



Australian Government

AHCNRM507 Manipulate and analyse data within geographic information systems

Release: 1

AHCNRM507 Manipulate and analyse data within geographic information systems

Modification History

Release	TP Version	Comment
1	AHCv1.0	Initial release

Application

This unit of competency describes the skills and knowledge required to extract, compare and manipulate data within a Geographic Information System (GIS) in response to customer requests.

This unit applies to those who undertake data analysis within a range of geographic information systems for the purpose of managing natural resources. They are likely to undertake a range of specialised skilled activities, exercise autonomy and take responsibility for complex work.

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

Pre-requisite Unit

Nil.

Unit Sector

Natural Resource Management (NRM)

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. Develop procedures for manipulation and analysis of data	1.1 Specify desired data format based on job requirements 1.2 Specify parameters for the manipulation of data sets 1.3 Explain the procedure and rationale for development in new documented procedures
2. Establish models required to provide	2.1 Evaluate applicability of existing tools, models, theories,

Element	Performance criteria
outcome	applications and solutions 2.2 Specify feasible parameters, equations and assumptions 2.3 Establish models required to provide specified outcome
3. Analyse data	3.1 Specify steps to be undertaken and computer operating systems and applications to be used to analyse and manipulate data 3.2 Consider restricting factors when selecting techniques for analysis 3.3 Isolate and retrieve data from its source 3.4 Interrogate data to ensure reliability 3.5 Prepare data for presentation media

Foundation Skills

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

Range of Conditions

Unit Mapping Information

This unit is equivalent to AHCNRM507A Manipulate and analyse data within geographic information systems.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72>

Assessment Requirements for AHCNRM507 Manipulate and analyse data within geographic information systems

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Performance Evidence

The candidate must be assessed on their ability to integrate and apply the performance requirements of this unit in a workplace setting. Performance must be demonstrated consistently over time and in a suitable range of contexts.

The candidate must demonstrate that they can extract, compare and manipulate data in response to customer requests.

The candidate must provide evidence that they can:

- develop and document suitable procedures for data collection, manipulation and analysis
- use or create appropriate models
- use operating systems and computer applications for data analysis and report writing, according to organisational requirements

Knowledge Evidence

The candidate must demonstrate knowledge of:

- database structures
- scripting and commands
- line instructions and programming
- operating systems used by enterprise for data analysis and storage, including:
 - UNIX
 - DOS
 - Windows
 - NT
- range of tools, models, theories, applications and solutions
- data analysis and manipulation techniques

Assessment Conditions

Assessors must satisfy current standards for RTOs.

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