Conceptual model/example of agriculture trade qualification

Skills Insight is undertaking a research project into the dynamics of agriculture trade qualification. This document contains an example of how such a qualification could be designed. It has been created after considering stakeholder feedback collected between September and November 2023.

Certificate III in Agricultural Production

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| **Qualification Description**  This qualification describes the skills and knowledge for trade level roles in Agriculture, working in Broadacre Cropping, Dairy Production and Livestock Production. Job titles may include:   * Agriculturist * Agricultural tradesperson * Agricultural technician * Agricultural specialist * Agricultural contractor   Individuals with this qualification work autonomously, applying a broad range of knowledge and skills in varied contexts to undertake skilled tasks. They interpret information, exercise judgement and discretion to plan and implement work tasks, and to respond to contingencies and solve problems. They may also influence and train other workers.  The qualification requires a specialisation in one or more of the following sectors:   * Broadacre production * Dairy Production * Livestock production   This qualification is suitable for an Australian Apprenticeship pathway. |
| **Entry Requirements**  There are no entry requirements for this qualification. |

**Packaging Rules**

#### To be awarded this qualification, competency in **one** of the six occupational options must be achieved.

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| ***OPTION 1: Agriculturalist specialising in broadacre cropping***  For the award of the **Certificate III in** **Agricultural Production (Broadacre Cropping)** a minimum of **34 units** are to be completed as follows:   * 20 core units * 14 elective units   Electives are to be selected as follows:   * 2 units from Group B * 8 units in Group C * 1 welding unit from Group F (*AUMGTW003 Perform manual metal arc welding* or *AUMGTW005 Perform gas metal arc welding*) * 3 units can be selected as from any units in Groups A to F (not already selected) * up to 2 units from any currently endorsed Training Package or accredited course that contribute to the vocational outcomes of the qualification. * up to 1 unit can be a subject from a Higher Education qualification that contributes to the vocational outcomes of the Certificate III in Agricultural Production. |
| ***OPTION 2: Agriculturalist specialising in dairy production***  For the award of the **Certificate III in Agricultural Production (Dairy Production)** a minimum of **38 units** are to be completed as follows:   * 20 core units * 18 elective units   Electives are to be selected as follows:   * 2 units from Group B (High Value) * at least 5 Dairy sector units (coded AHCDRY) from Group D * at least 7 Livestock sector units (coded AHCLSK) from Group D, including:   + *AHCLSK342 Prepare animals for parturition*   + *AHCLSK330 Implement procedures for calving*   + *AHCLSK318 Rear newborn and young livestock* * 1 welding unit from Group F (*AUMGTW003 Perform manual metal arc welding* or *AUMGTW005 Perform gas metal arc welding*) * 3 units can be selected as from any units in Groups A to F (not already selected) * up to 2 units from any currently endorsed Training Package or accredited course that contribute to the vocational outcomes of the qualification. * up to 1 unit can be a subject from a Higher Education qualification that contributes to the vocational outcomes of the Certificate III in Agricultural Production. |
