Modification history

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| Release | Comments |
| Release 1 | This version released with AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 1.0. |

| AHCNRM507 | Manipulate and analyse data within geographic information systems - Recommend deleting and replacement with CPPSIS5064 |
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| 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. |
| Prerequisite Unit | Nil |
| Unit Sector | Natural Resource Management (NRM) |

| Elements | Performance Criteria |
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| 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 outcome | 2.1 Evaluate applicability of existing tools, models, theories, 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  This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria. | |
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| Skill | Description |
| [Skill] | * [Style to be applied is SI Bullet List 1 * Use sentence case (i.e. commence with upper case) for each bullet point but do not put a full stop at the end * See Guidelines for the skills to be described, the order in which to list them and hints on writing descriptions |
| [Skill] | * SI Bullet List 1 * SI Bullet List 1 |
| [Style to be applied in left column is SI Text[ | * SI Bullet List 1 * SI Bullet List 1] |

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| Unit Mapping Information | | | |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| AHCNRM507 Manipulate and analyse data within geographic information systems | AHCNRM507A Manipulate and analyse data within geographic information systems | [SI Text] | Equivalent unit |

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| Links | Companion Volumes, including Implementation Guides, are available at VETNet:  https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72 |

| TITLE | Assessment requirements for AHCNRM507 Manipulate and analyse data within geographic information systems |
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| Performance Evidence | |
| An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.  The candidate must demonstrate that they can extract, compare and manipulate data in response to customer requests.  There must be evidence that the individual has   * 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 |
| --- |
| An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes 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 |
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| Assessment of skills must take place under the following conditions:  If any of the first level dot points do not apply to this unit, then please delete the point completely, e.g. if no interactions are needed with people at all, then you would delete the relationships point and second level points.   * [physical conditions:] * [e.g. skills must be demonstrated in [a commercial kitchen/a racing stable/veterinary practice/vineyard] or an environment that accurately represents workplace conditions] * [resources, equipment and materials:] * [e.g. live horses] * [e.g. use of specific tools] * [e.g. use of specific items of personal protective equipment] * [specifications:] * [e.g. use of specific workplace documents such as policies, procedures, processes, forms] * [e.g. use of manufacturer’s operating instructions for specific equipment, machinery, etc.] * [e.g. access to specific safety data sheets] * [e.g. use of workplace instructions/job specifications/client briefs] * [access to specific legislation/codes of practice] * [relationships: (include only if the individual needs to interact with internal and/or external people during assessment of skills): * [e.g. client(s), customer(s)] * [e.g. team member(s), supervisor(s)] * [timeframes: (include only if time is an essential assessment condition) * [e.g. according to time specified in job sheet] * [e.g. within a specific time period] * [final point only ends with a full stop.]   Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.  Delete the following if there are no additional assessor requirements.  [In addition, the following specific assessor requirements apply to this unit:   * SI Bullet List 1 * SI Bullet List 1: * SI Bullet List 2.] |

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