



Australian Government

ICTAIL401 Identify opportunities to apply artificial intelligence, machine learning and deep learning

Release: 1

ICTAII401 Identify opportunities to apply artificial intelligence, machine learning and deep learning

Modification History

Release	Comments
Release 1	This version first released with the Information and Communications Technology Training Package Version 8.0. Newly created unit of competency to address in-demand skills needs.

Application

This unit describes the skills and knowledge required to identify opportunities where artificial intelligence (AI), machine learning (ML) and deep learning (DL) can be applied to support the automation of work tasks and improve organisational productivity.

The unit applies to individuals who may work across a wide range of information and communications technology (ICT) roles, including support technicians, system administrators, programmers and cloud systems administration support workers.

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

Unit Sector

Artificial intelligence

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
1. Establish organisational AI, ML and DL objectives	1.1 Confirm work brief and tasks according to organisational policies and procedures 1.2 Confirm organisational goals for automating work tasks and improving productivity with required personnel 1.3 Identify existing organisational AI, ML and DL technologies and processes 1.4 Research and confirm application procedures for AI,

ELEMENT	PERFORMANCE CRITERIA
	ML and DL technologies according to work brief
2. Develop organisational recommendations for AI, ML and DL	2.1 Document AI, ML and DL options according to organisational requirements 2.2 Document advantages and disadvantages of AI, ML and DL technologies according to work brief 2.3 Identify and document implementation risks for AI, ML and DL technologies in consultation with required personnel 2.4 Explicitly reference selected AI, ML and DL technologies in required documentation
3. Finalise recommendations	3.1 Seek feedback from required supervisor on recommendations 3.2 Record and implement feedback across recommendations where required 3.3 Submit final recommendations to required personnel

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance but not explicit in the performance criteria.

Skill	Description
Reading	Interprets information in a range of workplace procedures essential to identifying organisational automation opportunities
Writing	Completes required documentation using organisational formats
Oral communication	Discusses ideas with required supervisors using appropriate language and responds clearly to enquiries
Problem solving	Applies problem-solving processes to identify actions required to support resolution of organisational problems
Initiative and enterprise	Identifies and follows organisational protocols and procedures

Unit Mapping Information

No equivalent unit. Newly created unit.

Links

Companion Volume Implementation Guide is found on VETNet - -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

Assessment Requirements for ICTAII401 Identify opportunities to apply artificial intelligence, machine learning and deep learning

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Performance Evidence

The candidate must demonstrate the ability to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including evidence of the ability to:

- report on at least one opportunity for each of the following technologies that may be applied in a workplace or organisation:
 - artificial intelligence (AI) technologies
 - machine learning (ML) technologies
 - deep learning (DL) technologies.

In the course of the above, the candidate must:

- make comparisons between the AI, ML and DL technologies
- apply required organisational policies and procedures.

Knowledge Evidence

The candidate must be able to demonstrate knowledge to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including knowledge of:

- functions and features of industry-recognised AI, ML and DL technologies used in organisations
- tasks and processes commonly automated in similar organisations, including:
 - creating and managing email campaigns
 - using chatbots and automated messaging platforms
 - analysing trends within datasets
 - hiring and recruitment
 - employee help desk support services
 - generating customer support logs and tickets

- key advantages and disadvantages of AI, ML and DL technologies
- key implementation risks for AI, ML and DL technologies
- organisational formats for documentation and reports
- organisational policies and procedures, and legislative requirements relating to work tasks.

Assessment Conditions

Skills in this unit must be demonstrated in a workplace or simulated environment where the conditions are typical of those in a working environment in this industry.

This includes access to:

- industry-recognised AI, ML and DL technologies that may be implemented
- opportunities for interaction with others
- work brief and organisational policies and procedures required to demonstrate the performance evidence.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

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