| ***OPTION 3: Agriculturalist specialising in Livestock production***  For the award of the **Certificate III in Agricultural Production (Livestock Production)** a minimum of **35 units** are to be completed as follows:   * 20 core units * 15 elective units   Electives are to be selected as follows:   * 2 units from Group B * 8 units in Group E including at least 6 Livestock sector units (coded AHCLSK) * 1 welding unit from Group F (*AUMGTW003 Perform manual metal arc welding* or *AUMGTW005 Perform gas metal arc welding*) * 4 units can be selected as from any units in Groups A to F (not already selected) * up to 2 units from any currently endorsed Training Package or accredited course that contribute to the vocational outcomes of the qualification. * up to 1 unit can be a subject from a Higher Education qualification that contributes to the vocational outcomes of the Certificate III in Agricultural Production. |
| ***OPTION 4: Agriculturalist specialising in Broadacre Cropping and Dairy Production***  For the award of the **Certificate III in Agricultural Production (Broadacre Cropping and Dairy Production)** a minimum of **45 units** are to be completed as follows:   * 20 core units * 25 elective units   Electives are to be selected as follows:   * 2 units from Group B * 8 units in Group C * at least 5 Dairy sector units (coded AHCDRY) from Group D * at least 7 Livestock sector units (coded AHCLSK) from Group D, including:   + *AHCLSK342 Prepare animals for parturition*   + *AHCLSK330 Implement procedures for calving*   + *AHCLSK318 Rear newborn and young livestock* * 1 welding unit from Group F (*AUMGTW003 Perform manual metal arc welding* or *AUMGTW005 Perform gas metal arc welding*) * 2 units can be selected as from any units in Groups A to F (not already selected) * up to 2 units from any currently endorsed Training Package or accredited course that contribute to the vocational outcomes of the qualification. * up to 1 unit can be a subject from a Higher Education qualification that contributes to the vocational outcomes of the Certificate III in Agricultural Production. |
| ***OPTION 5: Agriculturalist specialising in Broadacre Cropping and Livestock Production***  For the award of the **Certificate III in Agricultural Production (Broadacre Cropping and Livestock Production)** a minimum of **41 units** are to be completed as follows:   * 20 core units * 21 elective units   Electives are to be selected as follows:   * 2 units from Group B * 8 units in Group C * 8 units from Group E, including at least 6 Livestock sector units * 1 welding unit from Group F (*AUMGTW003 Perform manual metal arc welding* or *AUMGTW005 Perform gas metal arc welding*) * 2 units can be selected as from any units in Groups A to F (not already selected) * up to 2 units from any currently endorsed Training Package or accredited course that contribute to the vocational outcomes of the qualification. * up to 1 unit can be a subject from a Higher Education qualification that contributes to the vocational outcomes of the qualification. |
| ***OPTION 6: Agriculturalist specialising in Dairy production and Livestock production***  For the award of the **Certificate in Agricultural Production (Dairy Production and Livestock Production)** a minimum of **41 units** are to be completed as follows:   * 20 core units * 21 elective units   Electives are to be selected as follows:   * 2 units from Group B * at least 5 Dairy sector units (coded AHCDRY) from Group D * at least 7 Livestock sector units (coded AHCLSK) from Group D, including:   + *AHCLSK342 Prepare animals for parturition*   + *AHCLSK330 Implement procedures for calving*   + *AHCLSK318 Rear newborn and young livestock* * 4 units from Group E not already selected in Group D, including:   + *AHCBAC310 Maintain pastures and crops for livestock production*   + *AHCLSK307 Euthanase livestock* * 1 welding unit from Group F (*AUMGTW003 Perform manual metal arc welding* or *AUMGTW005 Perform gas metal arc welding*) * 2 units can be selected as from any units in Groups A to F (not already selected) * up to 2 units from any currently endorsed Training Package or accredited course that contribute to the vocational outcomes of the qualification. * up to 1 unit can be a subject from a Higher Education qualification that contributes to the vocational outcomes of the Certificate III in Agricultural Production. |

