Australian Government

UEENEED153A Set up, configure and test biometric devices

Release 2

INDUSTRY SKILLS COUNCILS
Creating Australia's Future

UEENEED153A Set up, configure and test biometric devices

Modification History

Not applicable.

Unit Descriptor

Unit Descriptor **1) Scope:**

1.1) Descriptor

This unit covers setting up and testing various biometric devices as implemented in the field of biometric measurements. This is achieved through the installing, setting up, configuring and testing biometric devices in accordance with requirements. It encompasses safe working practices, following written and oral instructions and procedures, applying knowledge of biometric devices then installing and testing their performance while documenting outcomes.

Application of the Unit

Application of the Unit **2)**

This unit applies to any recognised development program that leads to the acquisition of a formal award at AQF level 3 or higher.

Licensing/Regulatory Information

License to practice **3)**

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.

Pre-Requisites

Prerequisite Unit(s) **4)**

Competencies **4.1)**

Granting competency in this unit shall be made only after competency in the following unit(s) has/have been confirmed.

UEENEED102A	Assemble, set up and test computing devices
UEENEED146A	Set up and configure basic local area network (LAN)
UEENEEE101A	Apply Occupational Health Safety regulations, codes and practices in the workplace

Literacy and numeracy skills **4.2)**

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

Employability Skills Information

Employability Skills **5)**

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 competency standard unit	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 Prepare to set up and test biometrics devices	1.1	OHS processes and procedures for a given work area are identified, obtained and understood.
	1.2	Established OHS risk control measures and procedures are followed in preparation for the work.
	1.3	The extent of device set up and configuration work is determined from job specifications and in consultation with appropriate person(s).
	1.4	Appropriate personnel are consulted to ensure the work is coordinated effectively with others involved on the work site.
	1.5	Hardware, software and materials needed for the work are obtained in accordance with established procedures and checked against job requirements.
	1.6	Tools and testing devices needed to carry out the work are obtained and checked for correct operation and safety.
2 Set up and test biometric devices	2.1	OHS risk control measures and procedures for carrying out the work are followed.
	2.2	Circuits/equipment are checked as being isolated where necessary in strict accordance OHS requirements and procedures.
	2.3	Layout of biometric system network hardware, cabling and outlets is determined from job specifications or in consultation with appropriate

ELEMENT	PERFORMANCE CRITERIA	
		person(s)
	2.4	Hardware is set up in accordance with network requirements (See Note 1)
	2.5	Biometric devices are set up and configured in accordance with network requirements.
	2.6	Biometric devices on a network are tested and anomalies identified and corrected.
	2.7	Biometric device failures are responded to and rectified in accordance with requirements.
	2.8	Essential knowledge and associated skills required to set up and test biometric devices are applied to ensure work is carried out efficiently without waste of materials or damage to apparatus and the surrounding environment or services and using sustainable energy practices.
	2.9	Identified causes of reported problems are rectified and biometric devices are tested in accordance with established procedures.
	2.10	Unexpected situations are dealt with safely and with the approval of an authorised person.
	2.11	Biometric device installation and set-up are carried out efficiently without waste of materials or damage to apparatus and the surrounding environment or services and using sustainable energy practices.
3 Complete set up, test and report.	3.1	OHS risk control work completion measures and procedures are followed.
	3.2	Work area is cleaned and made safe in accordance with established procedures.
	3.3	Biometric device installation and maintenance records are maintained in accordance with established procedures.
	3.4	Service report is completed and forwarded to appropriate person(s) in accordance with established procedures.

ELEMENT	PERFORMANCE CRITERIA
	Note 1: Connection of equipment may include both plug connected power supply and network

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

8) 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 setting up and testing biometric devices.

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

KS01-ED153A Biometric devices

Evidence shall show an understanding of biometric devices to an extent indicated by the following aspects:

T1 Biometrics techniques and processes including definitions, terminology, advantages, disadvantages and applications

Note.

Includes basic principles of database design, software techniques, classifier combination, feature extraction, feature enhancement, chain code methods, image analysis, biometric transforms, matching techniques, verification and identification, biometric tools, satistical measures of biometrics

T2 Biometric device tools, software and testing techniques

T3 Physical interaction with biometric devices including operation and installation of biometric devices examples are iris scanners, hand scanners voice recognition apparatus, facial recognition devices and like equipment

T4 Legal aspects of biometrics

- Australian laws impacting on biometrics security and privacy legislation.
- Australian standards

Evidence Guide

EVIDENCE GUIDE

9) This provides essential advice for assessment of the unit and must be read in conjunction with the performance criteria and the range statement of the unit and the Training Package Assessment Guidelines.

The Evidence Guide forms an integral part of this unit. It must be used in conjunction with all parts of this 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 to demonstrate competency in this unit **9.2)**

Before the critical aspects of evidence are considered all prerequisites shall 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 – UEE11'. 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:
  - Set up and test biometric devices as described in 8) and including:

A Placing equipment in accordance with regulatory and customer requirements.

B Applying knowledge of relevant legislation, standards and/or codes of practice pertaining to security and privacy associated with biometric devices

C	Selecting appropriate equipment.
D	Entering functions and parameters in accordance with requirements.
E	Testing and verifying functional operation of device(s).
F	Responding to system anomalies to effect functionality of device(s) according to requirements.
G	Completing necessary documentation including handing over equipment maintenance and operating instructions documents to the customer.
H	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 setting up and testing biometric devices.

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 assessment 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)

There are no concurrent assessment recommendations for this unit.

The critical aspects of occupational health and safety covered in unit UEENEEE101A and other discipline specific occupational health and safety units shall be incorporated in relation to this unit.

Range Statement

RANGE STATEMENT

10) 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 relation to setting up and testing four different types of biometric device.

Note.

Examples of biometric devices are iris recognition scanners, palm print scanners, signature readers, voice recognition devices, data capture devices.

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

Competency Field **11)**

Computer Systems