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 7.0. |

| AHCDES5XX | Produce drawings for landscape design projects using CAD software |
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| Application | This unit of competency describes the skills and knowledge required to produce drawings for residential and commercial landscape design projects using computer-aided design (CAD) software.  The unit applies to individuals who apply specialist skills and knowledge to produce drawings for landscape design projects using CAD software, take personal responsibility and exercise autonomy in undertaking complex work. They analyse and synthesise information, and analyse, design and communicate solutions to sometimes complex problems.  All work is carried out to comply with workplace procedures, health and safety in the workplace requirements, legislative and regulatory requirements, and sustainability and biosecurity practices.  No licensing, legislative or certification requirements apply to this unit at the time of publication. |
| Prerequisite Unit | Nil |
| Unit Sector | Design (DES) |

| 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. Prepare for CAD drawing work | 1.1 Interpret concept and project information  1.2 Identify and confirm design drawing requirements with client or relevant project personnel  1.3 Identify CAD hardware, software, tools and equipment requirements for design project  1.4 Set up CAD hardware and software according to operating instructions and workplace procedures  1.5 Identify and retrieve digitised information relevant to project |
| 2. Create drawing template files | 2.1 Establish and record critical dimensions and data for required designs  2.2 Identify requirements in relation to accuracy, tolerances and other key information  2.3 Create layering strategy according to design drawing requirements  2.4 Create text and dimension styles according to design drawing requirements  2.5 Create line types and styles according to design drawing requirements  2.6 Create title box and page numbering system according to design drawing requirements |
| 3. Create CAD drawings | 3.1 Produce drawings using CAD software programs and functions  3.2 Add layers and drawing notations according to Australian standards and design drawing requirements  3.3 Add drawing scales and dimensions to drawing according to Australian standards and design drawing requirements  3.4 Hatch and render or fill selected areas |
| 4. Import files | 4.1 Import digital text, drawing and image files from other software applications into CAD drawings as required  4.2 Insert external drawing files into CAD drawings as required  4.3 Scan, save and import hard copy documents into CAD drawings as required |
| 5. Edit drawing components | 5.1 Remove unecessary elements and text from drawings as required  5.2 Use editing commands to modify drawing elements and text  5.3 Use tools to measure lengths and areas of specific elements of drawing |
| 6. Print CAD drawings | 6.1 Setup drawing file page layout to suit printing requirements  6.2 Setup printing parameters for printer  6.3 Select correct print media for drawings  6.4 Print, monitor and collate printed drawings |
| 7. Save and back up files | 7.1 Create drawing project file directory  7.2 Save and retrieve drawing files  7.3 backup project files according to workplace procedures |
| 8. Export files | 8.1 Copy and send drawing files to client or relevant project personnel  8.2 Create PDF files for client or relevant project personnel  8.3 Review design drawings with client or relevant project personnel |
| 9. Finalise drawings | 9.1 Check design drawings against concept and project information  9.2 Identify and make adjustments to design drawings according to client or relevant project personnel review feedback  9.3 Store drawing files according to workplace procedures  9.4 Submit final design drawings according to agreed time requirements |

| 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 |
| Reading | * Interpret and evaluate detailed information, instructions and technical information to prepare and produce CAD drawings |
| Writing | * Record key design information and notations using correct conventions and terminology |
| Oral communication | * Use questioning and careful listening to elicit information from clients and relevant project personnel |
| Numeracy | * Identify and record layers, measurements and other numerically expressed information required for design drawings * Operate numerical functions of CAD equipment to produce accurate scales, dimensions, ratios and measurements |

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| Unit Mapping Information | | | |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| AHCDES5XX Produce drawings for landscape design projects using CAD software | Not applicable | The unit has been created to address an emerging skill or task required by industry | Newly created |

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

| TITLE | Assessment requirements for AHCDES5XX Produce drawings for landscape design projects using CAD software |
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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 produced drawings for landscape design projects using computer-aided drawing (CAD) software on at least two occasions and has:   * identified and confirmed design drawing requirements * selected CAD hardware and software to suit project requirements * followed CAD operating instructions and workplace procedures * Used features and functions of CAD software to produce design drawings * applied creative design, drawing and drafting skills, including: * characteristics, decorative styles and text styles * drafting methods * drafting technologies * drafting equipment * applied numeracy skills to calculate and record layers, scales, dimensions, ratios and measurements * Used client or relevant project personnel feedback to refine and produce final design drawings within agreed time requirements. | |

| Knowledge Evidence |
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| 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:   * principles and practices of drawing landscape design projects using CAD software, including: * CAD hardware, software, tools and equipment used for drawing landscape design projects * CAD operating instructions * CAD software program features and functions, including; drawing tools, view displays, edit funtions, working with layers, plotting, printing and file save functions * hard copy and digital file management procedures * Australian standards and workplace procedures relevant to producing CAD drawings for landscape design projects. |

| Assessment Conditions |
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| Assessment of the skills in this unit of competency must take place under the following conditions:   * physical conditions: * a workplace setting or an environment that accurately represents workplace conditions * resources, equipment and materials: * site, concept and project information, and data applicable to producing drawings for landscape design projects using CAD software * CAD software, hardware, printers and peripheral equipment * specifications: * CAD operating instructions * Australian standards and workplace procedures applicable to producing CAD drawings for landscape design projects * relationships: * client or relevant project personnel * timeframes: * according to job requirements.   Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards. |

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