**Core** (Suggested units that cover work functions trade level agricultural workers typically perform)

| **#** | **Unit Code** | **Unit Title** | **Unit description** |
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| 1 | [AHCWHS402](https://training.gov.au/Training/Details/AHCWHS402) | Maintain workplace health and safety processes | Describes the skills and knowledge required to maintain workplace health and safety processes, including facilitating meetings and documenting actions that relate to the consideration of workplace health and safety issues.  **Comment** - *AHCWHS301 Contribute to workplace health and safety processes* was considered but *AHCWHS402* is recommended based on advice that trade level workers will coordinate other workers (e.g., back packers) when required. Another option is to have both units in role. |
| 2 | [AHCBIO303](https://training.gov.au/Training/Details/AHCBIO303) | Apply biosecurity measures | Describes the skills and knowledge required to interpret and apply control measures in a biosecurity plan to protect a site from the entry and spread of biosecurity threats. |
| 3 | [AHCPCM305](https://training.gov.au/Training/Details/AHCPCM305) | Implement a plant nutrition program | Describes the skills and knowledge required to implement a plant nutrition program, including preparing for the nutrition program, monitoring and controlling the nutritional requirements of plants, preparing fertilisers and application equipment, applying products to plants, and completing plant nutrition program activities. |
| 4 | [AHCSOL406](https://training.gov.au/Training/Details/AHCSOL406) | Sample soils and interpret results | Describes the skills and knowledge required to prepare for soil sampling, collect soil samples and interpret test results. |
| 5 | [AHCSOL505](https://training.gov.au/Training/Details/AHCSOL505) | Monitor and manage soils for production | Describes the skills and knowledge required to research soil information, apply soil testing information to production or management plan, develop and monitor soil amendment practices, review and document soil management plan. |
| 6 | [MSS015042](https://training.gov.au/Training/Details/MSS015042) | Measure and report on carbon footprint | Describes the skills and knowledge required to determine the carbon footprint of a section of a value chain and make recommendations for improvements.  **Comment**  Carbon measurement, reporting and management is global agenda and priority for commonwealth and state/territory governments. As an example, refer to WA government’s Strategic Training Plan. |
| 7 | [AHCPMG301](https://training.gov.au/Training/Details/AHCPMG301) | Control weeds | Describes the skills and knowledge required to plan and coordinate weed control activities using appropriate strategies to provide effective, economic control while minimising environmental damage. |
| 8 | [AHCPMG302](https://training.gov.au/Training/Details/AHCPMG302) | Control **plant** pests, diseases and disorders | Describes the skills and knowledge required to identify and assess the effect to plants of plant pests, diseases and disorders and plan and coordinate control measures. |
| 9 | [AHCPMG308](https://training.gov.au/Training/Details/AHCPMG308) | Implement pest management strategies | Describes the skills and knowledge required to assist in the implementation of a pest management plan for weeds, **vertebrate or invertebrate** pests. |
| 10 | [AHCCHM304](https://training.gov.au/Training/Details/AHCchm304) | Transport and store chemicals | Has four elements:   1. Prepare to handle and transport chemicals 2. Handle and transport chemicals 3. Store chemicals in the workplace 4. Record storage details |
| 11 | [AHCCHM307](https://training.gov.au/Training/Details/AHCCHM307) | Prepare and apply chemicals to control pest, weeds and diseases | Describes the skills and knowledge required to safely prepare and apply chemicals for the control of pests, weeds and diseases, using general application equipment. |
| 12 | [AHCMOM317](https://training.gov.au/Training/Details/AHCMOM317) | Operate tractors with attachments | Describes the skills and knowledge required to prepare for, operate and maintain tractor operations with attached equipment. |
| 13 | [AHCMOM302](https://training.gov.au/Training/Details/AHCMOM302) | Perform machinery maintenance | Describes the skills and knowledge required to prepare, inspect, maintain and record maintenance requirements for machinery that is used principally in agriculture, horticulture, and conservation and land management work. |
| 14 | [AHCINF305](https://training.gov.au/Training/Details/AHCINF305) | Implement property improvement, construction and repair | Describes the skills and knowledge required to implement property improvement, construction and repair where the services of a tradesperson are not necessary. |
| 15 | [BSBTEC403](https://training.gov.au/Training/Details/BSBTEC403)  *AHCNEW3XX* | Apply digital solutions to work processes  AND / OR a proposed new unit.  *Operate and monitor an agricultural production data information technologies, systems and software.* | Defines the skills, knowledge and outcomes to integrate digital technologies into common management practice.  **Comment:**  Based on stakeholder feedback, [BSBTEC403](https://training.gov.au/Training/Details/BSBTEC403) lacks some important outcomes required by trade level workers in agriculture. The proposed new unit should include the skills and knowledge to:   * Install and use digital information systems, technologies and/or software * ensure relevant, valid and reliable data is being collected, monitored and stored * select, extract and analyse critical data * interpret and act upon critical information * identify and/or rectify faults in digital systems and software |
| 16 | AHCNEW4XX | Select appropriate technology for an agricultural production system | Proposed new unit to provide the skills and knowledge to research and recommend suitable technologies (including plant, machinery, equipment and digital resources) for a specific agricultural production system.  The suggested elements are:   1. Identify the needs and selection criteria for appropriate technology 2. Investigate appropriate technology 3. Evaluate appropriate technology options 4. Select appropriate technology 5. Document a proposal to procure the appropriate technology. |
| 17 | [AHCWRK318](https://training.gov.au/Training/Details/AHCWRK318) | Comply with industry quality assurance requirements | Has three elements:   1. Follow quality assurance practices 2. Implement standard operating procedures 3. Reporting problems that affect quality. |
| 18 | [AHCAGB302](https://training.gov.au/Training/Details/AHCAGB302) | Keep production records for a primary production business | Describes the skills and knowledge required to keep production business records, such as paddock and livestock activity, in accordance with workplace requirements for decision-making and auditing. |
| 19 | [BSBXCM301](https://training.gov.au/Training/Details/BSBXCM301) | Engage in workplace communications | Describes the skills and knowledge required to communicate (through written, oral and nonverbal form) in the workplace within an industry. |
| 20 | [TAADEL311](https://training.gov.au/Training/Details/TAEDEL311) | Provide work skill instruction | Describes the skills and knowledge required to conduct individual and small group work skill instruction using existing support materials and demonstration of work skills as a training strategy; and assess the success of training and one’s own training performance. It focuses on the training being driven by the work process and context. |

