



**राष्ट्रीय सौर उर्जा संस्थान**  
**National Institute of Solar Energy**

(एक स्वायत्त संस्था, नवीन एवम् नवीकरणीय ऊर्जा मंत्रालय, भारत सरकार के अधीन)  
(An Autonomous Institute of Ministry of New and Renewable Energy, Government of India)  
ग्वालपहाडी, गुडगांव – फरीदाबाद मार्ग, गुडगांव – 122003 (हरियाणा)  
Gwal Pahari, Gurgaon - Faridabad Road, Gurgaon -122003  
दूरभाष / Tel. No. : 0124-2579207, 2579252 Fax : 0124-2579208  
• Email : dgnise.mnre@gmail.com

**File No.:SDD-31020/1/2022-SDD/EOI-Suryamitra**

**Date: 23.03.2022**

**Sub: Expression of Interest (EOI) of Suryamitra Skill Development  
Program for FY 2021-22.**

Expression of Interest is hereby invited to empanel Training Centres (TCs) to impart training under Suryamitra skill development program. The empanelment of TCs may be considered for one year or beyond, subject to the continuity of the programme.

**Last date to submit the online application is 18/04/2022 up to 5:30PM.**

The link for online submission of application is  
<https://suryamitra.nise.res.in/Enrollment/Login>.

This bears approval of competent authority.

**-Sd-**  
**(Dr. Vikrant Sharma)**  
**Dy. Director**



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Invitation For  
Expression of Interest  
for empanelment of Training Centres for imparting  
training under  
“SURYAMITRA SKILL DEVELOPMENT  
PROGRAMME”

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## Section 1: Background

### 1.1 Introduction

National Institute of Solar Energy (NISE) is an Autonomous Institute of Ministry of New and Renewable Energy (MNRE), Government of India (GoI) to facilitate Research & Development (R &D), Testing, Certification and Skill Development activities in the areas of solar energy technologies in the Country.

Under the skill development initiatives of the MNRE, NISE is mandated as the nodal agency for implementation of “Suryamitra Skill Development Programme” (SSDP). NISE is inviting Expression of Interest (EoI) for empanelment of Training Centres (Tcs) for imparting training under SSDP.

### 1.2 About Suryamitra Skill Development Program (SSDP)

SSDP aims to develop the skills of youth, considering the opportunities for employment in the growing solar energy sector such as: installation, operation & maintenance in India and abroad. The SSDP is also designed to prepare the participant/ trainee to become an entrepreneur in solar energy sector. This is a 600 hours residential skill development program following the Qualification Pack (QP) of SGJ/Q0101 details of the QP is available at [https://sccgj.in/wp-content/uploads/2016/10/Booklet\\_Qualification-Pack-SCGJ.pdf](https://sccgj.in/wp-content/uploads/2016/10/Booklet_Qualification-Pack-SCGJ.pdf). Preferable qualification for participant will be as per QP SGJ/Q0101. Special emphasis to be given to the persons coming from rural background, unemployed youth, women, SC/ST category. The participants would be provided boarding and lodging facilities at the Training Centre (TC) by the Training Partner (TP). At the end of the course, Assessment and certification shall be done by Skill Council for Green Jobs (SCGJ). Any change in assessing body (SCGJ) shall be informed by NISE. List of Equipment and Curriculum for conducting training under SSDP is attached as **Annexure 1**.

NISE reserves the right to modify/change/ update/amend/cancel the Expression of Interest (EoI) without specifying any reason. Any query related to this EoI can be sent to **e-mail [suryamitra@nise.res.in](mailto:suryamitra@nise.res.in)**.

### 1.3 Important Date

The applicant (TP) has to submit application in online mode only and the applications submitted through any other mode shall not be considered. The link for online submission of application is available at <https://suryamitra.nise.res.in/Enrollment/Login>.

