**QUALIFICATION CODE** CPC50520

**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 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**

None.

**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 Ain 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**

|  |  |
| --- | --- |
| 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 |
| CPCSFS5008 | Create detailed designs for fire detection and warning systems |

**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**

|  |  |
| --- | --- |
| BSBAUD504 | 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**

|  |  |
| --- | --- |
| BSBCUS402 | Address customer needs |
| BSBCUS501 | Manage quality customer service |
| BSBPMG516 | Manage project information and communication |
| BSBPMG522 | 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**

|  |  |  |  |
| --- | --- | --- | --- |
| **Code and title** | **CPC08 Construction, Plumbing and Services Training Package** | **Comments** | **Equivalency statement** |
| CPC50520 Diploma of Fire Systems Design | CPC50509 Diploma of Fire Systems Design | Supersedes and is 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>