

# Module **BTTE** Electrical

## *BTT Electrical*

BTTE (9 h 55 min)



**Aim:** The aim of this BTT Electrical Module is to give the participants the knowledge and skills to carry out basic electrical tasks (supervised by an experienced technician), using safe working procedures and the correct PPE.

### PROGRAM: BTTE Basic Technical Training Electrical

- 1 Introduction to the training
2. Introduction to electricity
  - 2.1 Direct current
  - 2.2 Ohm's Law
  - 2.3 Alternating current
  - 2.4 Alternating current and direct current
3. Electrical safety
  - 3.1 Why electrical safety?
  - 3.2 Low and high voltage
  - 3.3 PE and GFCI/RCD
  - 3.4 Stored energy
  - 3.5 Static electricity
  - 3.6 Safety signs
  - 3.7 Types of PPE
  - 3.8 The importance of appropriate isolation
4. Electrical components
  - 4.1 Resistors
  - 4.2 Batteries
  - 4.3 Switches
  - 4.4 Contactors
  - 4.5 Relays
  - 4.6 Diodes
  - 4.7 Bridge rectifiers
  - 4.8 Capacitors
  - 4.9 Transformers
  - 4.10 Generators and motors
  - 4.11 Fuses and circuit breakers
  - 4.12 Processor control systems
5. Sensors
  - 5.1 Introduction to sensors
  - 5.2 Wind sensors
  - 5.3 Temperature sensors
  - 5.4 Position sensors
  - 5.5 Other sensors
  - 5.6 Diodes
  - 5.7 Bridge rectifiers
  - 5.8 Capacitors
  - 5.9 Transformers
  - 5.10 Generators and motors
  - 5.11 Fuses and circuit breakers
  - 5.12 Processor control systems
6. Electrical circuits
  - 6.1 Symbols and diagrams
  - 6.2 Assembly of an electrical circuit
7. Electrical measuring instruments
  - 7.1 Symbols and settings on electrical measuring instruments
  - 7.2 How to measure with electrical measuring instruments
  - 7.3 Measuring points

8. Summary and theoretical test
  - 8.1 Summary
  - 8.2 Theoretical test
9. Training review
  - 9.1 Training review
  - 9.2 Feedback session

#### BTTE Module (BTT Electrical)

**Duration:** 9 h 55 min (1.5 days)

**BTTE Program :** Sections 1 to 9

**Maximum students:** 12 people per Edition.

#### Certificate validity:

**Permanent** (the company may require re-certification if no electrical work is carried out for an extended period of time).

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