**Last date to submit the online application is 18/04/2022 up to 5:30PM.**

## Section 2

### 2.1 Scope of work

NISE invites response document to this Expression of Interest for the selection of TCs to impart training under Suryamitra skill development Programme on PAN India basis against the program sanctioned by MNRE for FY2021-22. Empanelled TCs may also be considered for FY2022-23 subject to the program sanctioned by MNRE and also subject to the fulfilment of all qualifying conditions. As per present sanction all empanelled training centres to ensure

completion of training by June 2022. However, this date may be extended subject to the receipt of sanction from MNRE.

**2.2 Eligibility Criteria (All TCs must fulfil following criteria so as to be considered for further evaluation as per technical scoring criteria given at para 2.3).**

- (i) The TC must be an Institute/ Engineering College/ Polytechnic College/ ITI/ NGO/Pradhan Mantri Kaushal Kendra (PMKK) or any other affiliated skill development centre with proper infrastructure as per para 2.5.
- (ii) TC must have training experience in the renewable energy/ solar energy.
- (iii) The TC must have at least one MoU/Tie-up with Industries for industrial on job training.
- (iv) The TC must have valid centre affiliation from NSDC to conduct training as per the relevant QP i.e. solar PV installer SGJ/Q0101.
- (v) The TC shall have 2 trainers per centre and at least one of them shall be certified as Training of Trainer (ToT) from SCGJ to conduct solar training as per the relevant SCGJ Qualification Pack.
- (vi) TC must have well equipped laboratory, classroom facilities and residential facilities as per para 2.5.
- (vii) The TC must provide all the required details in online application form as given below:

**Online Application Form**

**Part-A**

<b>A.1</b>	<b>Title of the Project</b>	Suryamitra Skill Development Program for FY 2021-22										
<b>A.2</b>	<b>Name of TC</b>											
<b>A.3</b>	<b>Name of the Authorized Person of TC with Designation</b>											
<b>A.4</b>	<b>Address of the registered office and contact details of the TC</b>	<b>Address:</b> <b>Phone:</b> <b>Email:</b>										
<b>A.4</b>	<b>Legal status of the TC</b>	<i>(Attach proof of Certificate of Incorporation from the competent Authority)</i> <i>(Attach Copies of, PAN GST registration etc.)</i>										
<b>A.5</b>	<b>Annual Turnover</b>											
	<b>S. No.</b>	<b>FY Year</b>	<b>Annual Turnover (in rupees)</b>						<b>Upload Audited Balance Sheets</b>			
	1											
	2											
	3											
		<b>Total</b>										
<b>A.6</b>	<b>Solar power plant (at least 1kWp capacity)</b>	<i>(Installed Solar plant at the proposed Centre)</i> <i>Attach geo-tagged Photo</i>										
<b>A.7</b>	<b>Training Centre (TC) Detail:</b>											
	<b>Sr. No</b>	<b>Name of TC</b>	<b>St at e/ U t T</b>	<b>D i s t r i c t</b>	<b>C i t y</b>	<b>Complete Address</b>	<b>Centre Affiliation Certificate Number along with validity</b>	<b>Ownership of Training Centre (Owned/ Lease) * If leased date of validity of</b>	<b>Hostel Facility within the Campus/ Outside the campus#</b>	<b>Number of candidates Trained in last three years in this Centre in solar energy**</b>	<b>Number of candidates for whom Placement done in last</b>	<b>Upload document described at *,** and #, Centre Affiliation certificate</b>

								lease agreement				three years from this centre in solar energy**	Geo-tagged Photos of Centre, classroom, lab, Hostel
<p><i>*Attach proof of the Training Centres Ownership or Lease/Rent Agreements along with Geo-tagged Photos.</i></p> <p><i>**Attach statement certified by a Chartered Accountant to have trained and placed number of participants in Solar Energy Sector specifically for the centre applied</i></p> <p><i>#Outside Hostel facility but within the radius of 1 km of training centre may be considered as within the campus. Attach the screen shot of Google map as proof of distance.</i></p>													

**PART-B**

**B.1 Past experience of the TC– Skill Development Training in Solar Energy (minimum 80Hours) in last three years**

S. No.	Financial Year	Name of the training program	Candidates Trained	Name of Sector Skill Council
1				
2				
3				
	<b>Total</b>			

