



The 14-Day Solar PV & EV Charger Professional Training

Course Curriculum – Offline Batch

Friday & Saturday

Time: 3pm to 6pm

Day	Session Focus	Key Topics/Activities	Trainer	Schedule
Day 1	Introduction to Renewable Energy & Solar PV Sector, Solar PV Technologies & System Types	Introduction and overview of renewable energy; global renewable energy scenario; Bangladesh renewable energy context; introduction to solar PV systems; global and Bangladesh-specific solar PV trends. Solar PV technologies; grid-tied, hybrid and distributed solar systems; application areas; comparison of on-grid, off-grid and hybrid systems.	<u>Dr. Md Akhtaruzzaman</u> Associate Professor & Head, DIU - Robotics and Mechatronics Engineering	<u>04.09.2026</u> Friday
Day 2	Datasheet Analysis: Solar Panels & Inverters	Panel and inverter datasheet analysis for off-grid, on-grid and hybrid systems; Watt, Voc, Vmp, Isc, Imp, efficiency, temperature coefficient, warranty; MPPT range, DC input, AC output, protection, communication and system compatibility.		<u>05.09.2026</u> Saturday

Day 3	PVsyst Software Fundamentals	Introduction to PVsyst; interface overview; project creation workflow; site/location setup; meteo data selection; system type selection; orientation, tilt, azimuth and component database understanding.	<u>Eng. Lutfar Rahman</u> Solar PV Design Engineer / Project Engineer, Greenery Energy Solution Ltd	<u>11.09.2026</u> Friday
Day 4	PVsyst Simulation Workflow & Analysis (100 MW Project Report)	Module and inverter selection in PVsyst; string configuration; basic shading; energy yield estimation; loss diagram; performance ratio; simulation result analysis and report generation.		<u>12.09.2026</u> Saturday
Day 5	Off-Grid & Hybrid System Sizing	Load analysis; daily energy calculation; solar array, battery, inverter and charge controller/MPPT sizing; autonomy days and backup requirement; practical off-grid and hybrid design considerations.		<u>18.09.2026</u> Friday
Day 6	Off-Grid & Hybrid Detailed Project Completion Session	Complete off-grid and hybrid project details; finalized load calculation; panel, inverter, MPPT/charge controller and battery sizing; cable and protection device selection; single-line concept; final BOQ and project completion discussion.		<u>19.09.2026</u> Saturday
Day 7	PVsyst & Hybrid Real Project Practice	Hands-on PVsyst practice for hybrid project design; component selection; string configuration; load and storage design considerations; simulation practice; result analysis; report preparation and project review.		<u>25.09.2026</u> Friday
Day 8	Introduction to SketchUp & Basic 3D Building Design	SketchUp interface; basic drawing and editing tools; measurement and unit setup; geo-location setup; simple building layout; rooftop structure creation; basic 3D modeling; model view and navigation practice.	<u>Pallab Biswas</u> Solar PV Design Engineer	<u>26.09.2026</u> Saturday
Day 9	Real Solar PV Project Design Using Skelion Plugin	Skelion plugin; solar panel layout design; module placement on rooftop; tilt and orientation setup; row spacing; shading consideration; project location and		<u>02.10.2026</u> Friday

		sun path analysis; array design; energy layout preparation and final model review.		
Day 10	Solar PV Standards, Safety & Environmental Impact	Modules, inverters, mounting, cables, protection devices, batteries and charge controllers; equipment standards, quality and safety; grid connection requirements; voltage/frequency limits and synchronization; basic electrical design; risk management; Bangladesh solar PV policy; net metering; socio-environmental sustainability.	<u>Tanvir Imteaz</u> Manager, Technical & Sales, Greenery Energy Solution Ltd	<u>03.10.2026</u> Saturday
Day 11	Solar PV Testing, Commissioning, O&M, Monitoring, Site Visit & Practical Exposure	Testing and commissioning; insulation testing; polarity checking; inverter configuration; performance evaluation; O&M; monitoring systems; troubleshooting common faults; rooftop or utility-scale site visit; component observation; safety briefing; layout review and practical exposure to real project installation and operation.	Training Management	<u>09.10.2026</u> Friday
Day 12	EV Charger Technology & System Study	Introduction to EV charging systems; AC and DC charger overview; EV charger types and ratings; charging connectors; communication and protection systems; EV charging load calculation; compatibility with EV models; safety standards and site requirements.	<u>Ezazul Haque</u> Industry Trainer & Mentor – Solar PV, ESS & EV Charging	<u>10.10.2026</u> Saturday
Day 13	EV Charger Installation, Testing & Commissioning	EV charger installation procedure; cable sizing; protection device selection; earthing requirement; mounting and wiring; charger configuration; testing and commissioning; troubleshooting; integration with solar PV and battery storage; final project presentation.		<u>16.10.2026</u> Friday
Day 14	Certification & Convocation	The program will conclude with a formal certification and convocation ceremony attended by trainees and industry experts. Top performers will have the		

		opportunity for on-the-spot recruitment interviews, while other trainees will receive career counselling and guidance, followed by the certificate distribution ceremony.	Training Management	<u>17.10.2026</u> Saturday
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