PROGRAM OVERVIEW

Skill Program in Solar Power Plant

Design, Installation & Maintenance

ONLINE

WHO ARE WE?

Kissan Solar Offers Services:

- ✓ **Technical Learning**,
- ✓ **Practical Training**,
- ✓ **Job Opportunities,**
- ✓ **Zero Investment Business in Solar Fields**

We Build Relation beyond Certification.

You can access numbers of Batches for same course for a Years

You come to Fresher, will go with a job or Business.

Kissan Solar is on Mission to Bridge the Skill gap Between Aspiring professionals and Industry's demands through job Oriented Courses.

LEADING COMPANIES
WHO HAVE HIRED OUR STUDENTS

JAKSON EMPOWERING PEOPLE Solar Energy Systems

MEDRS

SunSource ENERGY An SHV Energy Company

LUMINOUS

SERVOTEC

WAAREE One with the Sun

WHY LEARN WITH KISSAN SOLAR?

INDUSTRY-RELEVANT CURRICULUM

drafted by subject-matter expertsin the latest hardware and software tools

PROJECTS FOR YOUR PORTFOLIO

that are implementations of real large-scale projects

JOB ASSISTANCE

Our Career Success team will help with mock interviews, enhancing your resume and LinkedIn profile

EXPERT MENTORSHIP

by domain specialists who will personally guide you with your coursework

FORUM SUPPORT

for interaction with mentors & peers to get your doubts cleared

Online Classes

ABOUT THE PROGRAM

Duration: Three months

This comprehensive program deals with designing solar power plant, covering both Maintenance, Commissioning and Repairing Segments.

The specially curated curriculum trains you holistically in sub-domains such as Design, Pvsyst and Google SketchUp, for you to gain a well-rounded knowledge of all technical aspects of Solar Power Plant.

By the end of the program, you will master tools like PVSYST, SKETCHUP, SOLAR CONSULTANCY, TECHNICALS and many more.

CURRICULUM

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Module 1 courses - Fundamentals

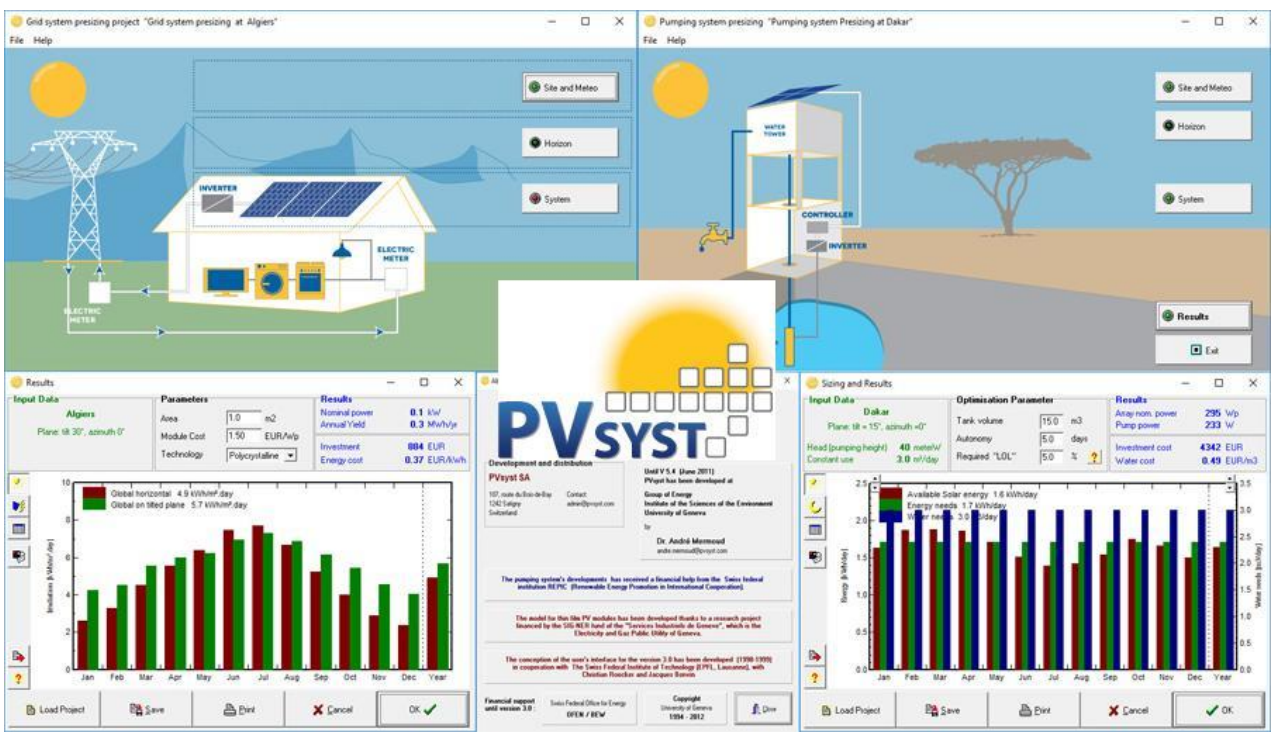
1. Place of PV in the World
2. The Fuel of PV Module (Solar Radiation)
3. How to analysis types of Solar Power Plant
4. Understanding the PV Cells

