# UNIVERSITY OF NAIROBI

# CHIROMO CAMPUS

# DEPARTMENT OF PHYSICS

## SOLAR ACADEMY: AUGUST- 2025

#### SHORT PROFESSIONAL COURSE IN SOLAR PV SYSTEMS DESIGN, SIZING, INSTALLATION & MAINTENANCE

The Department of Physics in conjunction with Solar Energy Research Group invites applications for **T1 & T2 and T3** training in solar photovoltaic design, installation, maintenance and commissioning for the August Training series.

#### **QUALIFICATIONS**

**T1 &T2:** At least a High School certificate. Extra professional or academic certificates and or field experience not compulsory for admission.

**T3:** Must have done T1 &T2 training (please attach training certificate with application). At least a Diploma in Electrical or its equivalent. At least a diploma in another scientific field but with a Physical Science background can be considered.

#### T1 &T2 SCOPE

The training will cover among others: • Basics of solar PV electricity, • Solar PV components (panels, batteries, charge controllers, inverters), • Solar PV appliances (lights, refrigerators, tv, radio, water pumping), • Site survey and solar system sizing, • Installation and maintenance, • Entrepreneurship in Solar PV applications

## T3 SCOPE

The training will cover: C&I System design. • PV plant performance. • PV array & Inverter matching • System protection and safety • DC and AC cable design • Site assessment & planning for commercial rooftop & MW scale PV power projects • Array layout design preparation • Loss, Energy Yield & Performance Ratio estimation, Financial Analysis & Project Bankability, • Solar PV Design for Commercial rooftop and MW PV plants using Design Software • System monitoring and evaluation. • Grid and Hybrid system Best Practices. • Minigrid regulations •.Net metering

#### THE TRAINING

The training will be physical at the Department of Physics, Chiromo Campus, University of Nairobi, about 2 km from Nairobi town centre and off Riverside drive, on the way to westlands.

## TARGET GROUPS

**T1, T2** Course: The training is ideal for groups or individuals from government, public or private institutions, electrical installation, technicians, teachers, technical institute tutors, NGO's outreach personnel & solar PV retailers.

**T3**-Advanced Design Course: The training targets PV engineers, Project Managers, Solar EPC Contractors, Solar Industry professionals, PV system designers or anyone else involved with designing/ implementing grid connected PV systems.

#### **DURATION AND COST**

The **T1& T2** training will run **from 4<sup>th</sup> August, 2025 – 8<sup>th</sup> August 2025** full time, 8 am-5pm. The tuition cost is KShs.48,000/- per person for Kenyans or USD 640 for non-Kenyans..

The T3 training will be from 11<sup>th</sup> August, 2025 – 15<sup>th</sup> August 2025 full time, 8 am-5 pm. The tuition cost is KShs.58,000/- per person for Kenyans or USD 690 for non- Kenyans.

Those who will do T1&T2 and immediately proceed for T3 will be given some discount for T3.

Participants are expected to arrange for their own accommodation near the training venue as well as health cover during the period

## HOW TO APPLY:

Application forms available online https://solar-academy-uon.co.ke/ are at or http://physics.uonbi.ac.ke/. A non-refundable application fee of KShs. 1000/- (or USD 20 for non Kenyans) is charged and together with the training fees are payable to: **UoN Research Grants** Account, Kenya Commercial Bank, University way Branch Account No. 1104657112. Cheques are payable to: UoN Research Grants. Mpesa payment: paybill:522522, account: 1104657112. Duly completed application forms, CV, academic & professional certificates and bank deposit slip / bank response mpesa deposit message should be brought to the Department of Physics or can also be scanned and emailed to: solar-academy@uonbi.ac.ke with a copy to: solaracademy2012@gmail.com on or before 25<sup>th</sup> July, 2025. Due to the limited number of training opportunities, invitation shall be based on first come first served basis. For more information log into our website : <u>https://solar-academy-uon.co.ke/</u> or Contact the Chairman, Department of Physics, Chiromo Campus, Tel 020-4914119, email: physics@uonbi.ac.ke, or The training coordinator on telephone +254722838140, Email: swaita@uonbi.ac.ke