**B.2 Trainers with relevant qualification and Experience (at least one trainer should be certified by SCGJ as per relevant QP) -**

Sr. No	Name of the Training Centre	Name of Trainer	SCGJ Certificate Number, issue and validity of Certificate	Qualification (ITI/Diploma + 3 years of Experience or B.tech/ B.E +2 years of experience)	Institution	Total Experience as trainer in solar energy	Upload relevant Documents ToT certificate, Degree, Experience Letter
1							
2							

**B.3 MOU/Tie-up of TP with Industries for industrial training in solar energy**

List the name of organizations where placement linkages is established

Name of TC	Name of Industry	MOU/ Agreement Copy to be uploaded

TC/TP must have one MOU/tie-up with industry for on job industrial training in solar energy

and placement.

### 2.3 Process of Shortlisting the TCs

- (a) NISE will form a **Technical Evaluation Committee (TEC)** duly approved by the competent authority to evaluate the response submitted by the TCs against this EoI.
- (b) The TEC will evaluate the responses submitted by the TCs as per following technical response scoring criteria:

#### Technical Scoring Criteria – maximum 100 marks

<b>NATIONAL INSTITUTE OF SOLAR ENERGY</b>			
<b>"Solar PV Installer (SURYAMITRA)" TRAINING PROGRAMME</b>			
<b>MARKING CRITERIA - 100 MARKS</b>			
<b>S. No.</b>	<b>Evaluation Criteria / Weightage</b>	<b>Maximum marks</b>	<b>Proof / Documents required</b>
a	<b>Training Centre infrastructure facility</b>	20	Ownership document
	Training Centre including classroom, labs etc.		
	(i) Owned by the TC <b>(20 marks)</b>		
	(ii) Rented/Lease <b>(10 marks)</b>		
b	<b>Hostel facility</b>	20	Geo-tagged image of hostel clearly showing the centre and hostel
	(i) within the campus <b>(20 marks)</b>		
	(ii) outside the campus <b>(10 marks)</b>		
c	<b>No of ToT certified trainer per centre</b>	20	CV with relevant documents
	No of ToT certified trainer 2 <b>(20 Marks)</b>		
	No. of ToT certified trainer 1 <b>(10 Marks)</b>		
d	<b>Total no of participants trained in Solar Energy in last 3 years</b>	10	Centre-wise number of participants trained and placed certified by CA and self-declared by Head/Authorized Person of the Centre (Refer <b>Annexure-4</b> )
	No. of Trained participants 401 and above <b>(10 Marks)</b>		
	No. of Trained participants between 301 to 400 <b>(8 Marks)</b>		
	No. of Trained participants between 201 to 300 <b>(6 Marks)</b>		
	No. of Trained participants between 101 to 200 <b>(4 Marks)</b>		
	No. of Trained participants 50 to 100 <b>(2 Marks)</b>		
e	<b>Percentage (%) of participants Placed after training in Solar Energy in last 3 years</b>	20	
	Percentage of Placed participants 90% and above <b>(20 Marks)</b>		
	Percentage of placed participants More than 70% to 90 % <b>(15 Marks)</b>		
	Percentage of placed participants More than 50% to 70% <b>(10 Marks)</b>		

	Percentage of placed participants 30% to 50% <b>(5 Marks)</b>		
f	<b>MOU/Tie-up with Industries for industrial on job training</b>	10	Attach Copies of MoU
	(i) Number of MoU's more than 5 <b>(10 marks)</b>		
	(ii) Number of MoU's 1 to 5 <b>(05 marks)</b>		
	<b>TOTAL</b>	<b>100</b>	

- (c) Based upon the evaluation/recommendation of the TEC as per above technical scoring criteria, state-wise merit list of the TCs will be prepared.

