



# MBC

## RENEWABLES

## Renewable Energy Training

CPD accredited, practitioner led courses for commercial & industrial renewable energy teams.

As the UK and Ireland accelerate the transition to clean power, organisations need skilled people who can design, survey, connect, test and commission renewable energy assets safely and efficiently. MBC Renewables Ltd delivers practical training that supports your teams from first principles through to confident real-world application.

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| • Flexible delivery: live online or on-site at your premises                          |
| • Commercial and technical programmes for sales, design, survey and engineering teams |
| • Real-world delivery by senior practitioners with extensive industry experience      |
| • Group booking discounts available; bespoke programmes on request                    |

Book or enquire: +44 (0) 7784 150 058 | [info@middlemast.com](mailto:info@middlemast.com) | [www.mbc renewables.com](http://www.mbc renewables.com)



## Training at a glance

Our core program includes eight courses that can be delivered live online or on-site. Prices are per attendee and exclude VAT. Discounts are available for group bookings.

Code	Course	Duration	Price (per attendee, ex VAT)
MBC101	Renewable Energy Industry Training	2 days	£450
MBC102	Renewable Energy Survey Course	1 day	£450
MBC103	Design & Simulation Training	2 days	£1,050
MBC104	Testing & Commissioning Solar PV Systems	2 days	£1,050
MBC105	Introduction to G98, G99 & G100	1 day (6 hours)	£450
MBC106	Solar PV Testing Toolbox Talk	3 hours	£95
MBC107	Solar Roofing	1 day	£450
MBC108	Energy Storage Systems Design	1 day	£450

### Why teams choose MBC Renewables

- Real world delivery by senior practitioners.
- CPD certificates (where applicable).
- Flexible delivery: live online or on-site.
- Bespoke programmes available for your business.



## What past learners say

"Michael delivered an excellent two-day MBC101 course for me and my team. His deep industry knowledge and clear, patient approach made the training both engaging and informative.

We gained valuable insights and practical understanding that will support us in our roles moving forward.

Highly recommended for anyone looking to build confidence and expertise in the renewable energy sector."

### Neal Williams

Country Manager UK & Ireland at Van der Valk

# VAN DER VALK



# ONE ENERGY PROJECTS

"As I have never previously worked in the solar industry, I found this course very informative and beneficial to get me started.

Michael was accommodating and took his time with us to make sure we understand and made time for us to ask the questions when needed.

I would definitely recommend this for anyone who needs to understand Solar from the beginning and I will definitely look at taking further courses in the future."

### Mollie Wilkinson

Operations Manager at One Energy Projects

"Michael spent 3 days with 3 of us at our office working through designs from simple to difficult.

His knowledge and understanding of the software is fantastic. The best part for me was the fact that we had a couple of designs that had a deadline attached and he spent time going through the designs helping us to make sure they were correctly finished off. He also said that if we needed any help with any designs then I just needed to contact him.

All in all I would not hesitate in recommending Michael and MBC Renewables for anyone in the Renewable Energy Sector."

### Keith Willis

PV Manager at Oakes Energy



# MBC101 Renewable Energy Industry Training

Course facts	Course overview
<p><b>Delivery:</b> Live online or on-site at your premises</p> <p><b>Duration:</b> 2 days (2 x 8-hour sessions)</p> <p><b>Price:</b> £450 + VAT per attendee (online delivery)</p> <p><b>Typical cohort:</b> 1–15 attendees</p>	<p>A comprehensive introduction to the renewable energy sector for new starters and professionals who want a stronger commercial and technical foundation. We explore core technologies (solar PV, energy storage and EV charging), how different markets work, and how successful businesses prospect, qualify and deliver projects.</p>

## What you will cover

- Renewable energy fundamentals and key technologies (solar PV, storage and EV charging).
- Market segmentation across residential, commercial and utility-scale projects.
- Project lifecycle basics: early-stage feasibility through to delivery and performance review.
- Commercial development: prospecting, qualification and customer engagement strategies.
- How to speak confidently about performance, risk and return on investment (ROI).
- CPD certificate on completion (where applicable).

## Who this course is for

- New employees and graduates entering the renewable energy sector.
- Sales and business development teams.
- Consultants, engineers and project developers who want a sector overview.
- Investors and end users seeking a clearer understanding of the market.

**Ready to book?** Email [info@middlemast.com](mailto:info@middlemast.com) or call +44 (0) 7784 150 058. Please include the course code, preferred dates and delivery mode.

