



Australian Government

UEECS0002 Analyse and implement biometric measuring techniques and applications

Release: 1

UEECS0002 Analyse and implement biometric measuring techniques and applications

Modification History

Release 1. This is the first release of this unit of competency in the UEE Electrotechnology Training Package.

Application

This unit involves the skills and knowledge required to analyse and implement biometric measuring techniques and applications.

It includes analysing and implementing the various biometric techniques and applications implemented in the field of biometric measurements and evaluating biometric system from enrolment phase. It also includes working safely, following instructions, evaluating performance and documenting outcomes.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Not applicable

Competency Field

Computer Systems

Unit Sector

Electrotechnology

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Prepare to analyse and implement biometric techniques and applications

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

1.1 Work health and safety (WHS)/occupational health and safety (OHS) requirements and workplace procedures for a given work area are identified, obtained and applied

- 1.2 Technical requirements for the design and system rollout in criminal, civil and commercial settings are identified
 - 1.3 Scope of biometric system work requirements for implementation and system rollout are identified in accordance with workplace procedures
 - 1.4 Existing and planned technical and environmental requirements are evaluated and documented in accordance with workplace procedures
 - 1.5 Work team/group is assembled of relevant persons in accordance with work requirements and workplace procedures
 - 1.6 Activities are planned in accordance with workplace procedures for timelines and in consultation with others involved
 - 1.7 Correct operation and safety of software, tools, equipment and testing devices required to carry out work are obtained and checked in accordance with relevant industry standards
 - 1.8 Work supervisor and/or customer/s are consulted to determine functions and parameters of the system and confirmation documented in accordance with workplace procedures
- 2 **Analyse and implement biometric systems**
 - 2.1 Technology and implementation processes are applied with biometric systems in analysing and implementing biometric techniques and applications in accordance with workplace procedures
 - 2.2 Performance of landline versus mobile telephony in association with biometric systems is analysed and evaluated in accordance with workplace procedures
 - 2.3 Safety, functional and budgetary requirements are incorporated in the installation design plan, analysed and evaluated in accordance with workplace procedures and relevant industry standards
 - 2.4 Hardware and software required for biometric system are analysed and implemented in accordance with the design plan and workplace procedures
 - 2.5 Relevant industry standards and/or codes of practice are

used to evaluate compliance in accordance with workplace procedures and relevant industry standards

- 2.6** Practical aspects and limitations of biometric system implementation are demonstrated through the use of multi-biometrics
 - 2.7** Location of device/s in the installation of the biometric system is tested for correct operation of system functions and documented in accordance with workplace procedures
 - 2.8** Unplanned situations are responded to in accordance with relevant industry standards and workplace procedures
- 3 Report on biometric system analysis and implementation**
- 3.1** Hardware and software required for the biometric system are analysed in accordance with WHS/OHS requirements, relevant industry standards and workplace procedures
 - 3.2** Activities are planned in accordance with workplace procedures for timelines and in consultation with others involved
 - 3.3** Implemented system analysis techniques of biometric systems are used to identify system malfunctions
 - 3.4** Issues/problems are analysed to provide effective solutions in accordance with workplace procedures
 - 3.5** Work completion is documented and relevant person/s notified in accordance with workplace procedures

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Non-essential conditions may be found in the UEE Electrotechnology Training Package Companion Volume Implementation Guide.

Analysing and implementing a biometric system must include at least two of the following features:

- analysis and evaluation development process
- target enrolment
- identification and verification
- system installation requirements
- software
- equipment requirements and instructions

Unit Mapping Information

This unit replaces and is equivalent to UEENEED154A Analyse and implement biometric measuring techniques and applications.

Links

Companion Volume implementation guides are found in VETNet - -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b8a8f136-5421-4ce1-92e0-2b50341431b6>

Assessment Requirements for UEECS0002 Analyse and implement biometric measuring techniques and applications

Modification History

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Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements, performance criteria and range of conditions on at least two separate occasions and include:

- analysing and implementing biometric techniques and applications
- analysing and implementing hardware and software required for biometric system
- applying relevant industry standards and/or codes of practice
- applying relevant work health and safety (WHS)/occupational health and safety (WHS/OHS) requirements, including using risk control measures
- assembling work group/team
- dealing with unplanned situations
- documenting and recording results in accordance with workplace procedures
- evaluating technology techniques and applications for biometric use
- identifying technical requirements for the design and system rollout in criminal, civil and commercial settings
- incorporating safety, functional and budgetary requirements into installation design plan, analysis and evaluation
- preparing to analyse and implement biometric systems
- reporting on biometric system analysis and implementation
- testing and documenting correct operation of system functions.

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements, performance criteria and range of conditions and include knowledge of:

- forms of automatic data capture, advantages and disadvantages
- functional design and construction of a simple system
- interfacing issues between systems involving different hardware and software
- problem-solving techniques
- relevant criminal, civil and commercial settings
- relevant hardware, software, tools, equipment and testing devices

- relevant industry standards
- relevant manufacturer specifications and operating instructions
- relevant job safety assessments or risk mitigation processes
- relevant WHS/OHS legislated requirements
- relevant workplace budgets, timelines, policies and procedures
- relevant workplace documentation
- technical principles, parameters and processes underpinning each biometric system technology in identity and verification recognition
- typical selection, evaluation and testing criterion and methods of biometrics systems.

Assessment Conditions

Assessors must hold credentials specified within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must satisfy the Principles of Assessment and Rules of Evidence and all regulatory requirements included within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must occur in suitable workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in simulated suitable workplace operational situations that replicate workplace conditions.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Resources for assessment must include access to:

- a range of relevant exercises, case studies and/or simulations
- relevant and appropriate materials, tools, facilities and equipment currently used in industry
- resources that reflect current industry practices in relation to analysing and implementing a biometric system for in field use
- applicable documentation, including workplace procedures, equipment specifications, regulations, codes of practice and operation manuals.

Links

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