



Australian Government

**Assessment Requirements for ICTAI503
Build natural language processing models
and pipelines**

Release: 1

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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.

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:

- build at least two natural language processing (NLP) models and pipelines.

In the course of the above, the candidate must:

- produce documentation for all performed work tasks in required organisational formats
- 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:

- requirements and techniques for analysing NLP models and pipelines, including:
 - natural language understanding (NLU)
 - natural language generation (NLG)
- key functions and features of components used to build NLP models and pipelines, including:
 - tagging
 - data sources
 - tokenizers
 - boundaries
 - language fields and blocks
 - acronyms
 - speech prediction

- parameters
- common types of morphological, lexical, syntactic and semantic analysis, disclosure integration and pragmatic analysis
- key techniques and features of text processing, including:
 - filtering stop words
 - lemmatising texts
- procedures for securing and saving NLP pipelines
- industry-recognised software and resources required to build NLP pipelines
- 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:

- software and resources required to build NLP pipelines
- 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

Companion Volume Implementation Guide is found on VETNet - -

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