



**Australian Government**

# **CPP50112 Diploma of Surveying**

**Release 2**

# CPP50112 Diploma of Surveying

## Modification History

Version Comment

- 2 Deletion of the Surveying and Spatial units as approved by the Industry Reference Committee Release 12.0 of the CPP Property Services Training Package:
  - CPPSIS5033A - Implement a spatial information services project plan
  - CPPSIS5045A - Undertake spatial process improvement to reduce costs and improve service
  - CPPSIS5055A - Plan and conduct major survey expeditions
  - CPPSIS5056A - Design road and railway
  - CPPSIS5059A - Determine suitable information sources to create new spatial datasets.
- 1 Changed outcome for all native CPP07 core units. Native and imported elective units updated.

## Description

Qualification requirements

This qualification applies to those who provide guidance in surveying activity. They analyse, design and execute judgements using wide-ranging technical, creative and conceptual competencies. Their knowledge base may be highly specialised or broad within the surveying field and they may be responsible for group outcomes.

This qualification is suitable for an Australian Apprenticeship pathway.

## Pathways Information

Not applicable.

## Licensing/Regulatory Information

Not applicable.

## Entry Requirements

Not applicable.

## Employability Skills Summary

Employability skill	Industry/enterprise requirements for this qualification include the following facets:
<b>Communication</b>	<ul style="list-style-type: none"> <li>• discuss vocational issues effectively with colleagues</li> <li>• impart knowledge and ideas through oral, written and visual means</li> <li>• apply literacy skills to:                             <ul style="list-style-type: none"> <li>• assess and use workplace information</li> <li>• locate and interpret legislation and other written documentation</li> <li>• prepare and manage documentation and information flow</li> <li>• read and write key performance reports, including technical reports</li> <li>• research and evaluate (high level) in order to source surveying or spatial information services (SSIS) educational information</li> </ul> </li> <li>• document project objectives, deliverables, constraints, principal work activities and equipment requirements according to spatial data specifications and client requirements</li> <li>• implement and maintain agreed communication processes between project members, clients and other stakeholders</li> <li>• complete required documentation promptly, accurately and according to organisational guidelines</li> <li>• implement and apply agreed communication processes between project members, clients and other stakeholders</li> </ul>
<b>Teamwork</b>	<ul style="list-style-type: none"> <li>• relate to people from a range of social, cultural and ethnic backgrounds and with a range of physical and mental abilities</li> <li>• present project specifications to relevant personnel</li> <li>• inform relevant personnel of the results according to organisational guidelines</li> </ul>
<b>Problem solving</b>	<ul style="list-style-type: none"> <li>• evaluate spatial information to apply knowledge to plan future collection requirements</li> <li>• scope spatial data acquisition requirements</li> <li>• analyse client instructions to determine specific needs and spatial data requirements</li> <li>• evaluate available collection options</li> <li>• research and adhere to pertinent legal and statutory standards</li> <li>• create, extract and output information from engineering plans</li> <li>• spatial skills to:                             <ul style="list-style-type: none"> <li>• understand the holistic implications of height, depth, breadth, dimension, direction and position to actual operational activity and virtual representation</li> <li>• exercise precision and accuracy in relation to surveying</li> <li>• solve complex problems relating to height, depth, breadth, dimension, direction and position in actual operational activity and virtual representation</li> </ul> </li> </ul>

<b>Employability skill</b>	<b>Industry/enterprise requirements for this qualification include the following facets:</b>
	<ul style="list-style-type: none"> <li>design and interpret technical documentation</li> </ul>
<b>Initiative and enterprise</b>	<ul style="list-style-type: none"> <li>select preferred option on the basis of client needs and organisational capability and priorities</li> <li>develop spatial data collection and validation plan</li> <li>create survey drawings using suitable software</li> </ul>
<b>Planning and organising</b>	<ul style="list-style-type: none"> <li>plan spatial data collection and validation</li> <li>plan the processes and procedures involved in undertaking field surveys, including access, layout, development and provision of services, according to organisational and OHS guidelines</li> <li>organise resources for survey operations</li> <li>prepare computer-aided design environment</li> <li>implement project management mechanisms to measure, record and report progress of activities in relation to the agreed schedule and plans</li> <li>archive spatial data according to project specifications</li> </ul>
<b>Self-management</b>	<ul style="list-style-type: none"> <li>delegate duties</li> <li>prioritise activities</li> <li>adhere to OHS requirements throughout the conduct of design and drawing procedures</li> </ul>
<b>Learning</b>	<ul style="list-style-type: none"> <li>train others in spatial precision techniques</li> <li>update skills and knowledge to accommodate changes in operating environment and equipment</li> <li>apply knowledge of terminology and nomenclature applicable to surveying</li> </ul>
<b>Technology</b>	<ul style="list-style-type: none"> <li>use a computer (high technical user level) to develop business documentation</li> <li>create survey drawings using suitable software</li> <li>conduct operational elements of surveying operations</li> <li>understand and apply high-level, relevant engineering-related tasks and associated computations</li> </ul>

Due to the high proportion of electives required by this qualification, the industry/enterprise requirements described above for each employability skill are representative of the property industry in general and may not reflect specific job roles. Learning and assessment strategies for this qualification should be based on the requirements of the units of competency for this qualification.

This table is a summary of employability skills that are typical of this qualification and should not be interpreted as definitive.

## Packaging Rules

To achieve this qualification, the candidate must demonstrate competency in:

- 16 units of competency:
  - 7 core units
  - 9 elective units.

The elective units must ensure the integrity of the AQF alignment and contribute to a valid, industry-supported vocational outcome and are to be chosen as follows:

- up to 9 units from the elective units listed below
- up to 2 units may be chosen from Certificate IV, Diploma or Advanced Diploma qualifications in CPP07 or another current Training Package or accredited course.

### Core units

CPPSIS5031A	Plan spatial data collection and validation
CPPSIS5047A	Conduct an advanced GNSS data collection and set out survey
CPPSIS5048A	Conduct an engineering survey
CPPSIS5050A	Create engineering drawings
CPPSIS5053A	Perform advanced surveying computations
CPPSIS5054A	Perform geodetic surveying computations
CPPSIS5058A	Conduct geodetic surveying

### Elective units

AHCLPW404A	Produce maps for land management purposes
BSBOHS509A	Ensure a safe workplace
CPCCSV5007A	Undertake site surveys and set-out procedures for building projects
CPPCMN4002B	Implement and monitor environmentally sustainable work practices
CPPSIS4038A	Prepare and present GIS data
CPPSIS5037A	Maintain complex spatial data systems

CPPSIS5040A	Collate and interpret spatial data
CPPSIS5043A	Design a spatial data storage system
CPPSIS5044A	Develop a subdivision survey design for local government approval
CPPSIS5046A	Design a stormwater system
CPPSIS5049A	Conduct an engineering surveying project
CPPSIS5051A	Apply land and planning law to surveying
CPPSIS5052A	Integrate surveying datasets
CPPSIS5057A	Carry out a precision survey
CPPSIS5060A	Use complex spreadsheets for spatial information
CPPSIS5061A	Locate underground services in surveying practice
CPPSIS5064A	Manipulate and analyse GIS data
CPPSIS6021A	Conduct open mine pit surveying
CPPSIS6022A	Create mine drawings
CPPSIS6033A	Conduct underground mine surveying
PSPLAND308A	Compile and check survey plans
RIIMEX405A	Apply and monitor systems and methods of surface coal mining
RIIRIS401A	Apply site risk management system

## Custom Content Section

Not applicable.