

3 Month add-on
**" SOLAR TECHNOLOGY : A
SOLUTION TO
ENVIRONMENTAL PROBLEMS"**

Collaborative programmes to be jointly conducted by
MGICCC (Govt. of NCT of Delhi), Bakoli, Delhi & SSN College (DU), Alipur, Delhi



Curriculum

BASIC OF ENERGY SYSTEMS& ENVIRONMENTS: (2 Hours)

1. Conventional energy resources, renewable energy resources, introduction to solar thermal & photovoltaic system.
2. Concept / role of solar technology for-environment, climate change and sustainable development .

SOLAR TECHNOLOGIES COMPONENT FAMILARATIONS: (4 Hours)

1. Solar radiation and material characterization, passive and active heating , photoelectric effect, solar cell technology , defining of components like pv cell, module, panel and arrays etc.
2. Measuring the requirement of pv module for a particular load, factors influencing the output of a pv module, basics about batteries and selection of batteries for pv systems .
3. Functions, working, types and features of solar charge controller/regulator and its role, maximum power point tracking (mppt) charge controller,
4. Introduction to inverters & wires and their role in SPV power.

SOLAR TECHNOLOGIES - (3 Hours)

1. Solar photovoltaic technologies & solar thermal technologies for domestic use
2. Solar photovoltaic technologies & thermal technologies for industrial applications.
3. Concept of solar building design.

SOLAR BUSINESS :(4 Hours)

1. Solar system load calculations, design, precautions and safety measures
2. Important factor for solar business planning to installation .

ENERGY SAFETY& ENVIRONMENTAL ISSUES :(8 Hours)

1. Principal of energy conservation and Safety
2. Principal of energy audit, Energy planning and management
3. Innovative approach to energy conservation ,

4. Environmental issues: social & scientific approach ,
5. Innovative approach to waste managements

Practical Sessions - (4 Hours)

1. Connect and test solar panel to the Inverter and run the load, Mount a solar panel to a roof, Wire a solar controller to a solar to a battery storage station,
2. Green Audit - Concept and calculation
3. Carbon Emission

4. FIELD VISIT - (15 Hours)

Visit of trainees to the nearest biodiversity park, solar power installation to demonstrate various aspects to cover skills as specified above.

5. PROJECT WORK (5 Hours)

Project work to cover skills as specified above.

NOTE : Certificate will be provided to those who successfully complete the project work .

**List of Students for short term course on
" Solar Technology : a solution to Environmental Problems**

S.No.	Name	Father's Name	Contact No.
1	Sakshi	Sh. Dharampal Sharma	9991991040
2	Ritu	Sh. Kishan Kaushik	7082775255
3	Kunj	Sh. Kailash Gupta	8950966623
4	Rashi	Sh. Mahesh Patel	8221075150
5	Nisha	Sh. Satish Kumar	9671523517
6	Mamta	Sh. Banarshi	7056635036
7	Ridhi	Sh. Krishan	7988178996
8	Abhilasha	Sh. Rajender Singh	9518455732
9	Preeti	Sh. Krishan Gautam	9729614196
10	Jyoti	Sh. Mehar Singh	9468178981
11	Poonam	Sh. Bijender	8221035367
12	Anjali	Sh. Surender Singh	9813317552
13	Tamanna	Sh. Shree Krishan	8813003085
14	Neeru	Sh. Mahavir	9996555284
15	Pooja	Sh. Sanjeev Dhaka	9991081872
16	Simran	Sh. Krishan Sapra	8607849691
17	Isha	Sh. Jaipal	8295779140
18	Kanika	Sh. Rajesh Kumar	9992691227
19	Taruna Jain	Sh. Anand Kumar Jain	9813303126
20	Ritu	Sh. Kuldeep Singh	70273537244
21	ADITYA THAKUR	TAKESH KUMAR	8851009175
22	AVANISH KUMAR PANDEY	SANJAY KUMAR PANDEY	9599629083
23	RAHUL PARMAR	OM PRAKASH	9870737230
24	SHUBHAM	BHARAT SINGH BIST	7042106695
25	AAKASH MADAN	MAN MOHAN MADAN	8447873286
26	Neha	Sanjay Kumar	9069234743
27	Mansi Gupta	Neeraj Kumar Gupta	9318329371
28	Kumar nachiketa	Ganesh rawani	7019544232
29	Neha	Mohan Lal	9599239976
30	Khushhal Aggaerwal	Uma Sankar Aggarwal	9953184584
31	Gagan	Ganga Ram	9891156872
32	Ajay	Vijay Singh	9868392281
33	Rishabh Rana	Lt. Sh. Narsingh Rana	9654009964
34	VIVEK KUMAR TIWARI	JITENDER KUMAR TIWARI	9599521610
35	Abhishek yadav	Shivdhar yadav	7835863487
36	Shailendra sharma	Pramesh Chandra Sharma	8840592586
37	ABHEESHTA JANI	SANJAY NAGAR	8585997148
38	Priyanka	Priyanka	9050903997
39	Bhumika	Faculty	9050903997
40	Lokesh Rana	Faculty	9968218246
41	Dr. Yogesh Kr Sharma	Faculty	9899753156
42	Dr. Alka Dwevedi	Faculty	8376979519

Dr. Mukesh k Rana - Coordinator (SSNC)









