



Wind Turbine Maintenance Technician Cross-Skill Programme (Level 3 / SCQF 6)

Developing a skilled, and agile workforce to enable two-way transition and continuity of worker transfers between Oil & Gas and Wind operations and maintenance.

The Connected Competence Wind Turbine Maintenance Technician (cross skill programme) recognises the transferable skills of existing Electrical, Mechanical and Instrument & Control Technicians working in the Engineering Construction Industry.

Workers will learn specific activities across the engineering pathways aligned to a NVQ Level 3 / SCQF 6 standard which cover the competency profile of a Wind Turbine Maintenance Technician, and include Slinger Signaller training and wind turbine specific training aligned to GWO BTT requirements.

As a pre-requisite, workers are required to be qualified in their primary trade and have successfully achieved the relevant Connected Competence tests within their occupation, before undertaking a programme of study and practical skills within defined activities across the other two technician pathways.

After successfully completing the cross-skilling programme technicians will enhance their primary trade discipline to also undertake operations and maintenance activities of a Wind Turbine Maintenance Technician allowing agility and transferability of skills across existing and new energy projects. Workers will be assessed for technical competence against NVQ Level 3 / SCQF Level 6 however employers will be responsible for achieving occupational competence at site.

The training and assessment for the two pilot programmes are fully funded. For further information please contact
lynsey.benson@ecitb.org.uk

Programme delivery dates:

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Pilot 1 -
Aberdeen:
17th March –
25th April 2025




Pilot 2 -
Grangemouth:
12th May –
20th June 2025
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The Wind Turbine Maintenance Technician Cross-Skill Programme is recognised by the **Health & Safety Executive**

Delivery Partners:



Programme overview

	Primary Disciplines		
	Electrical Technicians	Mechanical Technicians	Instrument & Control Technicians (I&C)
Prerequisite Qualifications	Relevant L3 NVQ / VQ / SCQF 6 or Apprenticeship in Electrical Engineering / Maintenance	Relevant L3 NVQ / VQ / SCQF 6 / or Apprenticeship Mechanical Engineering / Maintenance	Relevant L3 NVQ / VQ / SCQF 6 / or Apprenticeship Instrument & Control Engineering / Maintenance
Prerequisite Connected Competence Technical Tests	<ul style="list-style-type: none"> • TIE08 • TEM06 • TEM14 	<ul style="list-style-type: none"> • TMM01 • TMM05 • TMJI10 	<ul style="list-style-type: none"> • TMI14 • TMI17 • TSBT02
6-week Cross Skill Programme Pathways	<ul style="list-style-type: none"> • Mechanical Pathway • I&C Pathway • Wind Turbine Safety Rules <p>.....</p> <ul style="list-style-type: none"> • GWO BTT (Gap Training) • GWO BST: <ul style="list-style-type: none"> - Enhanced First Aid - Working at Height - Manual Handling - Fire Awareness - Sea Survival (optional) • GWO Slinger Signaller <p>.....</p> <ul style="list-style-type: none"> • E-Learning: <ul style="list-style-type: none"> - Wind Awareness - SCADA - HV Switchgear - Condition Monitoring <p>.....</p> <ul style="list-style-type: none"> • ORE Catapult Levenmouth Wind Turbine Site Visit 	<ul style="list-style-type: none"> • Electrical Pathway • I&C Pathway • Wind Turbine Safety Rules <p>.....</p> <ul style="list-style-type: none"> • GWO BTT (Gap Training) • GWO BST: <ul style="list-style-type: none"> - Enhanced First Aid - Working at Height - Manual Handling - Fire Awareness - Sea Survival (optional) • GWO Slinger Signaller <p>.....</p> <ul style="list-style-type: none"> • E-Learning: <ul style="list-style-type: none"> - Wind Awareness - SCADA - HV Switchgear - Condition Monitoring <p>.....</p> <ul style="list-style-type: none"> • ORE Catapult Levenmouth Wind Turbine Site Visit 	<ul style="list-style-type: none"> • Electrical Pathway • Mechanical Pathway • Wind Turbine Safety Rules <p>.....</p> <ul style="list-style-type: none"> • GWO BTT (Gap Training) • GWO BST: <ul style="list-style-type: none"> - Enhanced First Aid - Working at Height - Manual Handling - Fire Awareness - Sea Survival (optional) • GWO Slinger Signaller <p>.....</p> <ul style="list-style-type: none"> • E-Learning: <ul style="list-style-type: none"> - Wind Awareness - SCADA - HV Switchgear - Condition Monitoring <p>.....</p> <ul style="list-style-type: none"> • ORE Catapult Levenmouth Wind Turbine Site Visit
Outcomes	<ul style="list-style-type: none"> • Electrical technician cross-skilled as a Wind Turbine Maintenance Technician and GWO Winda record <div style="text-align: center;">  <p>Trade Award CONNECTEDCOMPETENCE Wind Turbine Maintenance Technician</p> </div>	<ul style="list-style-type: none"> • Mechanical technician cross-skilled as a Wind Turbine Maintenance Technician and GWO Winda record <div style="text-align: center;">  <p>Trade Award CONNECTEDCOMPETENCE Wind Turbine Maintenance Technician</p> </div>	<ul style="list-style-type: none"> • I&C Technician cross-skilled as a Wind Turbine Maintenance Technician and GWO Winda record <div style="text-align: center;">  <p>Trade Award CONNECTEDCOMPETENCE Wind Turbine Maintenance Technician</p> </div>

