

# CPP60109 Advanced Diploma of Spatial Information Services

Release: 1



#### **CPP60109 Advanced Diploma of Spatial Information Services**

# **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**

Industry/enterprise requirements for this qualification include the following facets:  apply verbal and written communication skills to: build on others' ideas to advance discussion and question others to clarify ideas encourage feedback provide clear sequenced oral instructions to others
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explore ideas in discussion listen and question to clarify and elicit information participate effectively in verbal interactions apply communication skills to discuss vocational issues effectively with colleagues and impart knowledge and ideas through oral, written and visual means apply literacy skills to: assess and use workplace information locate and interpret legislation and other written documentation prepare and manage documentation read and write technical reports research and evaluate apply numeracy skills to: analyse errors conduct image analysis interpret and analyse statistics perform mental calculations record with accuracy and precision undertake computations complete all required documentation according to organisational guidelines define and document project objectives, deliverables, constraints, principal work activities and equipment requirements according to spatial data specifications and client requirements implement and maintain agreed

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Employability Skills Qualification Summary		
		members, clients and other stakeholders
Teamwork	•	allocate work to appropriate personnel and implement supervisory processes, checks, measures and problem-solving techniques to ensure work is completed within time available
	•	inform relevant personnel of the results according to organisational guidelines
	•	relate to people from a range of social, cultural and ethnic backgrounds and with a range of physical and mental abilities
	•	select personnel and work teams for the project activity
	•	work with others
	•	work effectively as part of a team
Problem solving	•	apply theoretical spatial concepts to a range of situations in order to determine, create and facilitate acceptance by users of a suitable spatial data and attribute storage system
	•	determine functional requirements
	•	conduct an audit of existing spatial data sources to determine their suitability, usability, spatial data dependencies and adaptability
	•	create and test a prototype or adopt standard format to confirm that design meets functional requirements
	•	apply spatial skills to:
	•	understand the holistic implications of height, depth, breadth, dimension, direction and position to actual operational activity and virtual representation
	•	exercise precision and accuracy in relation to complex engineering surveying
	•	solve complex problems relating to height, depth, breadth, dimension, direction and position in actual operational activity and virtual representation
Initiative and enterprise	•	create and test system design apply research and analytical skills to: assemble evidence and evaluate for accuracy and relevance
	•	use and follow academic procedure for

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Employability Skills Qualification Summary		
	research techniques and copyright	
	requirements	
	<ul><li>use a variety of strategies for planning</li><li>apply creative and conceptual skills</li></ul>	
	<ul><li>apply delegation skills</li><li>undertake business negotiation</li></ul>	
	<ul><li>undertake business negotiation</li><li>create 2-D drawings</li></ul>	
	<ul> <li>create 2-D drawings</li> <li>create and modify a 3-D model or digital</li> </ul>	
	elevation model	
Planning and organising	• apply project management skills, including the ability to meet deadlines	
	develop a plan based on functional	
	requirements detailing spatial data flow dependencies	
	• develop a schedule for the introduction of the system	
	<ul> <li>archive spatial data according to project specifications</li> </ul>	
	<ul> <li>prepare data for geocoding</li> </ul>	
	<ul> <li>prepare for examination and assessment of product or service quality</li> </ul>	
	implement project management mechanisms to measure, record and report progress of activities in relation to the agreed schedule and plans	
	<ul> <li>organise project resources</li> </ul>	
	select a strategy for developing a web-based geographic information system application	
	• prepare 2-D or 3-D digital elevation model	
Self-management	time management	
oen-management	<ul> <li>manage self</li> </ul>	
	<ul> <li>prioritise activities</li> </ul>	
	adhere to correct OHS practices	
	<ul> <li>comply with, and develop or amend, organisational guidelines</li> </ul>	
Learning	apply knowledge of organisational policies and guidelines	
	<ul> <li>update skills and knowledge to accommodate changes in global positioning system equipment</li> </ul>	
	update skills and knowledge to accommodate changes in environment and equipment	

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Employability Skills Qualification Summary		
	•	train others in spatial precision techniques
	•	perform spatial data archival and retrieval and train others in this task
	•	perform spatial data management and manipulation and train others in this task
	•	perform file management and train others in this task
	•	perform global positioning system data archival and retrieval and train others in this task
Technology	•	use a computer (high technical user level) to complete business documentation and apply software and hardware
	•	assess spatial computing platforms and software systems for suitability against specification
	•	analyse and design networks
	•	select suitable computing platforms and software systems
	•	maximise the potential of the web-based geographic information systems application by the specification of possible software tools and links
	•	develop geographic information systems to run within the internet and private intranets
	•	check equipment to be in good working order

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**

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Minimum entry level for this Advanced Diploma is a Diploma of Surveying or a Diploma of Spatial Information Services.

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#### **Packaging rules**

To achieve recognition at the Advanced Diploma level, the candidate must demonstrate competency in the six core units, plus seven electives (total thirteen units). The elective units selected at this level must not include those selected at Diploma level. Up to two of the required electives may be selected from other qualifications aligned at the Diploma or Advanced Diploma level in this Training Package or from other relevant endorsed Training Package qualifications aligned at the Diploma or Advanced Diploma level.

Core units		
BSBRSK501A	Manage risk	
CPPSIS6003A	Determine client spatial requirements	
CPPSIS6004A	Design a spatial project plan	
CPPSIS6005A	Apply quality control measures to spatial information services industry	
CPPSIS6007A	Design spatial information services project deliverables	
CPPSIS6010A	Undertake spatial information services research and	

development

#### Elective units

Elective units	
BSBFIM501A	Manage budgets and financial plans
BSBMGT502B	Manage people performance
BSBMGT605B	Provide leadership across the organisation
BSBMGT616A	Develop and implement strategic plans
BSBMKG502B	Establish and adjust the marketing mix
BSBMKG608A	Develop organisational marketing objectives
BSBWOR502A	Ensure team effectiveness
CPCCSV6012A	Facilitate community development consultation
CPPCMN4001A	Develop workplace policy and procedures for sustainability
CPPDSM5036A	Prepare tender documentation in the property industry
CPPSIS5013A	Design a spatial data storage system

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Packaging rules	
CPPSIS6001A	Conduct open mine pit surveying
CPPSIS6002A	Create mine drawings
CPPSIS6006A	Develop and maintain spatial information services contractual relationships
CPPSIS6008A	Conduct design and set out survey
CPPSIS6009A	Educate the public on spatial information services
CPPSIS6011A	Carry out basic mine design
CPPSIS6012A	Conduct an advanced GPS control survey
CPPSIS6013A	Conduct underground mine surveying
CPPSIS6014A	Conduct mining geology operations
CPPSIS6015A	Conduct complex engineering set out surveys
CPPSIS6016A	Monitor complex engineering surveying structures
CPPSIS6017A	Conduct advanced remote sensing analysis
CPPSIS6018A	Design spatial networks and geocoding
CPPSIS6019A	Develop distributed mapping applications
CPPSIS6020A	Develop 2-D and 3-D terrain visualisations
LGAPLEM603B	Coordinate information gathering and geographic information systems development in council
LGAPLEM607A	Develop, monitor and maintain geographic information systems
LGAPLEM610A	Manage data within council's geographic information system

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