**Group B** (Suggested units to develop **agronomy, property asset enhancement and land care** knowledge and skills)

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| **#** | **Unit Code** | **Unit Title** | **Unit description** |
| 1 | [AHCBAC513](https://training.gov.au/Training/Details/AHCBac513) | Apply plant biology to agronomic practices | Describes the skills and knowledge required to apply introductory plant biology, including plant taxonomy, plant morphology and plant physiology, to a wide range of agronomic practices. |
| 2 | [AHCCFP405](https://training.gov.au/Training/Details/AHCCFP405) | Increase carbon using vegetation and/or agricultural methods | Describes the skills and knowledge required to identify the benefits of increasing carbon in the biosphere, using vegetation and agricultural methods, and to implement a project to reduce emissions or store carbon.  This unit does not cover increasing carbon in soil (refer to AHCCFP401 Increase soil organic carbon using land management practices). |
| 3 | [AHCCFP401](https://training.gov.au/Training/Details/AHCCFP401) | Increase soil organic carbon using land management practices | Describes the skills and knowledge required to identify the benefits of increasing soil organic carbon for soil condition or soil health, and to implement a project to increase soil carbon. |
| 4 | [AHCAGB404](https://training.gov.au/Training/Details/AHCAGB404) | Plan and implement infrastructure improvements | Describes the skills and knowledge required to plan and implement improvements to property infrastructure, which may include buildings, yards, fences, water supply systems, roads and tracks, and storage systems. |
| 5 | [AHCBUS406](https://training.gov.au/Training/Details/AHCBUS406) | Administer finance, insurance and legal requirements. | Has three elements:   1. Administer the legal requirements of the business 2. Process and maintain the insurance requirements for the business 3. Identify sources, types and cost of finance 4. Develop an application for finance or investment |
| 6 | [AHCECR501](https://training.gov.au/Training/Details/AHCECR501) | Manage natural areas on a rural property | Describes the skills and knowledge required to manage natural areas on privately owned rural properties and enhance the sustainable ecological and economic capacity and outcomes of the land. |
| 7 | [AHCECR506](https://training.gov.au/Training/Details/AHCECR506) | Develop and implement sustainable land use strategies | Describes the skills and knowledge required to develop and implement sustainable land use strategies that lead to improved ecological sustainability of land under production. |