#### 2.4 Financials and Payment terms:

The present funding breakup for SSDP are based on Ministry of Skill Development and Entrepreneurship (MSDE) norms and as per the sanction letter received from MNRE, however it may vary time to time as per notification received from MSDE / MNRE. The details of course fee, assessment charges and boarding & lodging sanctioned per participant is as below:

S.No.	Particulars	Description	Amount (in Lakh)
1	Course fee to the institute*	Rs 49/- per hour X 600 hours X30 participants	8.406
2	Assessment Charges	Rs 800 per participant X 30 participants	0.24
3	Boarding and Lodging** (**as per Classification 'X'/'Y'/'Z')	Rs 375 X 30 X 90 days ('X' cities)	10.125
		Rs 315 X 30 X 90 days ('Y' cities)	8.505
		Rs 250 X 30 X 90 days ('Z' cities)	6.750

\*Base cost of rupees 49.00/per hour of training is taken as per the MSDE notification dated 1<sup>st</sup> January 2021.

\*\*Boarding charges will be adjusted as per actual expenditure on city classification as per details provided in MSDE Gazette notification 1<sup>st</sup> January 2021.

The course fee shall be **Rs. 53.90 (10% increase of base cost @ Rs 49)** per hour per participant as per details provided in MSDE Gazette notification 11<sup>th</sup> November 2020 for batches conducted in North Eastern States, Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Andaman & Nicobar Island, Lakshadweep and the districts affected by Left Wing Extremism (LWE) as identified by M/o Home Affairs.

#### \*\*Categorization of Indian cities for Residential Training Costs

S. No.	State	Cities classified as "X"	Cities classified as "Y"
1.	Andhra Pradesh		Vijayawada [Urban Agglomeration (UA)], Visakhapatnam (UA), Guntur
2.	Assam		Guwahati (UA)
3.	Bihar		Patna (UA)
4.	Chandigarh		Chandigarh

5.	Chhattisgarh		Durg- Bhilai Nagar (UA), Raipur (UA)
6.	Delhi	Delhi NCR (UA)	
7.	Gujarat		Ahmedabad (UA), Rajkot (UA), Jamnagar (UA), Vadodara
8.	Haryana		Faridabad
9.	J & K		Srinagar (UA), Jammu (UA)
10.	Jharkhand		Jamshedpur (UA), Dhanbad
11.	Karnataka	Bengaluru (UA)	Belgaum (UA), Hubli-Dharwar, Mangalore (UA)
12.	Kerala		Kozhikode (UA), Kochi (UA), Thiruvanthapuram (UA)
13.	Madhya Pradesh		Gwalior (UA), Indore (UA), Bhopal (UA), Jabalpur
14.	Maharashtra	Greater Mumbai (UA)	Amravati, Nagpur (UA), Aurangabad (UA), Nasik (UA), Bhiwandi (UA), Pune (UA), Solapur, Kolhapur (UA)
15.	Orissa		Cuttack (UA), Bhubaneswar (UA)
16.	Puducherry		Puducherry (UA)
17.	Punjab		Amritsar (UA), Jalandhar
18.	Rajasthan		Bikaner, Jaipur, Jodhpur (UA), Kota
19.	Tamil Nadu	Chennai	Salem (UA), Tiruppur (UA), Coimbatore (UA), Tiruchirapalli (UA), Madurai (UA),
20.	Telangana	Hyderabad (UA)	Warangal (UA)
21.	Uttar Pradesh		Moradabad, Meerut (UA), Ghaziabad, Aligarh, Agra (UA), Bareilly (UA), Lucknow (UA), Kanpur (UA)
22.	Uttarakhand		Dehradun (UA)
23.	West Bengal	Kolkata (UA)	Asansol (UA)

All other cities/towns in various States /UTs which are not covered by classification as “X” or “Y” are classified as “Z”.

The breakup of expenditure out of course fee shall be as follows:

- (a) Mobilization of participants
- (b) Post-placement tracking/monitoring
- (c) Curriculum
- (d) Placement Expenses
- (e) Training of Trainer
- (f) Equipment
- (g) Amortization of Infrastructure costs/ utilization
- (h) Teaching aid
- (i) Raw material
- (j) Salary of trainers and support staff
- (k) Uniforms to each participant
- (l) Suryamitra Handbook/ study material to each participant
- (m) Any other expenditure for imparting the training programme.