# MBC102 Renewable Energy Survey Course

Course facts	Course overview
<p><b>Delivery:</b> Live online (on-site delivery available by arrangement)</p> <p><b>Duration:</b> 1 day (approximately 6–8 hours, depending on Q&amp;A)</p> <p><b>Price:</b> £450 + VAT per attendee (online delivery)</p> <p><b>Includes:</b> MBC Renewables Solar Survey Document Pack and support materials</p>	<p>An immersive site survey programme designed to help teams carry out thorough, safe and efficient surveys of residential and commercial properties ahead of renewable energy installations. Training includes interactive exercises using a 3D virtual property environment and practical data-gathering techniques that reduce missed details and repeat visits.</p>

## What you will cover

- How to structure a site survey to capture the full Request for Information (RFI) in one visit.
- Survey requirements for solar PV, energy storage systems (ESS) and EV charging (EVSE).
- Health and safety risk identification and controls on site.
- End-user needs and how to capture requirements accurately.
- Working safely in manufacturing and commercial environments.
- Using templates and document packs to standardise survey outputs.

## Who this course is for

- Surveyors, project engineers and designers supporting renewable energy installations.
- Electricians, technicians and commissioning staff expanding into survey work.
- Sales and business development professionals who want stronger technical survey insight.
- Senior students in engineering and related disciplines.

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# MBC103 Renewable Design & Simulation Training

<b>Course facts</b> <b>Delivery:</b> Live online or on-site at your premises <b>Duration:</b> 2 days (2 x 8-hour sessions) <b>Price:</b> £1,050 + VAT per attendee (online delivery) <b>Typical cohort:</b> 1–15 attendees	<b>Course overview</b> Renewable energy system design requires technical, practical and commercial knowledge. This course equips learners to produce accurate, efficient and safe system designs and simulations for solar PV, energy storage and EV charging - helping you offer better options, optimise payback periods and win more work.
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## What you will cover

- Project set-up, location choice and selecting accurate climate data.
- 2D and 3D modelling for pitched roof, flat roof, ground mount and carport arrays.
- Adding annual, monthly and half-hourly consumption data and selecting appropriate load profiles.
- Inverter matching and sizing.
- Energy storage matching and sizing.
- EV charging sizing and simulation.
- Simulating common architectures (string inverter, MLPE/optimisers and micro-inverters).
- Financial modelling and reporting: payback period, NPV, IRR and LCOE (where applicable).
- Producing a clear, client-ready simulation report.
- After-sales support to help you apply the learning on real designs.

## Who this course is for

- Solar PV professionals across all skill levels.
- Design engineers, project developers and consultants.
- Architects and civil/mechanical engineers expanding into renewables.
- Commercial teams who want stronger design literacy.

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# MBC104 Safely Testing & Commissioning Solar PV Systems

<b>Course facts</b> <b>Delivery:</b> Live online or on-site at your premises <b>Duration:</b> 2 days (2 x 8-hour sessions) <b>Price:</b> £1,050 + VAT per attendee (online delivery) <b>Typical cohort:</b> 1–15 attendees	<b>Course overview</b> A comprehensive, standards-led training course covering the test and commissioning process for solar PV systems - from residential through to commercial and utility-scale. Learners build a strong foundation in health and safety, preparation and methodology, with practical guidance on working safely around high-voltage DC systems.
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## What you will cover

- Test and commissioning methodology for solar PV systems.
- Key health and safety risks during inspection, testing and commissioning.
- Pre-testing calculations and preparation activities.
- Standard Test Conditions (STC) and what to expect in hot and cold environments.
- Conducting thorough visual inspection and documentation.
- Safe connection and testing practices for 1,000 V and 1,500 V PV systems.
- Understanding relevant standards, including IEC 62446-2:2020 and UK MCS MIS 3001.

## Who this course is for

- Electricians, technicians and commissioning engineers working on solar PV projects.
- Consultants and project engineers responsible for quality and compliance.
- End users and technical managers wanting a deeper understanding of PV commissioning.
- Senior students and early-career engineers entering PV testing/commissioning roles.

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# MBC105 Introduction to G98, G99 & G100 DNO Applications

<b>Course facts</b> <b>Delivery:</b> Live online or on-site at your premises <b>Duration:</b> 1 day (6 hours) <b>Price:</b> £450 + VAT per attendee (online delivery) <b>Typical cohort:</b> 1–15 attendees	<b>Course overview</b> Registering renewable energy assets is critical to network safety and compliance. This course explains the UK DNO (Distribution Network Operator) application, offer and notification process, and teaches learners how to complete G98, G99 and related application forms for solar PV installations.
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## What you will cover

- How the DNO process works: application, offer and notification stages.
- G98, G99 and G100 in practice: what they mean for your project.
- How to complete G98, G99 and SAF application forms.
- Working effectively with the DNO and managing timelines.
- Export limitation schemes and customer export limitations (G100 context).
- Aftersales support: help with your next grid-connection application.

## Who this course is for

- Project engineers, design engineers and technicians supporting grid connections.
- Electricians, consultants and project developers.
- Sales and business development professionals who work on grid-connected projects.
- Senior students in engineering and related disciplines.

