dedicated documents and the possibility of follow-up with regular /internship /e-learning modules. Over one to 45 days depending on the topic, trainees get in-depth, hands-on instruction and the opportunity to practice their acquired know-how.

We cover all the range of engineering industries skills disciplines:

- **Electrical System Design**
- **Solar Power Plant Design**
- **Heat Ventilation and Air Conditioning (HVAC)**
- **Thermal Power Plant**
- **Hydro Power Plant Design**
- **Technical Transformer Design**
- **QA/QC Electrical Engineer**
- **Entrepreneurship solar training**

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## OBJECTIVES OF TRAINING

- To make the Engineers expertise in Various engineering design field by experience faculty
- Engineers Job oriented programs.
- Develop the key skill in Electrical designing for employments
- To familiarize with industries norms ( BIS Code, NEC Code, IEC Code, IEEE Code , NFPA Code etc)
- To share experiences of various best practices
- To clarify their doubts in the execution process

## KEY FEATURES OF TRAINING

- ✓ First Certified institute for electrical and Electronics Engineers.
- ✓ Employment opportunities - EPC Companies, thermal power plant,
- ✓ Government sector (Contract Basis), Manufacturing, construction (Electrical Work).
- ✓ **Placement Partner with 10+companies in India.**
- ✓ Expert Faculty from Industries experience more than 7 year and Electrical Consultants.
- ✓ Hands on training facility on live projects(Power Sector and Infra sector)
- ✓ **Available Latest electrical software for Designing( Dialux, ETAP, CG Lux. Auto CAD, Substation D)**
- ✓ study materials provide by AEDEI
- ✓ Library of IS CODE , NEC Code, IEEE Code, IEC Code
- ✓ **Individual Candidates provided projects for designing.**
- ✓ Visiting solar power plant during practical session
- ✓ Visiting on switch yard/substation for practical session.
- ✓ **Certified by Design Engineer -Electrical.**
- ✓ More than Eleven courses for Electrical Engineers.



# **SYLLABUS OF SOLAR POWER PLANT DESIGN**

## **Chapter -1 Introduction of Solar Power Plant**

- Grid Interactive Solar Power Plant
- Net-Metering Solar Power Plant
- Grid Connected Solar Power Plant
- Off- Grid Solar Power Plant

## **Chapter – 2 Costing of Solar Components and selection criteria**

- PV Modules and latest Technology
- Types of Solar Inverter
- Balance of solar Power Plant (cable ,Connector,ACDB ,DCDB etc)
- Costing sheet preparation
- Proposal preparation with payment Terms and Condition

## **Chapter- 3 Government scheme and Subsidy**

- Nodal Agencies of solar Power plant state wise
- MNRE Schemes
- CAPEX and OPEX Model benefits
- State wise subsidy process
- Type of power purchase agreement(PPA)

## **Chapter -4 Business development & Identification of Solar Energy customers**

- Pvt. Investor & AD Benefit/REC Client
- Government Project intake process
- Online e-Procurement tendering process
- Private customer selection criteria with minimum risk with proper assessment
- Customer financial strength calculation
- Cash flow of solar Power Plant
- Payment terms Risk assessment
- Project cost estimation and analysis
- Overhead and profit calculation
- CEIG lionising and approval process



- Techno-Commercial Offer preparation of Pvt. & Govt. Tenders

## **Chapter- 5 Bidding process and financial modeling of Solar Power Plant**

- Government projects tendering.
- Private customer bidding process
- Pre Bid stage Engineering
- Financial modelling with OPEX and CAPEX

## **Chapter -6 Solar power Plant funding**

- Documentation for funding (Govt and private bank funding )
- Foreign funding
- Loan on solar power plant
- **Generation guarantee and handing over solar power plant**
- Compliances of Government tender
- Types of guarantee of Generation and measurement methodology
- Documents of handing over plant
- Operation and Maintenance of solar power Plant
- ABG
- PBG

## **Chapter-7 Assessment of Solar Power Plant and proposal for Customers**

- Site Visit for Data Collection
- Selection of Roof/ land
- Plant capacity calculation
- Review of bill
- Scope of Net –Metering
- Solar power Costing and rate of return Calculation .
- Solar Power Plant bill of material preparation
- Solar power Plant costing
- Solar Power Plant Taxation on Components and GST Impact .
- Rate of Return calculation with CAPEX and OPEX Model
- Payments Terms

**SOLAR SOFTWARES: Google sketchup, Heliioscope Software.**  
**DURATION : ONE MONTH**