#### 2.4.1 Fund Flow Mechanism

Each program should have 30 participants. Any revision of fee structure shall be based on MNRE approval, which shall be communicated accordingly. The funds will be released as per common norms of Ministry of Skill Development and Entrepreneurship (MSDE). Advance (30%) if requested by the TC shall be released against Bank Guarantee (BG) i.e. 30% of the total value of the fund as per norm. TC has to submit the documents for each program such as: - Utilization Certificate (UC) in GFR 12A, Statement of Expenditure (SoE), Attendance Sheet, Group Photo, Assessment & Certification receipt, Feedback Forms, Placement Information,



details of participants in the specified format (Adhaar number of participants is mandatory) and any other information required by NISE.

The schedule of release of payment will be based on MSDE Gazette notification dated 5<sup>th</sup> January, 2021. The funds should be released to the TCs as per the following schedule:

Instalment	Percentage of Total Cost	Output Parameter
1 <sup>st</sup>	30% less aggregate amount of refundable security deposit collected from each trainee	On Commencement of training Batch
2 <sup>nd</sup>	30%	On Utilization of 70% of first instalment and continuation of training with at least 70% of initial trainees continuing
3 <sup>rd</sup>	20% Plus aggregate amount of refundable security deposit collected from each certified trainee	On completion of training and certification of the successful trainees
4 <sup>th</sup>	20%	Outcomes based as under*

\*For the release of 20% of training cost which is linked to outcome i.e. Placement of Suryamitra Participants (4<sup>th</sup> instalment) to the TCs please refer MSDE Gazette notification dated 1<sup>st</sup> January 2021.

## 2.5 Infrastructure

1. A Class room to accommodate 30 participants with basic teaching aids- white board, tables and chairs for adequate sitting arrangement with audio & video facility.
2. Laboratory with minimum 300 sqft area to carryout hands on activities to understand the various concepts related to PV power generation.
3. Hostel facility with well-ventilated rooms and proper bedding arrangement to accommodate 30 participants. Separate arrangements for boy and girl participants should be made at the hostel premises.
4. Canteen facility with daily breakfast, lunch, dinner with two times tea for the participants. The dining area and food should be hygienic. Weekly menu should be fixed which includes local food dishes and seasonal green vegetables.
5. Availability of internet connectivity at the centre, necessarily at IT/ computer laboratory.

## 2.6 General Information

- (a) The documents with its supporting evidences should be properly uploaded on portal. The application with incomplete documents/ information will be out-rightly rejected and no correspondence for that will be entertained.
- (b) Applications of joint venture / consortium in any form shall not be considered.
- (c) The subletting of training is not allowed and will attract the cancellation of empanelment of TC.
- (d) The Training Partners (TPs) who are applying for multiple Training centres (TCs) within a state shall apply for one centre at one location/ city and not exceeding more than 3 centres within the state/UT and also not more than 10 centres in total within the country.
- (e) NISE will prepare a state-wise merit list of the training centres. The statewide distribution of the TCs will be done based on the criteria: Installed Solar Capacity, Solar

Radiation Potential and Population of the respective state. if two or more training centres get the same marks in evaluation then the order of selection preference will be as follows-

- Government Institutes/Universities (Central/State/Deemed to be University/Private University recognized by UGC)
  - Engineering College (Central/State/Private College approved by AICTE) Polytechnic (both private and government approved by designated state authority)/ ITI College (both private and government approved by NCVT/SCVT) PMKK Centre
  - Other affiliated Skill Development Centre affiliated from SCGJ/NSDC regarding solar training in academic setup (as mentioned above) shall be considered only.
- (f) The applicant has to deposit an online processing fee (non-refundable) of Rs 2000/- for submitting application for one centre in a state/UT and Rs1000/- for each additional centre in the same state/UT.
- (g) The applicant has to submit separate application form for each state /UT.
- (h) The non-refundable fee will be submitted through CC Avenue link for the fee payment will be available in the online application form.
- (i) The empanelled TC has to submit the yearly/ quarterly action plan with starting dates of the batches and details of participants in advance in the following format-