Module 2 courses - EQUIPMENTS

1. Sizing of PV Modules
2. Sizing of Inverter
3. Balance of System Equipment

Module 3 courses - DESIGN & INSTALLATION

1. Energy Assessment
2. ` Site Assessment
3. Matching Array & Inverter
4. System Protection
5. Cable Design
6. System Efficiency & Yield
7. System Installation
8. System Commissioning
9. System Maintenance & Troubleshooting
10. Economic of a Grid Connected PV System
11. Commercial and utility scale PV Systems



COURSE CONTENTS

MODULE 1	**TYPE OF SOLAR POWER PLANT**
	• Off Grid Power Plant
	• On Grid Power Plant
	• Hybrid Power Plant
MODULE 2	**SELECTION OF SITE AND SHADOW ANALYSIS**
	• PV Module structure interrow spacing
	• Selection of PV Module tilt Angle
	• Near Shadow Object Calculation
	• Site Survey and Plant Assessment
	• Types of Solar Radiation
	• Solar Geometry
	• Solar altitude
	• Defining Position of Sun
	• Using of Google SketchUp
	• Example
MODULE 3	**TYPE OF PV MODULE TECHNOLOGY**
	• Poly Crystalline
	• Mono Crystalline
	• Thin Film
	• Manufacturing Process of PV Cell
	• Selection of PV Cells
	• Characteristics of Solar Cell
	• Power Characteristic of Solar Cell
	• STC & NOCT
MODULE 4	**SOLAR INVERTER SELECTION & SIZING**
	• Type of Solar Inverter
	• Selection factor of Inverter
	• Sizing of Solar Inverter
	• Overloading Calculation& Clipping Losses
	• Protection for Solar Inverter
	• Anti-islanding Protection
	• Grid Connected Invt. Vs Off Grid Inverter
	• STC & NOCT

COURSE CONTENTS

MODULE 5	**CONNECTION OF PV MODULE**
	• Series Connection
	• Parallel Connection
	• Combining Parallel & Series Connection
	• PV Module String Connection
	• Mismatch Factor on voltage, Current & Power
	• Hotspot
	• Practical Numerical
MODULE 6	**SOLAR POWER PLANT SCB/ACDB/MDB**
	• Selection & Sizing of SCB
	• Selection of Isolator & Fuse
	• Selection & Sizing SPD & Protection
	• PV Module String Connection
	• Mismatch Factor on voltage, Current & Power
	• ACDB Switchgear Sizing
	• Practical Numerical
MODULE 7	**SELECTION AND SIZING OF AC / DC CABLE**
	• Sizing of Solar Cable / DC Cable
	• Derating Factor of Cable
	• Sizing of AC cable (invt to ACDB, ACDB to • MDB)
	• Sizing of DC Cable (Module to SCB, SCB to • Inverter)
	• HT Cable (Transformer to HT Gear, Gear to • Pooling Station/ Metering Point)
	• ACDB Switchgear Sizing
	• Practical Numerical
MODULE 8	**SIZING OF AC/DC SIDE EARTHING**
	• Type of Earthing
	• Types of Earthing Strip & Ground Conductor
	• Type of vertical Electrode
	• Sizing & Area of GI Strip
	• Resistance Calculation of GI Strip
	• Resistance calculation of Pipe Electrode.
	• Practical Numerical
MODULE 9	**SYSTEM LOSSES OF SOLAR POWER PLANT**
	• Layout of Solar Power plant
	• Losses Department
	• Various Types of Losses

COURSE CONTENTS

MODULE 10	**SOLAR POWER SYSTEM YIELD PERFORMANCE**
	• Calculation of Energy Yield
	• Specific Yield
	• Performance Ratios (PR ration)
	• CUF Calculation
MODULE 11	**PLANT INSTALLATION & COMMISSIONING**
	• IEC Standards
	• Commissioning
	• System Documents
	• System Installation & Pre commissioning • Checklist
	• Commissioning Test Sheets
MODULE 12	**MAINTENANCE & TROUBLESHOOTING**
	• Weekly Maintenance
	• Monthly Maintenance
	• Annual Maintenance
	• Troubleshooting
MODULE 13	**SOFTWARE**
	• PVsyst
	• Google SketchUp
	• Helioscope
	• Assignment

JOB OPPORTUNITIES FOR YOU

Our program prepares you for job roles in the following domains:

SOLAR DESIGNER / PVSYST / GOOGLE SKETCHUP / DRAFTING.

Solar Consultant: Technical Abasement / Sizing / Consultancy Firm

Execution: Installation / Maintenance / Commissioning

Solar Business / Freelancing / Pvt Ltd firm / Proprietor.

BASIC	PRO	PREMIUM
₹ 25,000	₹ 30,000	₹ 35,000
12 Month Access	**18 Month** Access	**Lifetime** Access

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