

# GWO BTT MECHANICAL



## DESCRIPTION OF THE COURSE

GWO Basic Technical Training (BTT) Mechanical course is yet another course intended for existing or potential Wind Turbine Technicians seeking proficiency in the mechanical aspects of a wind turbine generator. By the end of the two-day training, candidates will be proficient in the main components, mechanical systems, and operations of wind turbines. They will also be taught cooling and lubrication systems as well as manual tightening and measuring of tools and the use of devices like hydraulic torque wrenches and tension tools.



## TARGET GROUP

GWO BTT Mechanical Module is primarily intended for future and/or existing Wind Turbine Technicians, who are going to deal with mechanical part of Wind Turbine Generators.



## COURSE CONTENTS

The GWO BTT Mechanical Module covers the following topics:

- Mechanical Introduction
- Mechanical Safety
- The principles of bolted and welded connections
- Use of manual tightening and measuring tools
- Hydraulic Torque and Tension
- Gearbox
- Braking system
- Yaw System
- Cooling System
- Lubrication System



## OBJECTIVES OF THE COURSE

### Knowledge:

- Main components, mechanical systems, operation of Wind Turbines
- Risks and hazards associated with mechanics
- Importance of appropriate isolation/locking techniques (e.g. Lock Out Tag Out)
- Recognize bolts marking in the metric system
- Principles of bolted and welded connections and their inspection types
- Principles of gearbox
- Function of brake systems
- Function and inspection of yaw systems
- Function of cooling systems
- Function of lubrication systems

### Proficiency:

- Manual tightening and measuring tools Correct use of hydraulic torque wrenches and tension tools
- Correct measurement and recognize of bolts threads
- Correct use of indicators for alignments
- Inspection of brake systems
- Inspection of cooling systems
- Inspection of lubrication systems

## APPROVAL

Global Wind Organisation (GWO).



## ENTRY STANDARDS

Trainees wishing to enter this course should be medically fit and capable of fully participating.



## DURATION OF THE TRAINING COURSE

2 working days.

