

TECHNICAL CURRICULUM · SOLAR · STORAGE · OFF-GRID · FULL-TIME

RENEWABLE ENERGIES

A complete, hands-on training programme for photovoltaics, storage and off-grid systems.

Real systems, real measurements, market-ready skills.

THE PROGRAMME

A good system is no accident. This programme builds the skills for it, from the module to commissioning.



Renewable Energies is a hands-on full-time programme focused on photovoltaics, storage and off-grid systems.

Across the technical modules in Parts A and B, trainees work their way from electrical engineering, safety and the solar resource through PV design, mounting and installation to battery storage, off-grid and mini-grids.

The focus is on practice throughout. Learning happens on real systems, real instruments and real test protocols, with around 1,500 hours of technical learning and over 110 assessed exercises.

Every module ends with an assessed test piece, so competence shows in real work and not on paper. Part C adds marketing, costing and a self-financing model for the trainee's own business.

The programme is offered as a curriculum, as a matching equipment specification or as a turnkey package for your location.

23

MODULES

800_h

TECHNICAL LEARNING

90₊

PRACTICAL EXERCISES

110₊

EQUIPMENT POSITIONS

1

Years

FULL-TIME

TECHNICAL CURRICULUM

Twenty-three modules

From electrical engineering, safety and the solar resource through PV design, mounting and installation to storage, off-grid and operation, concluding with the final project.

MODULE

A.1 – B.16 · IN PHASES

1 Energy transition

FUNDAMENTALS

2 Workplace safety & PPE

SAFETY

3 Electrical fundamentals

ELECTRICAL ENGINEERING

4 Materials & components

FUNDAMENTALS

5 The solar resource

SITE ANALYSIS

6 Mounting & statics

MOUNTING

7 Standards & connection

STANDARDS

8 Photovoltaics basics

PHOTOVOLTAICS

9 PV system types

PHOTOVOLTAICS

10 Design & sizing

PHOTOVOLTAICS

11 Inverters & electronics

PHOTOVOLTAICS

12 PV system installation

MOUNTING

13 Cabling & protection

INSTALLATION

14 Commissioning & testing

TESTING

15 Battery storage & BMS

STORAGE

16 Off-grid & mini-grids

OFF-GRID

17 Solar thermal

SOLAR THERMAL

18 Heat pump basics

HEAT

19 Pumping & irrigation

APPLICATIONS

20 Small wind & micro-hydro

WIND & WATER

21 Biomass/biogas interface

INTERFACE

22 Maintenance & repair

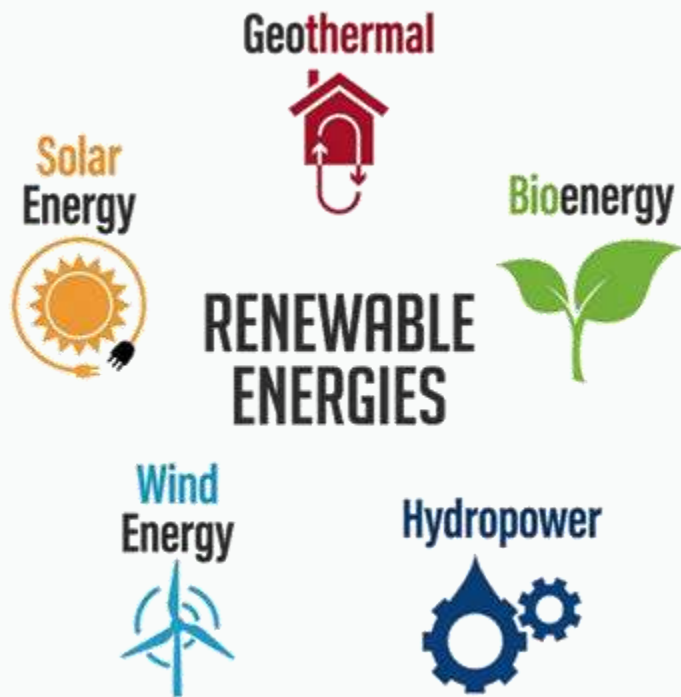
OPERATION & MAINTENANCE

23 Digital & monitoring

DIGITALISATION

EQUIPMENT

Trained on real systems and instruments.



01

Solar modules & racking

PV modules, substructure and racking systems for roof and open ground.

02

Inverters & power electronics

String and hybrid inverters, charge controllers and MPPT technology.

03

Battery storage & charge management

Lead and LiFePO4 storage, BMS as well as charging and safety technology.

04

Mounting, roof & fall protection

Fastening systems, tools and personal protective and fall-arrest equipment.

05

Measuring, testing & commissioning gear

Multimeters, IEC-62446-1 test devices, thermography and documentation.

06

Cabling, DC/AC protection & earthing

MC4 connectors, surge protection, RCD/MCB and earthing material.

~110 POSITIONS · 6 CATEGORIES

BRING THE PROGRAMME TO YOUR LOCATION

LET'S GET STARTED.

AVAILABLE AS · **Turnkey** (consulting + equipment + delivery + curriculum + setup)