

QUALIFICATION CODE CPC50919

QUALIFICATION TITLE Diploma of fire systems design

QUALIFICATION DESCRIPTION

The Diploma of Fire Systems Design reflects and supports the role of fire systems designers who prepare detailed technical designs and documentation for water-based fire suppression systems and/or fire detection and occupant warning systems.

The fire systems designs that are covered in this Diploma are those that meet the requirements of the Building Code of Australia or detailed designs prepared for alternative solutions designed or specified by a fire safety engineer. The Diploma of Fire Systems Design also includes a stream qualification for the annual certifier of fire systems.

Fire systems designers may enter the industry from a diverse range of occupations and sectors. They may choose to extend their careers by seeking to undertake subsequent higher education qualifications in related disciplines, including mechanical engineering and fire engineering.

The qualification has common core and elective unit of competency requirements that cover common skills for fire systems designers and certifiers, as well as specialist streams for:

- water-based systems
- detection and warning systems
- annual certifiers.

ENTRY REQUIREMENTS

Not applicable.

PACKAGING RULES

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

- 12 units of competency:
 - 4 core units
 - 8 elective units

The elective units are chosen as follows:

- 8 units from Group A Water-based systems elective unit or
- 5 units from Group B Detection and warning systems or
- 4 units from Group C Annual certifier elective units.

The remaining electives units can be selected from any of the groups listed below. Two elective units can be selected from any training package as long as they contribute to a valid, industry-supported vocational outcome.

An asterisk (*) against a unit code below indicates that there is a prerequisite requirement that must be met. Prerequisite unit(s) must be assessed before assessment of any unit of competency with an asterisk. Check the unit of competency for information on specific prerequisite requirements. All prerequisite requirements are packaged in the qualification.

Core units

CPCCWHS2001	Apply WHS requirements, policies and procedures in the construction industry
CPCSFS5001*	Define scope and hazard level of fire systems design projects
CPCSFS5002	Research and interpret detailed fire systems design project requirements

CPCSF5005 Research and evaluate fire system technologies and components

Group – A Water-based systems elective unit

CPCPCM4013	Produce 2-D architectural drawings using design software
CPCSF5003	Develop plans and methodology for fire systems design projects
CPCSF5006	Create detailed designs for fire sprinkler systems
CPCSF5007	Create detailed designs for hydrant and hose reel systems
CPCSF5009	Create detailed designs for fire systems' water supplies
CPCSF5010	Provide documentation and support for fabrication of fire sprinkler systems
CPCSF5011	Provide design documentation and review and support fire system installation processes
CPCSF5013	Support commissioning processes and finalise fire systems design projects

Group B – Detection and warning systems elective units

CPCPCM4013	Produce 2-D architectural drawings using design software
CPCSF5003	Develop plans and methodology for fire systems design projects
CPCSF5011	Provide design documentation and review and support fire system installation processes
CPCSF5013	Support commissioning processes and finalise fire systems design projects
CPCSF5018	Create detailed designs for fire alarm and emergency warning systems

Group C – Annual certifier elective units

BSBAUD504	Report on a quality audit
CPCCBC4012	Read and interpret plans and specifications
CPCSF5014	Conduct annual fire systems certification inspections
CPCSF5015	Assess documentation for annual fire systems certification inspections

Group D – General elective units

BSBCUS402	Address customer needs
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BSBCUS501	Manage quality customer service
BSBPMG516	Manage project information and communication
BSBPMG522	Undertake project work
BSBWHS503	Apply principles of WHS risk management
CHCDIV001	Work with diverse people
CPCBC4012	Read and interpret plans and specifications
CPCBC5009	Identify services layout and connection methods for Type B and C constructions
CPCCSV5009A	Assess the impact of fire on building materials
CPCPCM3099	Prepare simple drawings
CPCPCM4013	Produce 2-D architectural drawings using design software

QUALIFICATION MAPPING INFORMATION

Code and title	CPC08 Construction, Plumbing and Services Training Package	Comments	Equivalency statement
CPC50519 Diploma of Fire Systems Design	CPC50509 Diploma of Fire Systems Design	Supersedes and equivalent to CPC50509 Diploma of Fire Systems Design	E

LINKS

An Implementation Guide to this Training Package is available at:

<https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=7e15fa6a-68b8-4097-b099-030a5569b1ad>