

# **CPP50107 Diploma of Surveying**

Release: 1



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# **Modification History**

Not Applicable

## **Description**

Not Applicable

#### **Pathways Information**

Not Applicable

# **Licensing/Regulatory Information**

Not Applicable

# **Entry Requirements**

Not Applicable

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# **Employability Skills Summary**

Employability Skills Qualification Summary		
Employability Skill	Industry/enterprise requirements for this qualification include the following facets:	
Communication	<ul> <li>apply communication skills</li> <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:</li> <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 SIS educational information</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> <li>apply numeracy skills to:</li> <li>analyse errors</li> <li>conduct image analysis</li> <li>interpret and analyse statistics</li> <li>perform mental calculations</li> <li>record with accuracy and precision</li> <li>undertake high level computations</li> </ul>	
Teamwork	<ul> <li>relate to people from a range of social, cultural and ethnic backgrounds and with a range of physical and mental abilities</li> </ul>	

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Employability Skills Qualification Summary	
	<ul> <li>present project specifications to relevant personnel</li> </ul>
	inform relevant personnel of the results according to organisational guidelines
Problem solving	<ul> <li>evaluate spatial information to apply knowledge to plan future collection requirements</li> </ul>
	• scope spatial data acquisition requirements
	<ul> <li>analyse client instructions to determine specific needs and spatial data requirements</li> </ul>
	<ul> <li>evaluate available collection options</li> </ul>
	<ul> <li>research and adhere to pertinent legal and statutory standards</li> </ul>
	<ul> <li>create, extract and output information from engineering plans</li> </ul>
	• spatial skills to:
	<ul> <li>understand the holistic implications of height, depth, breadth, dimension, direction and position to actual operational activity and virtual representation</li> </ul>
	<ul> <li>exercise precision and accuracy in relation to surveying</li> </ul>
	solve complex problems relating to height, depth, breadth, dimension, direction and position in actual operational activity and virtual representation
	<ul> <li>design and interpret technical documentation</li> </ul>
Initiative and enterprise	select preferred option on the basis of client needs and organisational capability and priorities
	develop spatial data collection and validation plan
	• create survey drawings using suitable software
Planning and organising	plan spatial data collection and validation
	• plan the processes and procedures involved in
	undertaking field surveys, including access, layout, development and provision of services, according to organisational and OHS guidelines
	<ul> <li>organise resources for survey operations</li> </ul>
	<ul> <li>prepare computer-aided design environment</li> </ul>
	• implement project management mechanisms to measure, record and report progress of

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Employability Skills Qualification Summary		
	activities in relation to the agreed schedule and plans  archive spatial data according to project	
	specifications	
Self-management	<ul><li>delegate duties</li><li>prioritise activities</li></ul>	
	adhere to OHS requirements throughout the conduct of design and drawing procedures	
Learning	<ul> <li>perform file management and train others in this task</li> </ul>	
	<ul> <li>perform spatial data archival and retrieval and train others in this task</li> </ul>	
	<ul> <li>perform spatial data management and manipulation and train others in this task</li> </ul>	
	<ul> <li>train others in spatial precision techniques</li> </ul>	
	<ul> <li>update skills and knowledge to accommodate changes in operating environment and equipment</li> </ul>	
	<ul> <li>apply knowledge of terminology and nomenclature applicable to surveying</li> </ul>	
Technology	<ul> <li>use a computer (high technical user level) to develop business documentation</li> </ul>	
	• create survey drawings using suitable software	
	<ul> <li>conduct operational elements of surveying operations</li> </ul>	
	understand and apply high-level, relevant engineering-related tasks and associated computations	

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**

#### Packaging rules

To achieve recognition at the Diploma level, the candidate must demonstrate

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#### Packaging rules

competency in the seven core units, plus nine electives (total sixteen units). Up to two of the required electives may be selected from other qualifications aligned at the Certificate IV, Diploma or Advanced Diploma level in this Training Package or from other relevant endorsed Training Package qualifications aligned at the Certificate IV, Diploma or Advanced Diploma level.

Core units		
CPPSIS5001A	Plan spatial data collection and validation	
CPPSIS5017A	Conduct an advanced GPS data collection and set out survey	
CPPSIS5018A	Conduct an engineering survey	
CPPSIS5020A	Create engineering drawings	
CPPSIS5023A	Manage advanced surveying computations	
CPPSIS5024A	Perform geodetic surveying computations	
CPPSIS5028A	Conduct geodetic surveying	
Elective units		
BSBITU402A	Develop and use complex spreadsheets	
BSBATSIL502B	Work with the manager	
BSBOHS509A	Ensure a safe workplace	
CPCCSV5007A	Undertake site surveys and set-out procedures for building projects	
CPCCSV5008A	Apply building control legislation to building surveying	
CPPCMN4002A	Implement and monitor environmentally sustainable work practices	
CPPSIS5003A	Implement a spatial information services project plan	
CPPSIS5007A	Maintain complex spatial data systems	
CPPSIS5010A	Collate and interpret spatial data	
CPPSIS5013A	Design a spatial data storage system	

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Packaging rules	Packaging rules		
CPPSIS5014A	Develop a subdivision survey design for local government approval		
CPPSIS5015A	Undertake spatial process improvement to reduce costs and improve service		
CPPSIS5016A	Design a stormwater system		
CPPSIS5019A	Conduct an engineering surveying project		
CPPSIS5021A	Apply land and planning law to surveying		
CPPSIS5022A	Integrate surveying datasets		
CPPSIS5025A	Plan and conduct major survey expeditions		
CPPSIS5026A	Design road and railway		
CPPSIS5027A	Carry out a precision survey		
CPPSIS5029A	Determine suitable information sources to create new spatial datasets		
CPPSIS6001A	Conduct open mine pit surveying		
CPPSIS6002A	Create mine drawings		
CPPSIS6013A	Conduct underground mine surveying		
FDFOPTRWP3A	Report on workplace performance		
ICTTC032C	Undertake a civil site survey		
MNCO1046A	Apply and monitor systems and methods of mining		
LGAPLEM404A	Prepare and present geographic information systems data		
LGAPLEM508A	Manipulate and analyse data within geographic information systems		
MNQGEN500A	Implement and maintain management plans to control risk		
PSPLAND308A	Compile and check survey plans		
RTD4507A	Produce maps for land management purposes		

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