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CPPSIS4037 Produce computer-aided drawings

Release: 1

CPPSIS4037 Produce computer-aided drawings

Modification History

Release 1.

Replaces superseded equivalent CPPSIS4037A Produce computer-aided drawings.

This version first released with CPP Property Services Training Package Version 3.

Application

This unit of competency specifies the outcomes required to use appropriate software program functions and features to produce drawings for spatial tasks. The unit covers determining task requirements, including analysing task or design specifications and client needs, and setting up hardware and software applications. It requires the ability to use software functions and features to prepare digital and paper computer-aided spatial drawings, and to test and validate the integrity of drawings.

The unit supports those who work in technical support positions in a surveying and spatial information services team, and take some responsibility for liaising with clients or end users to meet task requirements.

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

Pre-requisite Unit

Nil

Unit Sector

Surveying and spatial information services

Elements and Performance Criteria

Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the range of conditions.
1. Determine drawing requirements.	1.1. Design specifications and client needs are identified and analysed to determine drawing requirements.
	1.2. *Appropriate persons* are consulted to clarify task specifications according to organisational requirements.
	1.3. Equipment and software are selected, set up and checked according to task specifications.

2.	Gather object parameters and measures.	2.1.	Critical dimensions and data for required drawings are established and recorded.
		2.2.	Quality requirements are identified and applied to design.
		2.3.	Requirements in relation to accuracy and tolerances are identified according to organisational requirements.
3.	Produce spatial drawings.	3.1.	*Software functions and features* are accessed and used according to task specifications.
		3.2.	Preliminary drawings are prepared and reviewed in consultation with appropriate persons.
		3.3.	Drawings are checked against task specifications and industry-accepted standards.
		3.4.	Drawing integrity is checked and validated to ensure accuracy and quality.
		3.5.	Adjustments to drawings are made to meet task specifications and final drawings are disseminated to appropriate persons.
		3.6.	Data files are stored according to organisational requirements.

Foundation Skills

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

Skill	Performance feature
Initiative and enterprise skills to:	• create spatial data layout and design.
Planning and organising skills to:	• plan and prioritise work to meet contractual requirements.

| Numeracy skills to: | • apply understanding of height, depth, dimension and position to actual operational activity and virtual representation |
| | • verify accuracy of drafting or drawing tolerances and measurements. |

| Oral communication skills to: | • liaise with clients and end users to identify task requirements and required drawing detail. |

| Reading skills to: | • interpret technical drawing standards. |

| Technology skills to: | • load spatial data into software applications |
| | • operate hardware, including computers and printers. |

Range of Conditions

This section specifies work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included. Bold italicised wording, if used in the performance criteria, is detailed below.

Appropriate persons must include at least two of the following:	• client
	• colleague
	• end user.

Software functions and features must include at least eight of the following:	• arcs
	• dimensions
	• drawing features, such as polylines and texts
	• drawing functions
	• edit functions
	• isometrics and perspectives
	• methods for drawing lines
	• plotting and printing
	• using attributes to make a report
	• view displays
	• working with layers
	• three-dimensional (3-D) techniques, including displaying 3-D views
	• two-dimensional (2-D) coordinate plotting.

Unit Mapping Information

CPPSIS4037A Produce computer-aided drawings

Links

Companion Volume implementation guides are found in VETNet - https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=6f3f9672-30e8-4835-b348-205dfcf13d9b