

1. Module details

Module name

Occupational Health and Safety

Suggested structured learning time

A learner possessing the prerequisite skills and knowledge should achieve the module purpose in 18 to 20 hours.

Module code

NBB002.1

Discipline code

0703110

2. Module purpose

This module provides Learners with the fundamental principles of Occupational Health and Safety. They will learn how hazards risks are dealt with in the workplace and the basic principles of electrical rescue and CPR.

3. Learning pathway

Intended use in the structured learning program

This module is intended to supplement orientation to electrical/electronic installation work. In particular it applies to those entering the work industry under a formal training.

Therefore before undertaking this module a Learner should have a general understanding of the work environment and the need to work safely.

Recommended prerequisites

For the most effective learning this module should be undertaken in the initial stage of a formal training program.

4. Relationship to competency standards

This module provides part of the underpinning knowledge and skills in the 'Evidence Guide' of specific units of competency in the National Electrotechnology Training Package and provides similar support, where mapped, to equivalent units in the National Metals and Engineering Competency Standards. For details refer to the module to unit maps, available from EEQSBA.

This module supports the development of essential capabilities required for electrical licensing.

5. Content

1. Legal requirements

- Aims and objectives of legislation
- Responsibilities, rights and obligations
- Safety committees
- Powers of inspectors

2. Requirements for personal safety
 - Safety precautions
 - Potential hazards
 - Sources of pollution
3. Workplace hazards
 - Safety checks within the workplace
 - Safety checklists
 - Identification of potential workplace hazards
 - Reporting potential workplace hazards
 - Preventative measures
4. Working with electrically operated tools and equipment
 - Causes of electrical accidents
 - Working safely with electricity
 - Protective devices
 - Isolation
5. Rescue from a live electrical situation
6. Emergency first aid/resuscitation
 - Procedures for performing emergency first aid and resuscitation from an electric shock victim CPR

6. Assessment strategy

Assessment methods

Assessment should be progressive reflecting a holistic approach to ensure the module purpose is met. To assist in ensuring validity, reliability and fairness assessment instruments should include practical exercises, assignments and written tests consisting of a number of item types, such as multiple choice, short answer and problem solving.

Conditions of assessment

Normally learning and assessment will take place in a formal learning environment.

7. Learning outcome details

Learning outcome 1

Explain the basic legal requirements covering occupational health and safety in the workplace.

Assessment criteria

- 1.1 List general aims and objectives of the relevant state or territory legislation relating to OH&S.

	1.2	List employer and employee responsibilities, rights and obligations.
	1.3	State major functions of safety committees and representatives.
	1.4	List the powers give to Occupational Health and Safety Inspectors.
Learning outcome 2		List the requirements for personal safety in the workplace.
Assessment criteria	2.1	Describe the safety precautions that are required to ensure personal safety in the workplace.
	2.2	Describe potential hazards in relation to improper industrial housekeeping.
	2.3	Describe sources of pollution in an engineering environment and outline control measures.
Learning outcome 3		Carry out a workplace safety check, identify potential workplace hazards and suggest measures for accident prevention.
Assessment criteria	3.1	Design a safety checklist for a typical workplace environment.
	3.2	Conduct a “safety check” within a typical workplace environment.
	3.3	Identify potential workplace hazards during a safety check within a typical workplace environment.
	3.4	Report on a suitable “checklist”, the findings of a safety check conducted within a typical workplace environment.
	3.5	List suitable methods of prevention of safety hazards within a typical workplace environment.
Learning outcome 4		Develop the knowledge and skills that are essential for working safely with electrical tools or equipment.
Assessment criteria	4.1	List the causes of electrical accidents and state the effects that electric shock can cause.
	4.2	Describe the purpose of circuit protection devices, such as fuses, circuit breakers and Residual Current Devices (RCDs).

	4.3 State the need for ensuring the (safe) isolation of an electrical supply.
Learning outcome 5	Describe the method of rescuing a person in contact with live electrical conductors or equipment.
Assessment criteria	5.1 Describe the emergency procedures for the rescue of an electric shock victim.
Learning outcome 6	Describe the essential requirements of emergency first aid for an electric shock victim and perform CPR on a mannequin.
Assessment criteria	6.1 Describe how to administer first aid (including CPR) on an electric shock victim. 6.2 Demonstrate the correct procedures for performing CPR on a mannequin.
8. Delivery of the module	
Delivery strategy	Delivery strategies must be suitable for learning both theoretical and practical aspects described in the module purpose. It is considered that the most effective method to achieve this is by integration of theory and practice where learners learn by experimentation, research and reports. It is recommended that learning and assessment be facilitated in a holistic manner that may require a learning outcome sequence other than that indicated in the module.
Resource requirements	Resources should be sufficient for learners to carry out learning activities on an individual basis. Useful references include: Jenneson, J. R. 1996, <i>Electrical Principles for Electrical Trades</i> , 4 th Ed., McGraw Hill, Sydney Pethebridge, K., and Neeson, I., 2001, <i>Electrical Wiring Practice</i> , 6 th Ed, Vol. 1, McGraw Hill, Sydney. Standards Australia, Standards New Zealand: <i>AS/NZS 4836 Safe working practice on low-voltage electrical installations</i> WorkCover Codes of Practice and Regulation

**Occupational health
and safety requirements**

Where this module is used in an approved Traineeship or Apprenticeship program learners should be advised to obtain, where available, respective EEQSBA¹ *User Guides* (these outline in detail what training and work performance the Learner is required to undertake for the program)

A safe and healthy environment will be provided for learners and teachers. Safety procedures for the particular learning facilities shall be followed as part of the learning / teaching activity and assessment.

¹ EEQSBA – ElectroComms and EnergyUtilities Qualifications Standards Body of Australia Ltd.