

# LEARN TO DESIGN YOUR OWN SOLAR HOME SYSTEMS

## Course content

### **Introduction to Solar Home System**

- Introduction to Solar Home System

### **Analysis of Power Consumption of Various Home Appliances**

- Electric Power Consumption of Home Appliance in Watt
- Estimation of Approx. Monthly Energy Bill in kWh

### **Types and Layout of Solar Home Systems**

- Off Grid Solar Rooftop System or Standalone Solar System
- Hybrid Solar Rooftop System
- Different Layouts of Solar Home System

### **Selection of Solar Panels for Solar Home System**

- Types of Solar Panels
- How to Read Datasheet of Solar Panel for Best Panel Selection
- Calculation of Approximate Number of Solar Panels in Solar Home System

### **Selection of Solar Inverter or UPS for Solar Home System**

- Solar Inverter vs Normal Inverters
- Sizing of Solar Inverter in Solar Home System

### **Selection of Solar Charge Controller for Solar Home System**

- Introduction to Solar Charge Controller
- Sizing of Solar Charge Controller

### **Selection of Solar Batteries for Solar Home System**

- Introduction to Solar Batteries
- Sizing of Solar Batteries as per design

### **Design Case Study for Solar Home Systems for DC Load**

- Design Case Study for Solar Home Systems for DC Load - Part 1
- Design Case Study for Solar Home Systems for DC Load - Part 2

### **Design Case Study for Solar Home Systems for AC Load**

- Design Case Study for Solar Home Systems for AC Load - Part 1
- Design Case Study for Solar Home Systems for AC Load - Part 2