S.No	Duration	Name of Candidate	Father's Name & Mother's Name	Date of birth	Permanent Address, email id, Mobile No.	Physically Handicapped if any	Category (Gen/SC /ST/OBC )	Aadhaar No.	Mobile No	No. of Days attended / Total no. of days of training)	Grade	Photograph

- (j) TC has to provide 2 set of uniform and suryamitra Handbook/ study material to each participant from the course fee head of the project cost.
- (k) Minimum 15 days industrial training is mandatory.
- (l) Aadhar Enabled Bio-matric System (AEBAS) and IP based camera system is to be used mandatorily at the training centre. The payment shall be released based on AEBAS attendance system or any other similar biometric system only.
- (m) Court of Jurisdiction for any dispute will be Punjab and Haryana high court Chandigarh. The decision of the Competent Authority, NISE shall be final in all matters relating to eligibility, acceptance or rejection of application, mode of selection.

## 2.7 Termination

The empanelment of the TC may be terminated at any point of time if any violation of norms is found during the implementation of the Suryamitra programs at its centres and accordingly performance bank guarantee will be forfeited.

## GENERAL INFORMATION FOR THE QUALIFICATION PACK

1.	<b>Name of the QP</b>	Solar PV Installer (Suryamitra)
2.	<b>Sector</b>	Solar Energy
3.	<b>Qualification Pack</b>	SGJ/Q0101
4.	<b>Trainee Qualification</b>	10th pass + ITI/ Diploma (Electrical, Electronics, Civil, Mechanical, Fitter, Instrumentation, Welder)
5.	<b>Age</b>	Minimum age: 18
6.	<b>Description</b>	<p>After the training, the candidate would suitable to work as Solar PV Installer. S/He has the competence for mechanical, civil and electrical installation of rooftop Solar PV Power Plants as well as maintaining them properly ensuring proper customer support. S/He will be trained on Solar PV and will be able to do:</p> <ul style="list-style-type: none"> <li>• Site Survey for installation of Solar PV System</li> <li>• Assess the customer's Solar PV requirement</li> <li>• Procure Solar PV system components</li> <li>• Install Civil and Mechanical parts of Solar PV System</li> <li>• Install Electrical components of Solar PV System</li> <li>• Test and Commission Solar PV System</li> <li>• Maintain Solar Photovoltaic System</li> <li>• Maintain Personal Health &amp; Safety at project</li> <li>• Customer orientation for Solar PV System</li> <li>•</li> </ul> <p>S/He will be able to check, configure, install, inspect, test, and commission different components of photovoltaic systems, that meet the performance and reliability needs of customers by incorporating quality craftsmanship and complying with all applicable codes, standards, and safety requirements.</p>

**List of Tools& Equipment for a batch of 30 trainees:**

<b>Sr. No.</b>	<b>Name of Tools &amp; Instruments</b>	<b>Quantity (Nos.)</b>
1.	Tool kit	As per requirements
2.	Double ended flat spanner	2 set
3.	Double ended ring spanner	2 set
4.	Combination pliers	4
5.	Side cutting pliers	4
6.	Nose pliers	4
7.	Wire stripper	4
8.	Electrician knife	10
9.	Hack saw frame with blade	4
10.	Hand crimping tools	2
11.	Cable cutter	1
12.	Screw driver	4
13.	Water level	5
14.	Measuring tape	1
15.	Centre punch	1
16.	Standard wire gauge	1
17.	Vanier caliper	1
18.	Line dori	2
19.	Chisel	1
20.	Drill m/c	2
21.	Plumb bob	2
22.	Sprit level	2
23.	Flat file	2
24.	Round file	2
25.	Triangle file	2
26.	Hand saw	2
27.	PVC mallet	2
28.	Ball pin hammer	4
29.	Fuse puller	1
30.	Safety helmet	As per requirement
31.	Safety souse	As per requirement
32.	Safety belt	As per requirement
33.	Nose mask	As per requirement
34.	Safety goggles	As per requirement
35.	Ear plug	As per requirement
36.	PVC hand glove	As per requirement
37.	Cotton hand glove	As per requirement
38.	Reflective jacket	As per requirement
39.	First aid kit	As per requirement
40.	Gum boots	As per requirement
41.	Tong tester AC/DC	2
42.	Digital Multimeter	2
43.	Megger	2
44.	Earth tester	2
45.	Earthing Rod	1