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# MBC106 Solar PV Testing: Electrical Safety, PPE & Instrument Care (Toolbox Talk)

<b>Course facts</b> <b>Delivery:</b> Live online or on-site <b>Duration:</b> 3 hours <b>Price:</b> £95 + VAT per attendee (online delivery) <b>Pre-requisites:</b> Electrical testing competence and PV commissioning knowledge assumed	<b>Course overview</b> A focused toolbox talk designed to reinforce safe working practices when testing DC solar PV strings. The session highlights common risks, appropriate PPE and instrument selection, and practical steps to protect both people and equipment during electrical testing. <b>Note:</b> A health and safety management system should be in place before undertaking testing activities.
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## What you will cover

- Typical hazards when testing DC PV strings and how incidents occur.
- Safe systems of work and behavioural controls during testing.
- PPE selection and basic electrical safety principles in PV environments.
- Instrument care and the impact of tool condition on safety and accuracy.
- Guidelines to minimize accidents and improve repeatable test results.

## Who this course is for

- Competent electrical testers and commissioning staff with PV experience.
- O&M teams responsible for safe inspection and measurement activities.
- Supervisors and team leads who deliver or monitor PV testing activities.

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# MBC107 Solar Roofing

Course facts	Course overview
<p><b>Delivery:</b> On-site (recommended) or live online</p> <p><b>Duration:</b> 1 day</p> <p><b>Price:</b> £450 + VAT per attendee (online delivery)</p> <p><b>Bespoke option:</b> Can be tailored to your mounting products and roof types</p>	<p>Solar panel mounting systems are a crucial - and often overlooked - part of a photovoltaic installation. This course is designed for roofing professionals who want practical knowledge of solar mounting solutions and how they are applied across a range of roof types and project scenarios.</p>

## What you will cover

- Introduction to common mounting system types and their applications.
- Key interface considerations: fixing methods, roof integrity and weatherproofing.
- Good practice to support durability, safety and long-term performance.
- Working effectively with PV installers and understanding installation constraints.
- Quality checks and documentation to reduce callbacks and remedial works.

## Who this course is for

- Roofing teams expanding into solar PV mounting work.
- Site supervisors and project managers overseeing roof-based renewables.
- Installation partners who want consistent approaches to mounting and roof interfaces.

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# MBC108 Energy Storage Systems

<b>Course facts</b> <b>Delivery:</b> Live online or on-site at your premises <b>Duration:</b> 1 day (intensive) <b>Price:</b> £450 + VAT per attendee (online delivery) <b>Typical cohort:</b> 1–15 attendees	<b>Course overview</b> A one-day intensive course for professionals seeking a clear, practical understanding of modern energy storage systems. Covering both residential and commercial contexts, the course explores how storage works, how to size and specify systems, and how to approach UK grid connection applications.
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## What you will cover

- How batteries and storage systems work, including AC- and DC-coupled configurations.
- Storage control strategies and integration with solar PV systems.
- Battery technologies: lithium-ion, lead-acid and vanadium redox flow (strengths, limitations and applications).
- Design and sizing using professional tools such as PV\*Sol and PVsyst (where applicable).
- UK grid connection considerations for storage systems.
- Microgrids, control modes and resilience-focused design principles.
- Emerging storage technologies and where the market is heading.

## Who this course is for

- Engineers, designers and consultants working on solar and storage projects.
- Project developers and technical sales teams who specify storage systems.
- Solar PV professionals expanding into storage design.
- Senior students and professionals interested in the energy transition.

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## Bespoke training solutions

If you have specific learning objectives, operational procedures or product ranges you want your team to focus on, we can tailor a programme to match. Bespoke training can combine modules from our core courses, incorporate your own documentation and processes, and be delivered at your premises.

### How to book

1. Choose the course code(s) and preferred delivery mode (online or on-site).
2. Let us know your preferred dates and number of attendees.
3. We will confirm availability and provide joining details or an on-site delivery plan.

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Pricing note: Prices are per attendee and exclude VAT. On-site training is available for the course fee plus travel and accommodation (where applicable). Group booking discounts are available.



Our founder **Michael Middlemast** has over 15 years of experience in the industry, from designing and installing solar PV systems to managing technical sales teams and developing PV test instrumentation.

With a proven track record of success, Michael has provided extensive support to the UK, North American and global solar community, including top names like Tesla and Canadian Solar.

With this wealth of experience in renewable energy sales, engineering, development, technical support, training and more, you can rest assured **MBC Renewables Ltd** will deliver results for you.



*"My vision is simple: help develop reliable renewable energy assets by means of education and excellence in design."*

**Michael Middlemast**

**MBC Renewables Ltd Founder**

## Contact Information:

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