**Group C** (Suggested units that cover **Broadacre Cropping** work functions)

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| **#** | **Unit Code** | **Unit Title** | **Unit description** |
| 1 | [AHCMOM308](https://training.gov.au/Training/Details/AHCMOM308) | Operate broadacre and row crop harvest machinery and equipment | Describes the skills and knowledge required to operate harvest machinery and equipment used for broadacre and row crop harvesting in the agriculture and horticulture sectors. |
| 2 | [AHCMOM309](https://training.gov.au/Training/Details/AHCMOM309) | Operate broadacre sowing machinery and equipment | Describes the skills and knowledge required to operate machinery and equipment required for broadacre sowing in agriculture and horticulture sectors. |
| 3 | [AHCMOM312](https://training.gov.au/Training/Details/AHCMOM312) | Operate row crop planting and seeding machinery and equipment. | Describes the skills and knowledge required to operate machinery and equipment required for row crop planting and seeding in agriculture and horticulture sectors. |
| 4 | [AHCBAC309](https://training.gov.au/Training/Details/AHCBAC309) | Undertake preparation of land for agricultural crop production | Describes the skills and knowledge required to select materials and equipment from crop production plan and prepare the land for an agricultural crop. |
| 5 | [AHCMOM315](https://training.gov.au/Training/Details/AHCMOM315) | Operate chemical application machinery and equipment | Describes the skills and knowledge required to operate machinery and equipment used for specialised liquid and granular chemical application in agriculture and horticulture sectors. |
| 6 | [AHCBAC315](https://training.gov.au/Training/Details/AHCBAC315) | Establish agricultural crops | Describes the skills and knowledge required to prepare and safely operate equipment and sow/plant an agricultural crop following specifications in a crop production. |
| 7 | [AHCBAC316](https://training.gov.au/Training/Details/AHCBAC316) | Maintain agricultural crops | Describes the skills and knowledge required to monitor and assess broadacre crop health and condition and implement crop maintenance procedures. |
| 8 | [AHCBAC317](https://training.gov.au/Training/Details/AHCBAC317) | Undertake agricultural crop harvesting activities | Describes the skills and knowledge required to prepare equipment and resources for crop harvesting, determine crop readiness for harvest and harvest a crop safely and efficiently. |
| 9 | [AHCINF307](https://training.gov.au/Training/Details/AHCINF307) | Plan and construct conventional fencing | Has four elements:   1. Determine fencing requirements 2. Prepare for construction 3. Construct conventional fence 4. Complete fencing operations |
| 10 | [AHCIRG346](https://training.gov.au/Training/Details/AHCIRG346) | Operate pressurised irrigation systems | Describes the skills and knowledge required to pre-start check, inspect, start up, operate, monitor and shut down pressurised irrigation systems. |
| 11 | [AHCIRG338](https://training.gov.au/Training/Details/AHCIRG338) | Trouble shoot irrigation systems | Describes the skills and knowledge required to locate and identify irrigation system faulty components and blockages, shut down and isolate components, replace faulty components, clear blockages and return irrigation system to normal operating status. |

