



Australian Government

RII60509 Advanced Diploma of Civil Construction Design

Release 3

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Modification History

Not applicable.

Description

The Advanced Diploma of Civil Construction Design reflects the role of senior civil works designers or para-professional designers who support professional engineers. They perform tasks that are broad, specialised, complex and technical and include strategic areas and initiating activities. They are responsible for the design of complex projects to ensure the implementation of the client's site requirements and are required to demonstrate self-directed application of theoretical and technical knowledge and initiate solutions to technical problems or management requirements.

Pathways Information

Not applicable.

Licensing/Regulatory Information

Not applicable.

Entry Requirements

Not applicable.

Employability Skills Summary

The following table includes a summary of the employability skills as identified by the resources and infrastructure industry for this qualification. The table should be interpreted in conjunction with the detailed requirements of each unit of competency packaged in this qualification. The outcomes required here are broad industry requirements that may vary depending on packaging options.

Employability Skill	Industry/enterprise requirements for this qualification include:
Communication	<ul style="list-style-type: none"> • provide clear and direct feedback • listen carefully to instructions and information • read and interpret project plans and safety signs • calculate basic weights, distances and volumes • complete accurate work plans, technical reports, risk assessments, etc • negotiate solutions to customer and workplace based issues • negotiate project details with clients • network with other professionals working in the same field
Teamwork	<ul style="list-style-type: none"> • plan and lead team performance and operations • coordinate project activities and timelines with clients • work cooperatively with people of different ages, gender, race, religion or political persuasion • provide feedback and advice to staff • lead site-wide planning and coordination activities
Problem-solving	<ul style="list-style-type: none"> • re-allocate staff and resources in response to changing weather, site conditions and priorities • manage staff to solve problems and coordinate individual responsibilities and activities • work cooperatively with clients to resolve contract and operational issues • manage the ongoing review and adjustment of operations against performance indicators and project milestones
Initiative and enterprise	<ul style="list-style-type: none"> • act independently to identify potential improvements to working practice and conditions • identify and take steps to resolve risks in the workplace • encourage the exploration and application of innovative approaches to improve on operational performance
Planning and organising	<ul style="list-style-type: none"> • manage and coordinate time and priorities for self and team • identify and obtain appropriate personnel and resources for work • ensure that risks are assessed and appropriate emergency plans are in place • ensure that project planning incorporates the possibility of adapting to future changes

Self-management	<ul style="list-style-type: none"> • take responsibility for ensuring team targets and goals are achieved • understand the standard of work expected at the work site • proactively manage team performance • develop trust and confidence in staff and customers
Learning	<ul style="list-style-type: none"> • be willing to learn new ways of working • seek information to improve performance from people and workplace documents like policies, procedures etc • understand equipment characteristics, technical capabilities, limitations and procedures • lead change and continuous improvement processes • manage learning and development plans • prepare and lead formal or informal training sessions
Technology	<ul style="list-style-type: none"> • apply a range of basic IT skills in monitoring and reporting on systems • operate equipment safely and according to manufacturer and workplace guidelines • use communications technology appropriate to the workplace (email, mobile, radio, etc) • computer technology is used to monitor and communicate project status • use IT to create documents and maintain records of work activities

Packaging Rules

Requirements for completion of the qualification

The following table provides the packaging rules for this qualification, followed by the list of relevant units of competency.

Successful completion of twelve (12) units made up of:

- five (5) Core units
- seven (7) elective units made up of:
 - at least four (4) units from the Group A General Management units listed
 - at least one (1) unit from the Group B Design units listed
 - up to two (2) units, from this or any other Training Package or accredited course at any level

Units of competency chosen must

- be relevant to the competency requirements for the job function
- reflect the competency profile for the occupation at the enterprise level
- in the case of accredited course units of competency, not duplicate in part or in whole any unit from a Training Package

The units chosen to satisfy the Advanced Diploma of Civil Construction Design must be additional to the Units of Competency achieved to satisfy the Diploma of Civil Construction Design.

Care must be taken to ensure that all prerequisites specified within imported units, or units chosen as electives, are complied with.

Core units of competency	
<i>Unit code</i>	<i>Unit title</i>
BSBOHS607B	Advise on application of safe design principles to control OHS risk
BSBPMG608A	Direct risk management of a project program
BSBWOR502B	Ensure team effectiveness
RIICWD601A	Manage the civil works design process
RIIQUA601A	Establish and maintain a quality system
Group A Elective Units – General Management	
<i>Unit code</i>	<i>Unit title</i>
BSBMGT608B	Manage innovation and continuous improvement
BSBMGT617A	Develop and implement a business plan
BSBPMG601A	Direct the integration of projects
BSBPMG602A	Direct the scope of a project program

BSBPMG603A	Direct time management of a project program
BSBPMG604A	Direct cost management of a project program
BSBPMG605A	Direct quality management of a project program
BSBPMG606A	Direct human resource management of a project program
BSBPMG607A	Direct communications management of a project program
BSBPMG609A	Direct procurement and contracting for a project program
BSBSMB405B	Monitor and manage small business operations
RIIBEF601A	Conduct business negotiations
RIIBEF604A	Conduct feasibility study
Group B Elective Units – Design Units	
<i>Unit code</i>	<i>Unit title</i>
RIICWD507A	Prepare detailed geotechnical design
RIICWD509A	Prepare detailed design of urban roads
RIICWD510A	Prepare detailed design of busways
RIICWD512A	Prepare detailed design of motorways and interchanges
RIICWD520A	Prepare detailed design of rigid pavements
RIICWD526A	Prepare detailed traffic analysis
RIICWD528A	Prepare detailed design of traffic management systems
RIICWD532A	Prepare detailed design of tunnels
RIICWD533A	Prepare detailed design of civil concrete structures
RIICWD534A	Prepare detailed design of civil steel structures
RIICWD535A	Prepare detailed design of civil timber structures
RIICWD536A	Prepare detailed design of civil masonry, crib and gabion structures