46.	Soldering Iron & Flux	5
47.	Phase Sequence Meter	2

### Demo Equipment

Sr. No.	Name of Tool & Instrument
1.	Tool kit
2.	Double ended ring spanner
3.	Combination pliers
4.	Side cutting pliers
5.	Nose pliers
6.	Wire stripper
7.	Electrician knife
8.	Hack saw frame with blade
9.	Hand crimping tools
10.	Cable cutter
11.	Screw driver
12.	Water level
13.	Measuring tape
14.	Centre punch
15.	Standard wire gauge
16.	Vanier calipash
17.	Line dori
18.	Chisel
19.	Drill m/c
20.	Plumb bob
21.	Sprit level
22.	Flat file
23.	Round file
24.	Triangle file
25.	Hand saw
26.	Pvc mallet
27.	Ball pin hammer
28.	Fuse puller
29.	Safety helmet
30.	Safety souse
31.	Safety belt
32.	Nose mask
33.	Safety goggles
34.	Ear plug
35.	PVC hand glove
36.	Cotton hand glove
37.	Reflective jacket
38.	Tong tester AC/DC
39.	MULTIMETER
40.	Megger
41.	Erath tester
42.	End termination of power cable
43.	Cable tray Erection
44.	Structure with module mounting

### Course Module

#### Solar PV Technician (Breakup of Schedule)

Sr. No	Theory (No. of Days)	Course Module	Practical (No. of Days)	Period Hours	
				Theory	Period
1.	2	Electrical Safety Electrical safety Rules, Simple First Aid , General safety of tools and equipment PPEs, Fire extinguishers, Type of fire extinguishers	2	1	7
2.	3	Electricity Basics	3	1	7
3.	2	Fundamental of earthing system	2	1	7
4.	5	PV module Fundamentals types of modules and its applications, PV components and configuration etc.	5	1	7
5.	2	Introduction to Solar Photovoltaic , Basic Principle of Photovoltaic Tech.	2	1	7
6.	3	PV System Sizing series & parallel Fundamental, temperature coefficients of current, voltage and power fundamental	3	1	7
7.	3	Performance analysis and troubleshooting monitoring of generation per string incoming & outgoing power at junction box & Inverter level.	3	1	7
8.	3	Requirement & Uses of Tools & Tackles. Basic knowledge of Ammeter Voltmeter, clamp meter tong tester Irradiance sensor temperature sensors	3	1	7
9.	2	Cable tray & cable laying	2	1	7
10.	2	SCADA & Control System	2	1	7
11.	5	End termination of power cable (LT/ HT)	5	1	7
12.	5	Commissioning & testing	5	1	7
13.	4	Structure erection	4	1	7
14.	3	Battery installation& maintenance	3	1	7
15.	2	Check list preparation	2	1	7
16.	2	Pre -requirement of installation of	2	1	7

		sub-station equipment			
17.	5	Basics and erection of transformers, pole erection and stringing	5	1	7
18.	5	Foundation- reinforcement & Shutting	5	1	7
19.	5	Operation & Maintenance	5	1	7
20.	12	Soft & Entrepreneurship Skills	12	1	7

Note: Any part or whole content and curriculum may change/ update at any point of time based on the industry requirement under the directions of MNRE/NISE.

**Self-Declaration**

I, .....(Name of the Authorized Person), .....(Designation of the Authorized Person) .....Name and address of Training Centre, do hereby declare that the information provided herein in the online application form is true and correct to the best of my knowledge and belief and nothing has been falsely stated or concealed therein. I understand that if the said information as given in the application form is found false, at any stage the empanelment of the centre will be liable to be rejected.

Date:

Signature

(Name of the Authorized Person)

Stamp