**Group D (**Suggested units that cover **Dairy Production** work functions)

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| **#** | **Unit Code** | **Unit Title** | **Unit description** |
| 1 | [AHCDRY202](https://training.gov.au/Training/Details/AHCDRY202) | Milk livestock | Describes the skills and knowledge required to extract milk from a range of livestock. It requires the ability to prepare site and equipment for milking, move and handle livestock, identify and report on abnormal livestock conditions and complete tasks after milking operations. |
| 2 | [AHCDRY303](https://training.gov.au/Training/Details/AHCDRY303) | Coordinate and monitor milking operations | Describes the skills and knowledge required to coordinate and monitor the milking operations of a dairy facility. It requires the ability to determine requirements and procedures for milking operations, implement livestock health program and monitor operations. |
| 3 | [AHCDRY304](https://training.gov.au/Training/Details/AHCDRY304) | Carry out routine service of milking equipment | Describes the skills and knowledge required to identify faults that do not require the services of qualified tradespeople and carry out routine service, adjustment and maintenance of milking equipment. |
| 4 | [AHCDRY402](https://training.gov.au/Training/Details/AHCDRY402) | Manage milking shed operations | Describes the skills and knowledge required to manage milking shed operations for a dairy facility according to regulatory and quality requirements. |
| 5 | [AHCDRY305](https://training.gov.au/Training/Details/AHCDRY305) | Conduct mechanical tests on milking machines | Describes the skills and knowledge required to mechanically test and make recommendations on the performance of milking machines used on dairy farms. |
| 6 | [AHCDRY306](https://training.gov.au/Training/Details/AHCDRY306) | Operate a dairy waste utilisation system | Describes the skills and knowledge required to prepare, operate, maintain and monitor a dairy waste utilisation system. |
| 7 | [AHCLSK342](https://training.gov.au/Training/Details/AHCLSK342) | Prepare animals for parturition | Describes the skills and knowledge required to feed and care for animals through the latter stages of pregnancy to birthing |
| 8 | [AHCLSK330](https://training.gov.au/Training/Details/AHCLSK330) | Implement procedures for calving | Describes the skills and knowledge required to prepare for calving, observe and support cows at calving and monitor after calf is born. |
| 9 | [AHCLSK331](https://training.gov.au/Training/Details/AHCLSK331) | Comply with industry animal welfare requirements | Describes the skills and knowledge required to comply with industry animal welfare requirements in the production of livestock. |
| 10 | <AHCLSK318> | Rear newborn and young livestock | Has four elements:   1. Prepare for care of newborn and young 2. Provide care for newborn and young 3. Monitor health of newborn and young 4. Meet ongoing requirements |
| 11 | [AHCLSK309](https://training.gov.au/Training/Details/AHCLSK309) | Implement animal health control programs | Has four elements:   1. Assess animal health status and treatment options 2. Prepare for treatment of animals 3. Treat animals 4. Complete treatment process |
| 12 | [AHCLSK301](https://training.gov.au/Training/Details/AHCLSK301) | Administer medications for livestock | Describes the skills and knowledge required to apply preventative health treatments and other medications to livestock under professional supervision. |
| 13 | [AHCLSK311](https://training.gov.au/Training/Details/AHCLSK311) | Implement feeding plans for livestock | Describes the skills and knowledge required to monitor available pasture for grazing and implementing a feeding plan. |
| 14 | [AHCLSK402](https://training.gov.au/Training/Details/AHCLSK402) | Develop livestock feeding plans | Has four elements:   1. Determine nutritional requirements for livestock 2. Assess pasture feed 3. Determine supplementary feeding program 4. Develop livestock feeding plan |
| 15 | <AHCLSK305> | Maintain livestock water supplies | Has four elements:   1. Identify maintenance requirements 2. Prepare for maintenance 3. Carry out maintenance procedures 4. Complete maintenance procedures |
| 16 | [AHCLSK422](https://training.gov.au/Training/Details/AHCLSK422) | Identify and select animals for breeding | Describes the skills and knowledge required to identify and select animals for breeding. |
| 17 | [AHCLSK307](https://training.gov.au/Training/Details/AHCLSK307) | Euthanase livestock | Describes the skills and knowledge required to euthanase livestock without distress or suffering prior to cessation of their vital life functions. |
| 18 | [AHCIRG346](https://training.gov.au/Training/Details/AHCIRG346) | Operate pressurised irrigation systems | Describes the skills and knowledge required to pre-start check, inspect, start up, operate, monitor and shut down pressurised irrigation systems. |
| 19 | [AHCIRG338](https://training.gov.au/Training/Details/AHCIRG338) | Trouble shoot irrigation systems | Describes the skills and knowledge required to locate and identify irrigation system faulty components and blockages, shut down and isolate components, replace faulty components, clear blockages and return irrigation system to normal operating status. |

