



**Australian Government**

# **AHCAGB521 Select and use agricultural technology**

**Release: 1**

# AHCAGB521 Select and use agricultural technology

## Modification History

| Release   | Comments                                                                                                                 |
|-----------|--------------------------------------------------------------------------------------------------------------------------|
| Release 1 | This version released with AHC Agriculture, Horticulture, Conservation and Land Management Training Package Version 4.0. |

## Application

This unit of competency describes the skills and knowledge required to select and apply modern agricultural technology in production systems. It covers the recording and reporting of farm activities, mapping, farm and production planning, data collection and analysis.

Applications in agricultural science range from spatial information tools to the precision application of production inputs and growth models for the improvement of production.

This unit is applicable for land managers or advisors who have a role in managing or operating a land based production business or providing expert advice.

All work must be carried out to comply with workplace procedures, work health and safety legislation and codes, and sustainability practices.

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

## Pre-requisite Unit

Nil

## Unit Sector

Agribusiness (AGB)

## Elements and Performance Criteria

| Elements                                         | Performance Criteria                                                                                                                                                                        |
|--------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Elements describe the essential outcomes.</i> | <i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>                                                                                      |
| 1. Evaluate need for agricultural technology     | 1.1 Identify and evaluate organisational tasks and processes that could be supported by technological applications<br>1.2 Assess opportunities and limitations for operational improvements |

| Elements                                         | Performance Criteria                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Elements describe the essential outcomes.</i> | <i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>                                                                                                                                                                                                                                                                                                                                                                                                   |
|                                                  | <p>that may result from adopting specific technological applications</p> <p>1.3 Evaluate equipment, tools and resource requirements and select most appropriate options</p> <p>1.4 Evaluate cost-benefit of using technology</p> <p>1.5 Seek independent technical advice and sources of information as required</p> <p>1.6 Develop plan to incorporate use of technology to improve operational efficiency, productivity and sustainability</p>                                                         |
| 2. Implement technology to manage production     | <p>2.1 Record, analyse and manage production data using technology</p> <p>2.2 Develop treatment strategies or input requirements using technology</p> <p>2.3 Collect, store and analyse data across land based business using technology</p> <p>2.4 Research information resources, report and communicate production management using technology</p> <p>2.5 Integrate use of technology to improve operational efficiency, production, profitability and sustainability</p>                             |
| 3. Evaluate use of technology                    | <p>3.1 Develop and review strategies to ensure use of technology is cost effective and consistent with operational goals</p> <p>3.2 Assess need for additional training and support</p> <p>3.3 Develop strategies to address barriers to effective use of technology when necessary</p> <p>3.4 Evaluate impact of technology use on production levels, input costs and cash flow budget</p> <p>3.5 Develop strategies for monitoring, evaluating and incorporating future developments in technology</p> |

## 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.*

| Skill             | Description                                                                          |
|-------------------|--------------------------------------------------------------------------------------|
| Get the work done | <ul style="list-style-type: none"><li>• Problem solve issues as they arise</li></ul> |

## Unit Mapping Information

| Code and title current version                      | Code and title previous version                     | Comments                                                                                     | Equivalence status |
|-----------------------------------------------------|-----------------------------------------------------|----------------------------------------------------------------------------------------------|--------------------|
| AHCAGB521<br>Select and use agricultural technology | AHCAGB507<br>Select and use agricultural technology | Performance criteria clarified<br>Foundation skills added<br>Assessment requirements updated | Equivalent unit    |

## Links

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

# Assessment Requirements for AHCAGB521 Select and use agricultural technology

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## Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit. There must be evidence that the individual has selected and used at least two technological products for agricultural production, including:

- identified a range of technologies and explained how they can be applied in an agricultural production system
- obtained and processed production data using technology
- identified and managed issues that have arisen in the use of the technology
- completed a cost and benefits analysis of using the technological product.

## 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:

- trends and developments in technology relevant to agriculture
- sources of information related to agricultural technology
- basic principles of cost-benefit analysis
- context in which particular organisations operate and how this may impact on the selection and use of technology
- potential barriers to learning to use technological applications, and strategies to address these
- range of technology options available to support organisational activities
- strategies that can be used to evaluate technology use
- training and technical support options available to the organisation to develop skills in the use of technology.

## Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:

- skills must be demonstrated in a workplace setting or an environment that accurately represents workplace conditions
- resources, equipment and materials:
  - sources of information about agricultural technology
  - computer-based technology and software relevant to the agricultural production business.

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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