UEENEEE078B Contribute to risk management in electrotechnology systems

Release: 2

UEENEEE078B Contribute to risk management in electrotechnology systems

Modification History

Not Applicable

Unit Descriptor

Unit Descriptor	**1**)
	1.1) **Descriptor**
	This unit covers contributing to the management of risk in electrotechnology systems related to OHS, environment, resources and financial viability. It encompasses contributing to the identification of electrotechnology systems risks; and risk events, the likelihood and consequences of such events, evaluating risk, risk management planning and mitigation of risk.

Application of the Unit

Application of the Unit	**4**)
	This unit is intended for competency development entry-level employment based programs incorporated in approved contracts of training. It is intended to apply to any formal recognition for this standard at the aligned AQF 5 level or higher.

Licensing/Regulatory Information

1.2) License to practice

The skills and knowledge described in this unit do not require a license to practice in the workplace. However, practice in this unit is subject to regulations directly related to occupational health and safety and, where applicable contracts of training such as apprenticeships or approved competency development programs.

Pre-Requisites

Prerequisite Unit(s)   **2**)

                    2.1) Competencies

                    There are no prerequisite competencies for this unit.

Employability Skills Information

Employability Skills   **3**)

                    This unit contains Employability Skills

                    The required outcomes described in this unit of competency contain applicable facets of Employability Skills. The Employability Skills Summary of the qualification in which this unit of competency is packaged will assist in identifying Employability Skill requirements.

Elements and Performance Criteria Pre-Content

6) Elements describe the essential outcomes of a unit of competency	Performance criteria describe the required performance needed to demonstrate achievement of the Element. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT		PERFORMANCE CRITERIA	
1	Contribute to the identification of risks and development of management strategies	1.1	OHS policies, processes and procedures for a given work area are identified, obtained and understood.
		1.2	The extent of a program or project is established from design brief, specification and/or other relevant documentation and from discussions with appropriate person(s).
		1.3	Potential, perceived and actual risk events and electrotechnology systems risks are identified, documented and analysed, in consultation with appropriate other person(s) in accordance with organisation policies and procedures.
		1.4	Risk management methods, tools and techniques are used to assist in the analysis and reporting of identified risk events.
		1.5	Risk management techniques are used to analyse electrotechnology systems risks and risk events, assess options and recommend risk approaches to appropriate person(s) for approval.
		1.6	Draft risk management processes and procedures are developed and communicated with all stakeholders to ensure understanding of management of risk factors.
		1.7	Risk management processes and procedures are submitted to appropriate person(s) for approval in accordance with established procedures.
		1.8	OHS risk control measures are submitted for incorporation in the risk management strategies in compliance with organisation's OHS policy and regulations.
2	Contribute to the implementation and monitoring of risk management strategies.	2.1	Risk management processes and procedures are produced and submitted for incorporation into work and project plans to ensure common approach achieving outcomes.
		2.2	Activities are monitored against programs and

ELEMENT		PERFORMANCE CRITERIA	
			projects plans to identify and responses submitted to appropriate person(s) for approval for variations in accordance with risk management processes and established procedures.
		2.3	Agreed risk responses are revised for implementation and plans modified following approval to reflect changing project objectives in an environment of uncertainty, in accordance with risk management processes and established procedures..
3	Contribute to the evaluation of risk management strategies.	3.1	Project outcomes are reviewed with appropriate person(s) to determine effectiveness of risk management processes and established procedures.
		3.2	Risk issues and recommended improvements are identified, documented and submitted to appropriate person(s) for approval to incorporate them into ongoing programs and future program and project and plans.
		3.3	Outcomes are documented and recorded/stored in accordance established procedures.

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

7) This describes the essential skills and knowledge and their level, required for this unit.

Evidence shall show that knowledge has been acquired of safe working practices and contributing to the managing of risk in electrotechnology activities.

All knowledge and skills detailed in this unit should be contextualised to current industry practices and technologies.

KS01-EE078B   **Principles of risk management, applications, practices and techniques**

Evidence shall show an understanding of principles of risk management, applications, practices and techniques to an extent indicated by the following aspects:

T1   Risk Management principles encompassing:

- models including reasonable and practicable
- hazard and risk
- safety and health
- safety risk including Injury Causation Model and Error Agencies
- health Risk including Occupational Hygiene Model
- hierarchy of Controls (Engineering and Administrative)

T2   Principles of risk management planning

T3   Principles of risk Assessment - planning and prioritisation

T4   Principles of risk mitigation – handling and monitoring

T5   Principles of risk management procedures encompassing:

- OHS practices – general, training, manual handling, and specific technical/occupational, organisational procedures
- OHS networks
- Hazard control and reporting
- Incident notification
- Emergency procedures and first aid

Evidence Guide

EVIDENCE GUIDE

EVIDENCE GUIDE

9) The evidence guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for this Training Package.

The Evidence Guide forms an integral part of this unit. It must be used in conjunction with all parts of the unit and performed in accordance with the Assessment Guidelines of this Training Package.

