

SOLAR ENERGY TECHNICIAN

(253)

The institution having the following requisite infrastructure, may apply for accreditation:

- A. Class Room :**
Class room for 25 students (minimum area 225 sq. ft.) should have proper ventilation, well-illuminated black board/white board and availability of adequate furniture and ceiling fans.
- B. Workshop :** The size of workshop for 20 students should be at least 25ft. x 20 ft. with adequate lighting, exhaust & ceiling fans. The workshop should have the following Tool/ Equipments/Apparatus or material for Practical Training:

List of Tools and Equipment

Equipment /tools	Qty.	Equipment /tools	Qty.
Solar intensity meter	1	Water meter	1
Heat exchanger	1	Solar dryer	1
Collector loop heater	1	Glass cover	4
Solar intensity simulator	1	Clay	As required
Storage device (thermal)	1	Conical solar water still distilled water	1
24 cells Solar photovoltaic cells (system) 1 panel 2'x2'	1 set	G.I. pipe (size as per requirement)	
		Water pan	1
Transparent plastic sheet	10	Velo meter	1
Solar cooker (domestic + community)	1+1	Basin type solar distillation unit	1
Liquid flat plate collector	1	Tubular stationary 24 volt. 260amp battery	1
Storage tank water	1	Solar PV panel of 340 watt	1
Pump with motor	1	Invertors with 18 watt tube light	12
Flow indicator	1	Lead acid storage battery	1
Energy meter	1	Solar water pumping system	1
Motor and pump starter	1	Electrical cable	25 meter
stop watch	2	Delivery head pipe	2 ½ "-1 length as required
Solar controller	1	Suction head pipe	2 ½ "-1 length as required
Solenoid valve	2	Pyranometer to measure solar intensity	1
Control panel (optional)	1		

C. **Physical Facilities** : The institution should have the facilities for Drinking water, Bathrooms & Toilets

D. **Library** : Library should have a minimum 20 books/articles/magazines etc. in related subject.

E. **Faculty & Supporting Staff:**

Faculty & Supporting Staff	Educational/Professional Qualification	No.
Coordinator	Graduate	01
Instructor	B.Sc. Ag./Diploma in Agriculture Engineering or Diploma in Mechanical/Civil/Electrical Engineering and having undergone elective course in non-conventional energy. Or B.Sc./Intermediate with Science subject with two years of experience in installation & maintenance of Solar Energy plants	01
Receptionist cum clerk	Relevant to job	01
Assistant	Relevant to job	

F. **Batch size** - Maximum 20 students in one batch.

Note : An institution can run maximum 2 batches for this course.