



Australian Government

AHCBAC408 Manage agricultural crop production

Release: 1

AHCBA408 Manage agricultural crop production

Modification History

Release	TP Version	Comment
1	AHCv1.0	Initial release

Application

This unit of competency describes the skills and knowledge required to manage agricultural crop production.

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

This unit applies to individuals who demonstrate deep knowledge in a specific technical area, take personal responsibility and exercise autonomy in undertaking complex work. They organise the work of self and others and analyse, design and communicate solutions to sometimes complex problems.

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

Broad acre cropping (BAC)

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. Determine requirements for an agricultural crop establishment program	1.1 Select plant varieties that are best suited to soil, climate, seasonal conditions and marketing goals 1.2 Determine required irrigation schedules where required for each soil and crop type based on assessed water requirements, rainfall and evapo-transpiration data 1.3 Assess nutrient requirements for crops to determine appropriate

Element	Performance criteria
	fertiliser program 1.4 Assess technology to ensure most efficient performance of operations 1.5 Identify and maintain budgetary constraints 1.6 Develop a crop establishment program appropriate to the crop production plan 1.7 Identify work health and safety hazards and develop control strategies in establishing agricultural crops
2. Implement crop maintenance	2.1 Implement strategic grazing to reduce or eradicate areas of weed infestation 2.2 Determine fertiliser applications and rates appropriate to crop type and applied accordingly 2.3 Determine crop nutrient requirements to ensure sustainability and achievement of yield 2.4 Monitor soil moisture and adjust watering schedule if appropriate 2.5 Determine and implement processes to minimise waste and soil degradation appropriately
3. Monitor an agricultural crop through to harvest	3.1 Determine longer term trends in weed, pest and disease incidence, and implement any necessary changes to control measures 3.2 Monitor soil structure and erosion and determine necessary changes to cultural practices, grazing management and drainage 3.3 Check and maintain irrigation and drainage systems 3.4 Monitor grazing management to ensure crop production levels 3.5 Monitor crop maturity and undertake harvesting to meet marketing and production targets
4. Implement the harvest strategy	4.1 Follow the harvesting plan to apply pre-harvest pest control treatments where weather patterns permit 4.2 Ensure adherence to all work health and safety and environmental requirements throughout the application of pre-harvest treatments and throughout the harvest 4.3 Ensure that all required labour and equipment is ready and available at the scheduled place and time 4.4 Commence the harvest at the scheduled time 4.5 Follow the order of the harvest described in the harvesting plan 4.6 Monitor harvesting operations and adjust to allow for weather, contracting and equipment maintenance needs 4.7 Instruct truck, tractor and harvester operators on procedures to deliver each crop load at maximum quality
5. Record production	5.1 Maintain appropriate records of production for analysis and evaluation of production performance

Foundation Skills

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

Range of Conditions

Unit Mapping Information

New unit - no equivalent.

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 AHCBA408 Manage agricultural crop production

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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 provide evidence that they can:

- apply environmental protection strategies in land use
- set objectives and milestones for a cropping program
- determine soil quality and land use capability
- determine crop nutrient requirements and fertiliser requirements
- measure and assess quantities of fertiliser to meet plant requirements
- predict patterns of weed infestation
- manage irrigation processes to avoid soil degradation if applicable
- demonstrate use of technology to improve efficiency
- prepare budgets
- develop a cropping program for an enterprise
- plan for crop establishment
- monitor growing crops, provide inputs and carry out cultural practices as required
- develop a plan for the crop harvest
- monitor crop yields and evaluate production performance
- implement work health and safety policies in the context of the work team
- implement enterprise environmental sustainability practices in the context of the work team.

Knowledge Evidence

The candidate must demonstrate knowledge of:

- land and soil conditions
- effects of soil characteristics on nutrient availability
- role of technology in improving efficiency
- budgeting and financial analysis techniques

- environmental protection strategies
- cultivation requirements for different types of crop
- safe handling processes for fertilisers
- infestation patterns for different types of weed
- integrated strategies for the management of pests, weeds and diseases
- work health and safety legislative requirements
- environmental legislation and codes of practice, relating to farm production.

Assessment Conditions

Competency is to be assessed in the workplace or simulated environment that accurately reflects performance in a real workplace setting.

Assessors must satisfy current standards for RTOs.

Links

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