Programme content

Electrical pathway:

- **Installing AC Electrical Motors** - Install suitable cables, terminate and test a three-phase motor, using appropriate materials, equipment, tools and techniques.
- **Inspect, Test and Maintain Industrial Switchgear Equipment** - safely and competently inspect, test and maintain industrial circuit protective equipment using appropriate equipment, tools and techniques.
- **Periodic Inspection of a Three-phase System** - carry out periodic inspection and testing of three-phase plant and equipment, including visual inspection of associated equipment.
- Wind Turbine specific basic technical training and awareness aligned to GWO BTT requirements.

Mechanical pathway:

- **Maintaining hydraulic systems** - Disassemble, clean, inspect and repair hydraulic pumps.
- **Maintaining centrifugal pumps** - Strip down, check dimensions, replace seals and rebuild centrifugal pumps.
- **Dismantle and assemble flanged joints using hydraulic and hand torquing methods** – Dismantle and inspect flanges and report faults. Prepare, assemble and secure flanged pipework joints within set tolerances.
- Wind Turbine specific basic technical training and awareness aligned to GWO BTT requirements.

eLearning

- Units will be covered throughout the six-week programme schedule and include a general awareness of the Wind Industry, Supervisory Control and Data Acquisition (SCADA) systems, an introduction to the Safe Operation of High Voltage Switchgear, and condition monitoring in wind turbines.

Instrument & control pathway:

- **Flow measurement and control systems** - Recommission a differential pressure flow transmitter into a fully operational condition, and calibration check the transmitter.
- **Maintain, calibrate and commission a process control valve** – Repair / replace a process control valve positioner and actuator, replace valve stem gland packing and reassemble. Set up and stroke test to operate open/closed on a 4–20 mA control signal, complete full loop calibration.
- **Disassemble and reinstall Small Bore Tubing (SBT) assemblies** - Identify faults and defects with SBT assemblies, disassemble SBT assemblies, rectify faults and defects and reinstall SBT assemblies by selecting and using the correct materials, tools, fittings, clamps and supports in accordance with P&ID and specification sheet.
- Wind Turbine specific basic technical training and awareness aligned to GWO BTT requirements.

GWO slinging and lifting

- Select equipment and lifting accessories to sling, lift and move a load to an identified location in accordance with appropriate industry regulations/procedures. Provide signaling and information to a crane operator to allow them to safely move a load.

GWO Basic Technical Training (BTT)

- Accredited prior learning for the Wind Turbine Maintenance Technician cross skill programme has been agreed with the Global Wind Organisation. The 4.5hr module will focus on the application of knowledge and skills on a wind turbine and successful candidates will be awarded the full GWO BTT accreditation.

GWO Basic Safety Training (BST)

- Adaptive eLearning and practical course delivery to teach delegates to support and care for themselves and others working in the industry by possessing the knowledge and skills of (Enhanced) First Aid, Working at Heights, Manual Handling, Fire Awareness, and Sea Survival.