



Australian Government

AHCDES507 Produce drawings for landscape design projects using CAD software

Release: 1

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Modification History

Release	Comments
Release 1	This version released with AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 7.0.

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.

Pre-requisite Unit

Nil

Unit Sector

Design (DES)

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. Prepare for landscape design CAD drawing	1.1 Interpret concept and project information 1.2 Identify and confirm design drawing requirements with client or

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
work	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 landscape design 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 landscape design 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 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 landscape design drawing components	5.1 Remove unnecessary 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

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
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 landscape design 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.

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

Skill	Description
	Operate numerical functions of CAD equipment to produce accurate scales, dimensions, ratios and measurements

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
AHCDES507 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

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 AHCDES507 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 one occasion 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 numeracy skills to calculate and record layers, scales, dimensions, ratios and measurements
- applied creative design, drawing and drafting skills, including:
 - characteristics, decorative styles and text styles
 - drafting methods
 - drafting technologies
 - drafting equipment
- used client or relevant project personnel feedback to refine and produce final design drawings within agreed time 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:

- 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 functions, 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

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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