

ISA STAR-Centre Kiribati invites you to  
8-day specialized training on

SOLAR PHOTOVOLTAIC

# SOLAR ROOFTOP SOLAR MINI GRID

Learn the fundamentals of solar PV system installation,  
commissioning, operation, trouble shooting and maintenance

## PROGRAM HIGHLIGHTS

- Fundamentals of Solar PV Technology
- Understanding of Solar Rooftop PV Systems
- Understanding of Solar Mini-Grid & Pumping
- System Sizing and Design Engineering
- Site Assessment Techniques
- Tools & Instrument Handling
- Installation, Testing & Commissioning and O&M
- Exposure Visit to Solar Sites and Quarry Resolution

## LIMITED SEATS

## REGISTER AT NO COST

### Solar Rooftop

- ✓ Batch 1:  
2nd Dec – 10th Dec 2024
- ✓ Batch 2:  
11th Dec – 20th Dec 2024

### Solar Mini Grid

- ✓ Batch 1:  
22nd Jan – 31st Jan 2025
- ✓ Batch 2:  
3rd Feb – 12th Feb 2025

**Time: 09:00 – 17:30 hrs**



## TARGET GROUPS

- Certified Electricians
- Early Engineering Students
- Graduates from TVET/Polytechnic
- Practicing Electricians and Technicians

Registration link: <https://forms.gle/83SU4TLwTPri1A4q8>



## CERTIFICATION

A certificate will be awarded to  
participants on successful  
completion of the course



Scan QR code to  
register online

## GET IN TOUCH

### ISA STAR-C Kiribati

Kiribati Institute of Technology  
South Tarawa, Kiribati

### Contact

Mikaere Tioro, Deputy Director - Teaching & Learning  
Email: [Mikaere.Tioro@kit.edu.ki](mailto:Mikaere.Tioro@kit.edu.ki)  
Phone: +686 751 26516/ +686 730 52785

## DAY 1-4 SCHEDULE OF INPERSON TRAINING ON SOLAR ROOFTOP

TIME	DAY 1	DAY 2	DAY 3	DAY 4
09:00 – 10:30	Introduction to Renewable Energy Sources	Solar PV Technology Basics	Key Components of Solar Systems (e.g., Inverters)	Site Assessment Techniques
10:30 – 10:45	Coffee Break	Coffee Break	Coffee Break	Coffee Break
10:45 – 12:30	Basic Electrical Terminologies and Power Concepts	Solar Module Construction and Technology	Balance of System (BoS) Components	Shading Analysis and Tilt Optimization
12:30 – 13:30	Lunch Break	Lunch Break	Lunch Break	Lunch Break
13:30 – 15:15	Introduction to Solar PV Systems	IV Characteristics of Solar Cells	System Concept of Grid-Connected Systems	PV Module Layout Planning
15:15 – 15:30	Coffee Break	Coffee Break	Coffee Break	Coffee Break
15:30 – 16:30	Introduction to Rooftop Solar PV Systems	Performance Metrics of Solar Modules	System Concept of Off-Grid and Hybrid Systems	BOS Component Layout Planning
16:30 – 17:30	Q&A Session	Q&A Session	Q&A Session	Q&A Session

## DAY 5-8 SCHEDULE OF INPERSON TRAINING ON SOLAR ROOFTOP

TIME	DAY 5	DAY 6	DAY 7	DAY 8
09:00 – 10:30	PV System Sizing	Installation Process and Safety Protocols	System Monitoring and Maintenance	Field Visit to a Rooftop Solar Installation
10:30 – 10:45	Coffee Break	Coffee Break	Coffee Break	Coffee Break
10:45 – 12:30	String Sizing and Design	Step-by-Step Installation of Solar PV Systems	System Troubleshooting	Hands-On Assessment of the Installation Site
12:30 – 13:30	Lunch Break	Lunch Break	Lunch Break	Lunch Break
13:30 – 15:15	Grid-Connected, Off-Grid & Hybrid System Design	System Testing	Project Costing	Group Discussion and Feedback
15:15 – 15:30	Coffee Break	Coffee Break	Coffee Break	Coffee Break
15:30 – 16:30	Plant Performance & Energy Yield Estimation	System Commissioning	Financial Analysis	Closing Ceremony
16:30 – 17:30	Q&A Session	Q&A Session	Wrap up and certification	Closing Ceremony

## DAY 1-4 SCHEDULE OF SOLAR MINI GRID & WATER PUMP

TIME	DAY 1	DAY 2	DAY 3	DAY 4
09:00 – 10:30	Introduction to Renewable Energy Sources	Solar PV Technology Basics for Mini-Grids & Solar Pumps	Key Components of Mini-Grid & Pumping Systems	Mini-Grid Site Assessment Techniques
10:30 – 10:45	Coffee Break	Coffee Break	Coffee Break	Coffee Break
10:45 – 12:30	Basic Electrical Terminologies and Power Concepts	Solar Module Construction and Technology	Balance of System (BoS) Components in Mini-Grids	Solar Pump Site Assessment Techniques
12:30 – 13:30	Lunch Break	Lunch Break	Lunch Break	Lunch Break
13:30 – 15:15	Introduction to Solar PV Systems	IV Characteristics of Solar Cells	Off-Grid and Hybrid Mini-Grid Systems Concepts	Mini-Grid Sizing & Design Engineering
15:15 – 15:30	Coffee Break	Coffee Break	Coffee Break	Coffee Break
15:30 – 16:30	Introduction to Solar Mini-Grid Systems & Water Pumping	Performance Metrics of Solar Modules	Solar Pumping System Concepts	Solar Pump Sizing & Design Engineering
16:30 – 17:30	Q&A Session	Q&A Session	Q&A Session	Q&A Session

## DAY 5-8 SCHEDULE OF SOLAR MINI GRID & WATER PUMP

TIME	DAY 5	DAY 6	DAY 7	DAY 8
09:00 – 10:30	Design Considerations Based on Water Demand and Solar Resource Availability	Installation Process and Safety Protocols for Solar Mini Grid	System Monitoring and Maintenance for Mini Grid and Solar Water Pumps	Field Visit to a Solar Water Pumping Installation
10:30 – 10:45	Coffee Break	Coffee Break	Coffee Break	Coffee Break
10:45 – 12:30	Step-by-Step Installation of Solar Water Pumps	Step-by-Step Installation of Solar Mini Grid	Troubleshooting Mini Grid and Solar Water Pumping Systems	Field Visit to a Solar Mini Grid Installation
12:30 – 13:30	Lunch Break	Lunch Break	Lunch Break	Lunch Break
13:30 – 15:15	System Testing in Solar Water Pumping Systems	System Testing in Solar Mini Grid System	Project Costing for Solar Mini Grid and Water Pumping Systems	Hands-On Assessment of the Installation Site
15:15 – 15:30	Coffee Break	Coffee Break	Coffee Break	Coffee Break
15:30 – 16:30	System Commissioning of Solar Water Pumping Systems	System Commissioning of Solar Mini Grid Systems	Group Discussion and Feedback	Closing Session
16:30 – 17:30	Q&A Session	Q&A Session	Wrap up and certification	Closing Ceremony