**Group E** (Suggested units that cover **Livestock Production** work functions)

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| **#** | **Unit Code** | **Unit Title** | **Unit description** |
| 1 | [AHCLSK331](https://training.gov.au/Training/Details/AHCLSK331) | Comply with industry animal welfare requirements | Describes the skills and knowledge required to comply with industry animal welfare requirements in the production of livestock. |
| 2 | [AHCLSK342](https://training.gov.au/Training/Details/AHCLSK342) | Prepare animals for parturition | Describes the skills and knowledge required to feed and care for animals through the latter stages of pregnancy to birthing |
| 3 | [AHCLSK330](https://training.gov.au/Training/Details/AHCLSK330) | Implement procedures for calving | Describes the skills and knowledge required to prepare for calving, observe and support cows at calving and monitor after calf is born. |
| 4 | [AHCLSK318](https://training.gov.au/Training/Details/AHCLSK318) | Rear newborn and young livestock | Has four elements:   1. Prepare for care of newborn and young 2. Provide care for newborn and young 3. Monitor health of newborn and young 4. Meet ongoing requirements |
| 5 | [AHCLSK309](https://training.gov.au/Training/Details/AHCLSK309) | Implement animal health control programs | Has four elements:   1. Assess animal health status and treatment options 2. Prepare for treatment of animals 3. Treat animals 4. Complete treatment process |
| 6 | [AHCLSK301](https://training.gov.au/Training/Details/AHCLSK301) | Administer medications for livestock | Describes the skills and knowledge required to apply preventative health treatments and other medications to livestock under professional supervision. |
| 7 | [AHCLSK311](https://training.gov.au/Training/Details/AHCLSK311) | Implement feeding plans for livestock | Describes the skills and knowledge required to monitor available pasture for grazing and implementing a feeding plan. |
| 8 | [AHCLSK402](https://training.gov.au/Training/Details/AHCLSK402) | Develop livestock feeding plans | Has four elements:   1. Determine nutritional requirements for livestock 2. Assess pasture feed 3. Determine supplementary feeding program 4. Develop livestock feeding plan |
| 9 | <AHCLSK305> | Maintain livestock water supplies | Has four elements:   1. Identify maintenance requirements 2. Prepare for maintenance 3. Carry out maintenance procedures 4. Complete maintenance procedures |
| 10 | [AHCLSK422](https://training.gov.au/Training/Details/AHCLSK422) | Identify and select animals for breeding | Describes the skills and knowledge required to identify and select animals for breeding. |
| 11 | [AHCAIS304](https://training.gov.au/Training/Details/AHCAIS304) | Artificially inseminate livestock | Describes the skills and knowledge required to prepare for and artificially inseminate livestock, complete documentation and records, and complete work. |
| 12 | [AHCLSK307](https://training.gov.au/Training/Details/AHCLSK307) | Euthanase livestock | Describes the skills and knowledge required to euthanase livestock without distress or suffering prior to cessation of their vital life functions. |
| 13 | [AHCLSK308](https://training.gov.au/Training/Details/AHCLSK308) | Identify and draft livestock | Describes the skills and knowledge required to identify and draft or sort animals for sale, breeding or other enterprise requirements. |
| 14 | [AHCLSK320](https://training.gov.au/Training/Details/AHCLSK320) | Coordinate and monitor livestock transport | Describes the skills and knowledge required to safely and efficiently transport livestock to a destination within specified timeframes.  All work must be carried out to comply with workplace procedures, work health and safety, animal welfare and biosecurity legislation and codes of practice and sustainability practices. |
| 15 | [AHCBAC313](https://training.gov.au/Training/Details/AHCBAC313) | Establish pastures and crops for livestock production | Describes the skills and knowledge required to prepare and establish pasture and crops for livestock and implement grazing strategies for livestock production. |
| 16 | [AHCBAC310](https://training.gov.au/Training/Details/AHCBAC310) | Maintain pastures and crops for livestock production | Has four elements:   1. Monitor & assess agricultural pasture and crop condition, growth and requirements 2. Undertake pasture and crop health operations 3. Complete cleaning and hygiene operations 4. Implement grazing strategies |
| 17 | [AHCBAC317](https://training.gov.au/Training/Details/AHCBAC317) | Undertake agricultural crop harvesting activities | Describes the skills and knowledge required to prepare equipment and resources for crop harvesting, determine crop readiness for harvest and harvest a crop safely and efficiently. |
| 18 | [AHCBAC311](https://training.gov.au/Training/Details/AHCBAC311) | Conserve forage | Describes the skills and knowledge required to prepare paddocks and storage facilities for forage conservation. It includes processing and harvesting forage crops and placing them into storage. The process also includes managing risks associated with forage conservation activities. |
| 19 | [AHCINF306](https://training.gov.au/Training/Details/AHCINF306) | Plan and construct an electric fence | Describes the skills and knowledge required to plan, construct and maintain an electric fence. |
| 20 | [AHCINF307](https://training.gov.au/Training/Details/AHCINF307) | Plan and construct conventional fencing | Describes the skills and knowledge required to plan and construct conventional fencing. |
| 21 | [AHCIRG346](https://training.gov.au/Training/Details/AHCIRG346) | Operate pressurised irrigation systems | Describes the skills and knowledge required to pre-start check, inspect, start up, operate, monitor and shut down pressurised irrigation systems. |
| 22 | [AHCIRG338](https://training.gov.au/Training/Details/AHCIRG338) | Trouble shoot irrigation systems | Describes the skills and knowledge required to locate and identify irrigation system faulty components and blockages, shut down and isolate components, replace faulty components, clear blockages and return irrigation system to normal operating status. |
| 23 | [AHCLSK218](https://training.gov.au/Training/Details/AHCLSK218) | Ride educated horses to carry out basic stock work | Describes the skills and knowledge required to handle and ride calm horses educated to muster and move livestock. It addresses the potential risks associated with working with and around horses and livestock. |
| 24 | [AHCLSK419](https://training.gov.au/Training/Details/AHCLSK419) | Manage horses for stock work | Describes the skills and knowledge required to manage horses for stock work, including coordinating specialist services from veterinarians and farriers. |

