

COURSE PROSPECTUS

Name of the Group: *STED*

Name of the Course: *Certificate course in Solar Power Installation
Operation and Maintenance*

Course Code: *SP100*

Starting Date: *12th April 2021*

Duration: *80 Hours spanned over 3 weeks*

Course Coordinator: *C. MOHAN, 0495-2287268 / 2287266-241*

Preamble:

Given the growing demand for skilled professionals in solar power electricity generation, and the rapid changes in PV technology, there is an increasing demand for the skilled manpower in maintenance of Solar PV Power plant both in India and abroad. The course has been designed to meet this requirement. This job-oriented course is designed with a proper balance of theory with practice, so that students get enough hands on experience. The project work at the end of the course enables students to get an exposure to industrial standards

Objective of the Course:

This is a skill oriented course in the study of solar photovoltaic (PV) cells, modules, and system components; electrical circuits; PV system design and sizing for use on homes, commercial building etc., understanding energy conversion from sunlight to electricity, and working with solar conversion equipment. This Course will give students the book knowledge and hands on experience needed to become entrepreneur / self employed

Outcome of the Course:

This, 80 Hours spanned over 3 weeks, intensive training course has been specifically designed to address the requirements of Solar PV Module installer who want to become experts in Solar Power Electricity Generation. Participants will learn different types of solar PV module and batteries used in solar PV plant, design of solar PV Plant based on estimated loads etc.,

Expected Job Roles:

Solar PV System Installation and Maintenance Technician

Course Structure:

Sl. N	Module Title	Duration (Hours)			Credit	
		Theor	Lab	Total	Theory	Lab
1	<i>Understanding the Solar PV cells parameters</i>	3	5	8	2	3
2	<i>Selecting the Solar PV system components</i>	6	10	16	4	6
3	<i>Solar PV System Design and Integration</i>	6	10	16	4	6
4	<i>Installing, Trouble Shooting and Safety</i>	8	12	20	4	6
5	<i>Project</i>	0	20	20	4	8
Total Duration/Credit		23	57	80	18	29

Other Contents

I. Course Fees:

General Candidates: Course fee is **Rs.8080/-** including all taxes as applicable.

SC/ST Candidates : Tuition Fees are waived for SC/ST students admitted under SCSP/TSP. However they are required to remit an amount of **Rs.1000/-** as Advance caution/security deposit. This amount will be considered as caution/security deposit and will be refunded after successful completion of the course. If the student fails to complete the course successfully, this amount along with any other caution/security deposits by the student will be forfeited.

Module wise Course Fee: Not Applicable for this course

II. Registration Fee General candidates: An amount of Rs.1000/- (nonrefundable) should be paid at the time of registering for the course. This fee shall be considered as part of course fee, if the student joins the course. If a student register and pay for more than one course and join for any one course, all such amount will be adjusted against the course fee payable.

Registration fee for SC/ST: An amount of Rs.500/- should be paid at the time of registering for the course and this registration fee will be refunded after the successful completion of the course.

If the student does not join for the registered course / any of the registered courses, fee paid shall be forfeited.

However above the registration fee shall be refunded on few special cases as given below

- Course postponed and new date is not convenient for the student
- Course canceled in advance, well before the admission date

III. Course Fee Installment structure

Fees	*Amount for General Candidates	Amount for SC/ST Candidates. (considered as caution/security deposit)	# Due Date (on or before)
1 st Installment (Registration Fee)	Rs.1000/-	Rs.500/-	During Registration
2 nd Installment	Rs. 7,080/-	NIL	12/04/2021
Total Fee	Rs. 8,080/-	NIL	-

**Above fees is inclusive CGST 9%, SGST 9% and KFC 1%, and revision, if any by Government shall be applicable at the time of payment. For SC/ST this registration fee will be refunded after the successful completion of the course.*

Fine will be applicable for late payment.

IV. Eligibility: 10 +2, Diploma/Any Graduates, ITI

V. Number of Seats : 15

VI. Selection of candidates : First come First Serve

VII. Test/Interview: Not Applicable

VIII. Counseling/Admission : 12-04-2021 9.15 AM

IX. Important Dates:

Course Starting date	12-04-2021
Last date to submit application form	09-04-2021
Selection intimation in website	09-04-2021
Counseling/Admission/spot admission	12-04-2021
Commencement of class work	12-04-2021
Payment of Fee	12-04-2021

X. Course Timings : 9.30AM to 5.30PM

XI. Placement. Not Applicable

XII. Lab Facilities - Various measuring instruments, Solar Power Meter, Solar Path finder, Battery Capacity Tester, Multi-Meter, AC/DC Digital Clamp Meter, Digital Insulation tester, On Grid Solar Power Plant 10KW & 40KW 3 Nos., Off Grid 300W solar power plant etc.,

XIII. Course Contents :

Learn procedure of measurement of Electrical Quantities
Follow procedure to measure Solar parameters Learn
How to assemble Solar PV module
Recognize different types of Batteries and their uses.
Use of Solar charge controller (MPPT)
Learn working principle of Inverter Design methodology for SPV system.
Various tools use for Solar PV panel mounting Design of Mechanical structure for Solar PV
Installation and Troubleshooting Solar PV System
Installation and Troubleshooting of Solar Street Light and Solar Lantern
Maintenance and Safety of Solar PV System, Electrical Audit. Preparation of Solar PV Plant
Installation Check list
Case studies of 300Wp off grid Solar Power Plant
Case studies of 10KW & 40KW on grid solar power plant

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