



Australian Government

CPC50520 Diploma of Fire Systems Design

Release 2

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Modification History

Release 2 This version first released with CPC Construction, Plumbing and Services Training Package Release 6.4.

Unit CPCSFS5008 Create detailed designs for fire detection and warning systems added to metadata unit grid.

Release 1 This version first released with CPC Construction, Plumbing and Services Training Package Release 5.0.

Supersedes and is equivalent to CPC50509 Diploma of Fire Systems Design. Updated to meet the Standards for Training Packages 2012.

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 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

There are no entry requirements for this qualification.

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 to be chosen as follows.

All units from one of the specialisations (Group A, B or C) must be completed. That is:

- all 8 units from *Group A Water-based systems*, or
- all 5 units from *Group B Detection and warning systems* plus 3 additional electives, or
- all 4 units from *Group C Annual certifier* plus 4 additional electives.

The additional electives must ensure the integrity of the AQF alignment and contribute to a valid, industry-supported vocational outcome. Of these, 1 unit can be selected from any endorsed Training Package or accredited course at a Diploma or higher AQF level. One unit can be selected from Group A in the Certificate IV in Plumbing and Services. The remainder are to come from groups A, B, C or D listed below.

An asterisk (*) against a unit code below indicates that the unit has a prerequisite. Please check the unit for information on this. All prerequisites 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

CPCSFS5005 Research and evaluate fire system technologies and components

Group - A Water-based systems elective unit

CPCPCM4013 Produce 2D architectural drawings using design software

CPCSFS5003 Develop plans and methodology for fire systems design projects

CPCSFS5006 Create detailed designs for fire sprinkler systems

CPCSFS5007 Create detailed designs for hydrant and hose reel systems

CPCSFS5009 Create detailed designs for fire systems' water supplies

CPCSFS5010 Provide documentation and support for fabrication of fire sprinkler systems

CPCSFS5011 Provide design documentation and review and support fire system installation processes

CPCSFS5013 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
- CPCSFS5003 Develop plans and methodology for fire systems design projects
- CPCSFS5008 Create detailed designs for fire detection and warning systems
- CPCSFS5011 Provide design documentation and review and support fire system installation processes
- CPCSFS5013 Support commissioning processes and finalise fire systems design projects

Group C - Annual certifier elective units

- BSBAUD513 Report on a quality audit
- CPCCBC4012 Read and interpret plans and specifications
- CPCSFS5014 Conduct annual fire systems certification inspections
- CPCSFS5015 Assess documentation for annual fire systems certification inspections

Group D - General elective units

- BSBOPS404 Implement customer service strategies
- BSBOPS505 Manage organisational customer services
- BSBPMG535 Manage project information and communication
- BSBPMG430 Undertake project work
- BSBWHS513 Lead WHS risk management
- CHCDIV001 Work with diverse people
- CPCCBC4012 Read and interpret plans and specifications
- CPCCBC5009 Identify services layout and connection methods to medium rise construction projects
- CPCCSV5009* Assess the impact of fire on building materials

CPCPCM3024 Prepare simple sketches and drawings

CPCPCM4013 Produce 2-D architectural drawings using design software

Qualification Mapping Information

CPC Construction, Plumbing and Services Training Package 5.0	CPC08 Construction, Plumbing and Services Training Package	Comments	E/NE
CPC50520 Diploma of Fire Systems Design	CPC50509 Diploma of Fire Systems Design	Supersedes and is equivalent to CPC50509 Diploma of Fire Systems Design. Updated to meet the Standards for Training Packages 2012.	E

Links

Companion volumes to this training package are available at the VETNet website - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=7e15fa6a-68b8-4097-b099-030a5569b1ad>