Overview of Assessment	**9.1**)
	Longitudinal competency development approaches to assessment, such as Profiling, require data to be reliably gathered in a form that can be consistently interpreted over time. This approach is best utilised in Apprenticeship programs and reduces assessment intervention. It is the industry-preferred model for apprenticeships. However, where summative (or final) assessment is used it is to include the application of the competency in the normal work environment or, at a minimum, the application of the competency in a realistically simulated work environment. It is recognised that, in some circumstances, assessment in part or full can occur outside the workplace. However, it must be in accordance with industry and regulatory policy.
	Methods chosen for a particular assessment will be influenced by various factors. These include the extent of the assessment, the most effective locations for the assessment activities to take place, access to physical resources, additional safety measures that may be required and the critical nature of the competencies being assessed.
	The critical safety nature of working with electricity, electrical equipment, gas or any other hazardous substance/material carries risk in deeming a person competent. Sources of evidence need to be 'rich' in nature to minimise error in judgment.
	Activities associated with normal everyday work have a bearing on the decision as to how much and how detailed the data gathered will contribute to its 'richness'. Some skills are more critical to safety and operational requirements while the same skills may be more or less frequently practised. These points are raised for the assessors to consider when choosing an assessment method and developing assessment instruments. Sample assessment instruments are included for Assessors in the Assessment Guidelines of this Training Package
Critical aspects of evidence required	**9.2**)
	Before the critical aspects of evidence are considered all

EVIDENCE GUIDE

to demonstrate competency in this unit	prerequisites must be met.

Evidence for competence in this unit shall be considered holistically.   Each element and associated performance criteria shall be demonstrated on at least two occasions in accordance with the 'Assessment Guidelines - UEE07'.   Evidence shall also comprise:

- A representative body of work performance demonstrated within the timeframes typically expected of the discipline, work function and industrial environment. In particular this shall incorporate evidence that shows a candidate is able to:

    - Implement Occupational Health and Safety workplace procedures and practices, including the use of risk control measures as specified in the performance criteria and range statement

    - Apply sustainable energy principles and practices as specified in the performance criteria and range statement

    - Demonstrate an understanding of the essential knowledge and associated skills as described in this unit. It may be required by some jurisdictions that RTOs provide a percentile graded result for the purpose of regulatory or licensing requirements.

    - Demonstrate an appropriate level of skills enabling employment

    - Conduct work observing the relevant Anti Discrimination legislation, regulations, polices and workplace procedures

- Demonstrated consistent performance across a representative range of contexts from the prescribed items below:

    - Contribute to risk management in electrotechnology systems as described in 8) and including:

        A   Contributing to identifying potential, perceived and actual risk events.

        B   Using risk management methods, tools and techniques to assist in the analysis and reporting.

        C   Contributing to incorporation of risk management processes and procedures into program and project plans.

        D   Contributing to the monitoring and responding to electrotechnology systems and risk events

EVIDENCE GUIDE

effectively.

E   Identifying improvements and documenting recommendation for their inclusion in ongoing or future programs and projects.

F   Dealing with unplanned events by drawing on essential knowledge and skills to provide appropriate solutions incorporated in a holistic assessment with the above listed items.

Note:
Successful completion of relevant vendor training may be used to contribute to evidence on which competency is deemed. In these cases the alignment of outcomes of vendor training with performance criteria and critical aspects of evidence shall be clearly identified.

Context of and specific resources for assessment	**9.3**) This unit should be assessed as it relates to normal work practice using procedures, information and resources typical of a workplace. This should include: • OHS policy and work procedures and instructions. • Suitable work environment, facilities, equipment and materials to undertake actual work as prescribed in this unit. These should be used in the formal learning/assessment environment. Note: Where simulation is considered a suitable strategy for assessment, conditions for assessment must be authentic and as far as possible reproduce and replicate the workplace and be consistent with the approved industry simulation policy. The resources used for assessment should reflect current industry practices in relation to contributing to risk management in electrotechnology systems.

EVIDENCE GUIDE

Method of assessment	**9.4**)
	This unit shall be assessed by methods given in Volume 1, Part 3 'Assessment Guidelines'.
	Note:
	Competent performance with inherent safe working practices is expected in the Industry to which this unit applies. This requires that the specified essential knowledge and associated skills are assessed in a structured environment which is primarily intended for learning/assessment and incorporates all necessary equipment and facilities for learners to develop and demonstrate the essential knowledge and skills described in this unit.
Concurrent assessment and relationship with other units	**9.5**)
	For optimisation of training and assessment effort, competency development in this unit may be arranged concurrently with unit:
	UEENEEH041B Manage electronics/computer systems projects

Range Statement

RANGE STATEMENT

8) This relates to the unit as a whole providing the range of contexts and conditions to which the performance criteria apply. It allows for different work environments and situations that will affect performance.

This unit shall be demonstrated in contributing to the management of risk in electrotechnology systems related to OHS, environment, resources and financial viability with the following attributes:

- electrotechnology systems risks identification
- risk events
- likelihood and consequences of risk events
- evaluating risk
- risk management planning
- mitigation of risk for a program or an individual project
- technical requirements documentation

Generic terms used throughout this Vocational Standard shall be regarded as part of the Range Statement in which competency is demonstrated. The definition of these and other terms that apply are given in Volume 2, Part 2.1.

Unit Sector(s)

Not Applicable

Competency Field

2.2) Literacy and numeracy skills

Participants are best equipped to achieve competency in this unit if they have reading, writing and numeracy skills indicated by the following scales. Description of each scale is given in Volume 2, Part 3 'Literacy and Numeracy'

Reading   5   Writing   5   Numeracy   5

Custom Content Section

Competency Field   **5**)

Electrotechnology