



Australian Government

CUAACD312 Produce computer-aided drawings

Release: 1

CUAACD312 Produce computer-aided drawings

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package Version 5.0.

Application

This unit describes the skills and knowledge required to use different computer-aided design and drafting (CADD) program functions to produce drawings and documentation. It involves preparing to undertake the work, understanding the object or project brief parameters and measurements and finalising drawings according to requirements. The focus of this unit is on the technical skills required to operate CADD, not on design skills.

The unit applies to those who use computer-aided drawing skills in various contexts.

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

Unit Sector

Visual Communication – Art, Craft and Design

Elements and Performance Criteria

ELEMENT	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 computer-aided drawing work	1.1 Clarify drawing requirements and objectives in concept or project information 1.2 Identify hardware, software, tools and equipment required for computer-aided design and drafting projects 1.3 Set up hardware and software according to operating instructions and organisational procedures as required 1.4 Identify and retrieve digitised information required for projects
2. Gather object parameters and measurements	2.1 Establish and record critical dimensions and data for required designs 2.2 Identify requirements in relation to accuracy, tolerances and

ELEMENT	PERFORMANCE CRITERIA
	other information according to drawing requirements
3. Prepare plots or drawings	3.1 Access and use CADD functions and features according to operating instructions 3.2 Access and use peripheral equipment required for projects 3.3 Prepare and review preliminary drawings in consultation with required personnel
4. Finalise drawings	4.1 Check designs against project objectives and specifications and mark up documentation according to organisational procedures 4.2 Identify and make required adjustments to designs in consultation with required personnel 4.3 Store data files according to operating instructions and organisational procedures 4.4 Submit final drawings within agreed time parameters

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance but not explicit in the performance criteria.

SKILL	DESCRIPTION
Reading	- Interprets and evaluates detailed information, instructions and technical specifications in different formats when preparing for and producing computer aided drawings - Reviews accuracy of drawings against specifications and project information
Writing	Records key design information using industry standard conventions and terminology
Oral Communication	Elicits information and opinions from others using questioning and careful listening
Numeracy	- Identifies and records measurements and other numerically expressed specifications required for drawings - Operates numerical functions of computer aided drawing equipment and produces drawings to scale and measurements that meet drawing requirements
Self-management	Takes responsibility for following necessary organisational procedures when planning and undertaking work
Teamwork	Participates in review of work progress with required personnel

SKILL	DESCRIPTION
Planning and organising	- Plans and organises required equipment, software and data in logical steps according to workplace and project requirements - Prepares preliminary drawings for evaluation by others and makes recommended refinements - Manages time to complete final drawings within established timeframes
Technology	Produces, edits, stores and retrieves drawings using features of digital systems and tools

Unit Mapping Information

Supersedes and is equivalent to CUAACD302 Produce computer-aided drawings.

Links

Companion Volume Implementation Guide is found on VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

Assessment Requirements for CUAACD312 Produce computer-aided drawings

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Performance Evidence

The candidate must demonstrate the ability to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including evidence of the ability to:

- use features and functions of a computer-aided design and drafting (CADD) program to produce at least three different computer-aided drawings that meet project objectives.

In the course of the above, the candidate must:

- select CADD hardware and software to suit project requirements
- follow operating instructions and organisational procedures
- use feedback from others to refine and produce final drawings within specified timelines.

Knowledge Evidence

The candidate must be able to demonstrate knowledge to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including knowledge of:

- software, peripheral equipment and tools used for CADD
- ways in which CADD is used within the specific workplace situation
- typical features and functions of CADD programs, including:
 - drawing tools to support methods for drawing lines, arcs, polylines, texts, dimensions
 - view displays
 - edit functions
 - working with layers
 - plotting and printing.

Assessment Conditions

Skills in this unit must be demonstrated in a workplace or simulated environment where the conditions are typical of those in a working environment in this industry.

This includes access to:

- CADD equipment and software
- project or concept information
- operating instructions and organisational procedures
- required personnel.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational educational and training legislation, frameworks and/or standards.

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