



Australian Government

CPP60112 Spatial Information Services

Release 1

CPP60112 Advanced Diploma of Spatial Information Services

Modification History

Changed outcome for some native CPP07 core units. Imported core unit updated. Native and imported elective units updated.

Surveying units removed from elective pool of qualification and re-packaged into new CPP60312 Advanced Diploma of Surveying.

Entrance requirements removed.

Description

Qualification requirements

This qualification applies to those who provide strategic direction for using spatial information services. They analyse, design and execute judgements using wide-ranging highly technical, creative, and conceptual competencies, often in an unpredictable variety of contexts. Their knowledge base may be highly specialised or broad across a range of spatial information services. These individuals may be responsible for group outcomes and for the overall performance of the spatial information services activity of a business unit.

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:
Communication	<ul style="list-style-type: none"> • apply verbal and written communication skills to: <ul style="list-style-type: none"> • build on others' ideas to advance discussion and question others to clarify ideas • encourage feedback • provide clear sequenced oral instructions to others • explore ideas in discussion • listen and question to clarify and elicit information • participate effectively in verbal interactions • discuss vocational issues effectively with colleagues and impart knowledge and ideas through oral, written and visual means • apply literacy skills to: <ul style="list-style-type: none"> • 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 • complete 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 communication processes between project members, clients and other stakeholders
Teamwork	<ul style="list-style-type: none"> • 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 effectively as part of a team
Problem solving	<ul style="list-style-type: none"> • 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

Employability skill	Industry/enterprise requirements for this qualification include the following facets:
	<ul style="list-style-type: none">• apply spatial skills to:<ul style="list-style-type: none">• 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

Employability skill	Industry/enterprise requirements for this qualification include the following facets:
Initiative and enterprise	<ul style="list-style-type: none"> • create and test system design • apply research and analytical skills to: <ul style="list-style-type: none"> • assemble evidence and evaluate for accuracy and relevance • use and follow academic procedure for research techniques and copyright requirements • use a variety of strategies for planning • apply creative and conceptual skills • apply delegation skills • undertake business negotiation • create 2-D drawings • create and modify a 3-D model or digital elevation model
Planning and organising	<ul style="list-style-type: none"> • 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 • archive spatial data according to project specifications • prepare data for geocoding • prepare for examination and assessment of product or service quality • implement project management mechanisms to measure, record and report progress of activities in relation to the agreed schedule and plans • organise project resources • select a strategy for developing a web-based geographic information system application • prepare 2-D or 3-D digital elevation model
Self-management	<ul style="list-style-type: none"> • manage time • prioritise activities • adhere to correct OHS practices • comply with, and develop or amend, organisational guidelines
Learning	<ul style="list-style-type: none"> • apply knowledge of organisational policies and guidelines • update skills and knowledge to accommodate changes in environment and equipment, including global navigation satellite system (GNSS) equipment • train others in spatial precision techniques
Technology	<ul style="list-style-type: none"> • use a computer (high technical user level) to complete business documentation and apply software and hardware • assess spatial computing platforms and software systems for

Employability skill	Industry/enterprise requirements for this qualification include the following facets:
	suitability against specification <ul style="list-style-type: none"> • 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

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

- 13 units of competency:
 - 6 core units
 - 7 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 7 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

BSBR501B	Manage risk
CPPSIS6023A	Determine client spatial requirements
CPPSIS6024A	Design a spatial project plan

CPPSIS6025A	Apply quality control measures to spatial information services industry
CPPSIS6027A	Design spatial information services project deliverables
CPPSIS6030A	Undertake spatial information services research and development

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
BSBWOR502B	Ensure team effectiveness
CPCCSV6012A	Facilitate community development consultation
CPPCMN4001B	Develop workplace policies and procedures for sustainability
CPPDSM5036A	Prepare tender documentation in the property industry
CPPSIS5043A	Design a spatial data storage system
CPPSIS6022A	Create mine drawings
CPPSIS6026A	Develop and maintain spatial information services contractual relationships
CPPSIS6029A	Educate the public on spatial information services
CPPSIS6031A	Carry out basic mine design
CPPSIS6032A	Conduct an advanced GNSS control survey
CPPSIS6034A	Conduct mining geology operations
CPPSIS6037A	Conduct advanced remote sensing analysis
CPPSIS6038A	Design spatial networks and geocoding

CPPSIS6039A	Develop distributed mapping applications
CPPSIS6040A	Develop 2-D and 3-D terrain visualisations
CPPSIS6042A	Coordinate information gathering and GIS development
CPPSIS6043A	Develop, monitor and maintain geographic information systems
CPPSIS6044A	Manage GIS data

Custom Content Section

Not applicable.