

# **APPLICANT**INFORMATION GUIDE



Wind Turbine
Maintenance
Technician (WTMT)
Apprenticeship





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#### INTRODUCTION

The National Wind Turbine Maintenance Technician Apprenticeship is for people who wish to pursue a career in the maintenance of large scale commercial wind turbines.

This apprenticeship was developed by a consortium of industry representatives and Kerry Education and Training Board has been appointed as the lead educational provider. It is designed to meet the needs of the growing Irish Renewable and Sustainable Energy sector.

It will equip learners with the knowledge, skills and competence to inspect and maintain various wind turbine system components, locate and diagnose faults, replace components and reconfigure systems.

This guide provides an overview of this apprenticeship for prospective apprentices, parents and guidance counsellors.

#### PROGRAMME AIM

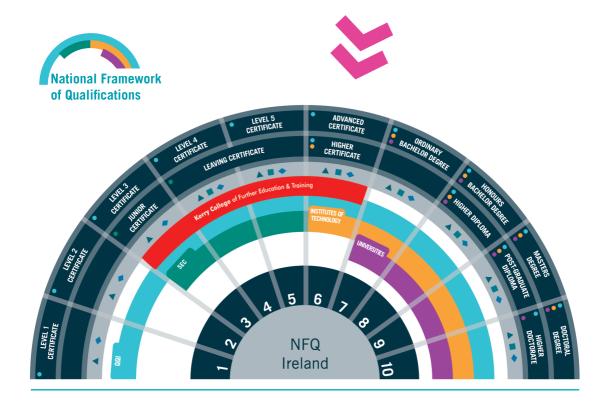
# The Wind Turbine Maintenance Technician Apprenticeship is concerned with carrying out core maintenance tasks on commercial turbines.

On completion of this programme, the learner (apprentice) will be able to:

- Understand the regulatory environment and Global Wind Organisation (GWO) Basic Safety Training standards and apply health and safety standards; adopting a behavioural based safety approach to work activities
- Use broad knowledge of electrical, mechanical, hydraulic, gearbox, control and monitoring, and IT systems to maintain wind turbines
- Carryout planned maintenance tasks- using and interpreting documentation, and selecting the most appropriate methods, tools and equipment in line with lean principles
- Interpret and communicate technical information (oral, written and digital) to meet reporting requirements and evaluate work methods to inform improvement practice
- Justify decisions using problem solving techniques and the technical knowledge of components and systems associated with inspection, diagnostics, maintenance, repair and replacement work activities
- Understand the relevance of the role of the Maintenance Technician within the industry, and the impact of the industry on society as a whole.
   Communicate effectively within a team and the organisation, sharing knowledge openly, and seeking guidance as appropriate to resolve issues

## PROGRAMME OVERVIEW

Programme Title	Wind Turbine Maintenance Technician Apprenticeship
Duration	Three years
Certification	Advanced Certificate in Industrial Wind Turbine Engineering
Awarding Body	Quality and Qualifications Ireland (QQI) issues certificates as the awarding body

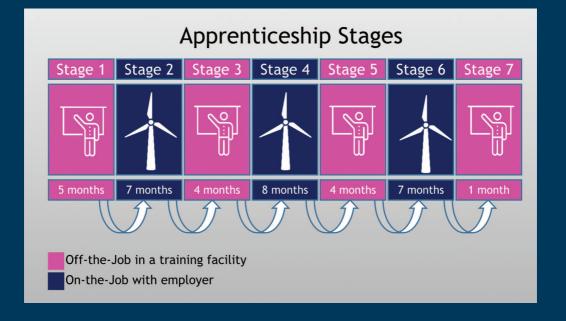


#### PROGRAMME STRUCTURE

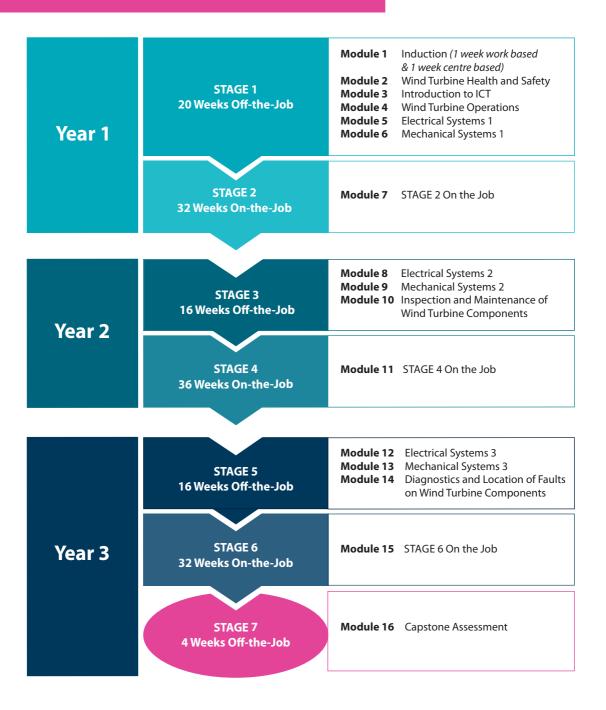
Apprentices will be trained in a progressive manner and will get to put their skills into practice during both on and off the job training stages.

