

## Course Syllabus

The course content for the training has been carefully thought out syllabus with specific subject experts giving lectures and going through specific case studies such that, at the end of the course considerable useful knowledge transfer is perceived.

### The course will address the following aspects:

- Basics of Solar Energy
- Basics of Solar Radiation
- Solar Radiation Resource Assessment
- Solar Radiation Database
- Solar Resource Mapping
- Site feasibility studies
- Economic Analysis & Project cost estimation
- Preparation of Detailed Project Report
- Site Assessment and Planning
- Solar Photovoltaic (SPV) Plant Design, Installation, Commissioning & Testing
- Energy Yield Estimation and Performance Ratio
- Technical Audit & Performance guarantee test
- Environmental Safety aspects
- O & M aspects of SPV plants
- Project management
- Hands on Experience on PV related Software
- Solar Off Grid Systems
- Solar Roof Top / Ground Grid Tied Systems
- Solar Thermal technology
- Energy Storage Systems
- Solar powered vehicles
- Solar Water Pumping Systems
- Solar Water Heating Systems
- Floating Solar Plant
- Solar forecasting

Additional lectures would also be organized while visiting solar farms and manufacturing facility to give a complete picture of the know-how and how to go about setting up a coordinated solar energy programme at national level.

Participants will also have opportunity of hands on experience on Solar Energy systems at different laboratories and Site visits to Solar Radiation Resource Assessment, SPV plant and manufacturing plants