**Group F** (Suggested units related to **agricultural machinery operations**)

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| **#** | **Unit Code** | **Unit Title** | **Unit description** |
| 1 | [AUMGTW003](https://training.gov.au/Training/Details/AUMGTW003) | Perform manual metal arc welding | Describes the performance outcomes required to prepare and weld components using the manual metal arc welding (MMAW) process. |
| 2 | [AUMGTW005](https://training.gov.au/Training/Details/AUMGTW005) | Perform gas metal arc welding | Describes the performance outcomes required to weld components using the gas metal arc welding (GMAW) process. |
| 3 | [AHCMOM216](https://training.gov.au/Training/Details/AHCMOM216) | Operate side by side utility vehicles | Describes the skills and knowledge required to safely operate a side by side utility vehicle including undertaking pre-start checks and shut down procedures. |
| 4 | [ACHMOM217](https://training.gov.au/Training/Details/AHCMOM217) | Operate Quad Bikes | Describes the skills and knowledge required to safely operate quad bikes including undertaking pre-start checks and shut down procedures. |
| 5 | [AHCMOM303](https://training.gov.au/Training/Details/AHCMOM303) | Operate a telehandler | Describes the skills and knowledge required to operate a telehandler, including the use of attachments, safe driving and operation. |
| 6 | [AHCMOM304](https://training.gov.au/Training/Details/AHCMOM304) | Operate machinery and equipment | Describes the skills and knowledge required to prepare and operate machinery and equipment in a safe and controlled manner that is used principally in agriculture, horticulture, and conservation and land management work. |
| 7 | [AHCMOM310](https://training.gov.au/Training/Details/AHCMOM310) | Operate land-forming machinery and equipment | Describes the skills and knowledge required to operate machinery and equipment used for land-forming in agriculture and horticulture sectors. |
| 8 | [AHCMOM311](https://training.gov.au/Training/Details/AHCMOM311) | Operate precision control technology | Describes the skills and knowledge required to operate precision technology used for the control of specialised machinery and equipment and to optimise specialised machinery performance.  Note: Precision control technology must include at least one of the following:   * on-board Global Positioning System (GPS), Global Navigation Satellite System (GNSS) or Differential Global Positioning System (DGPS) precision control equipment * fixed GPS, GNSS or DGPS precision control equipment. |
| 9 | [AHCMOM313](https://training.gov.au/Training/Details/AHCMOM313) | Operate mobile irrigation machinery and equipment | Describes the skills and knowledge required to operate mobile machinery and equipment used for irrigation in agriculture and horticulture sectors. |
| 10 | [AHCMOM314](https://training.gov.au/Training/Details/AHCMOM314) | Transport machinery | Describes the skills and knowledge required to load, transport and unload machinery used for earth-moving and agricultural operations |
| 11 | [AVIY0027](AVIY0027%20-%20Operate%20multi-rotor%20remote%20pilot%20aircraft%20systems%20(Release%201)) | Operate multi-rotor remote pilot aircraft systems | Involves the skills and knowledge required to operate multi-rotor remote pilot aircraft systems (RPAS) in compliance with relevant regulatory requirements of the Civil Aviation Safety Authority (CASA) and national operating standards.  It includes operating and managing multi-rotor RPAS during normal flight and during abnormal and emergency procedures. |
| 12 | [HLTAID311](https://training.gov.au/Training/Details/HLTAID011) | Provide First Aid | Describes the skills and knowledge required to provide a first aid response to a casualty in line with first aid guidelines determined by the Australian Resuscitation Council (ARC) and other Australian national peak clinical bodies. |