On successful completion, the apprentice will be fully competent in the role of a Wind Turbine Maintenance Technician.

The following stages will be completed as part of the WTMT Apprenticeship:



#### 3 YEAR PROGRAMME



#### ENTRY REQUIREMENTS

- At least 18 years of age
- QQI Level 4 Major Award (or equivalent), or at least 3 years trade related experience.
- Pass Grade in Maths at Level 3 (or equivalent).
- B2 Level of English Language proficiency.
- Ability to work at heights of up to 100m is essential.
- Excellent colour vision is essential
- Pass a medical fitness to work assessment

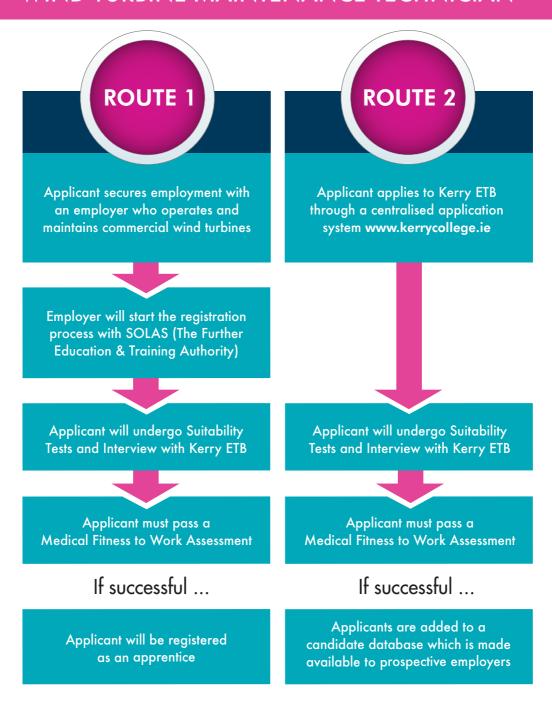
#### IS IT FOR ME?

- Good level of physical fitness and enjoy physical activity and work.
- Safety focused.
- Interest in energy sustainability and efficiency.
- Solid literacy, verbal and numeracy skills.
- Ability to plan and prepare work
- · Good analytical and problem solving skills
- · Good computer skills
- Good hand/eye co-ordination, manual dexterity and spatial aptitude.
- Good interpersonal skills.
- · Ability to work independently and as part of a team

#### Non-Standard Entry

In a case where an applicant does not meet the educational requirements specified above, they must satisfactorily complete an informative panel interview facilitated by the Programme Manager.

# HOW TO BECOME AN APPRENTICE WIND TURBINE MAINTENANCE TECHNICIAN



#### LEARNING ENVIRONMENT

#### **OFF-THE-JOB**

Apprentices will learn theory in a classroom environment and practice their skills in a state of the art simulated wind turbine environment.

- Kerry ETB's bespoke training facility is equipped with two state of the art wind turbines where apprentices will learn inspection, maintenance, repair and fault finding skills on authentic wind turbine components. These turbines will present specific situations and cases that may occur during the operation of a wind farm and apprentices will be able to test real life situations and concepts acquired during the different training modules.
- Kerry ETB's 23 meter training tower and high quality climbing equipment
  offers excellent preparation for real-life situations where apprentices will learn
  how to climb and undertake work safely at heights whilst also learning how to
  competently carry out rescues for wind turbines, all under the supervision of
  qualified and experienced instructors.
- Kerry ETB's advanced Nacelle Training system teaches apprentices how wind turbines are operated and maintained. Future wind turbine technicians will be challenged by this complex electronic system while learning on a simulated model of how mechanical energies are converted to electricity using mechanical, electrical and hydraulic components.

#### **ON-THE-JOB**

Each year of the apprenticeship, the apprentices will spend over 50% of their time on the job with their employer. Apprentices will be supported by a dedicated and trained workplace mentor who will facilitate the apprentice's learning in the workplace by shadowing, coaching, observing and guiding.

During the work-based stages the apprentice will have the opportunity to hone their skills and complete maintenance and fault finding tasks in a real world working environment while building up a level of experience working alongside mature and skilled members of the occupation.



### **USEFUL LINKS**

For more information on the Wind Turbine Maintenance Technician (WTMT) Apprenticeship, visit our website: **www.kerrycollege.ie** or email info@kerrycollege.ie

For more information on Apprenticeship as a career pathway, visit the Generation Apprenticeship website: **www.apprenticeship.ie** 

For information on Kerry Education and Training Board, which is the Co-ordinating Provider of the Wind Turbine Maintenance Technician (WTMT) Apprenticeship, visit the Kerry ETB website: **www.kerryetb.ie** 



"Qualified Wind Turbine Maintenance Technicians are in high demand. Work is readily available in a range of Irish and European companies who operate in the domestic and European wind energy market..."



of Further Education & Training

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