



CPC50520 DIPLOMA OF FIRE SYSTEMS DESIGN DETECTION AND WARNING SYSTEMS STREAM

This course is for experienced fire systems designers who prepare detailed technical designs and documentation for fire detection and warning systems, including smoke detection and alarm systems, smoke hazard management systems and occupant warning systems.

The Diploma level course recognises and validates your existing skills and knowledge in fire systems design of water based systems, whilst offering an opportunity to learn new skills.

Are there any special requirements needed to take this course?

- Participants must be experienced designers of fire detection and warning systems, and have completed designs and documentation of smoke detection and alarm systems, smoke hazard management systems and occupant warning systems.
- Participants require access to a personal computer or tablet to enable use of the on-line learning system.

Am I eligible for RPL?

- The first step of the RPL process after you enrol is to assess your suitability for RPL. This is an important step as it ensures that you are enrolled in the most appropriate pathway to complete the qualification.
- Assessing your eligibility to complete the course using an RPL pathway involves:
 - o a review of your work history and experience
 - o consideration of any formal training courses and qualifications previously completed; and
 - o a review of your ability to submit a portfolio of evidence of work projects aligned with the course requirements
- If your assessor determines that you are not able to meet the RPL requirements, you will be offered the opportunity to transfer your enrolment to a training course pathway.

What is Recognition of Prior Learning (RPL)

- RPL is an assessment process that assesses an individual's formal, non-formal and informal learning, combined with their experience to determine the extent to which the individual can demonstrate achievement of the required level of competency.
- RPL is ideal for experienced fire systems designers who have acquired skills and knowledge working in the fire industry and through the completion of formal training and informal learning activities.
- RPL for this course requires the submission of current and valid evidence of completing fire systems design and documentation across a range of building types and environments.
- Candidates are required to submit a portfolio of evidence as well as completing knowledge assessments, assignments and undertake course work for parts of the course.

Portfolio of Evidence Requirements

To complete the RPL pathway for this course, you will need to provide fully compliant designs for fire detection and warning systems, including drawings and documentation for a range of building types and classifications, including:

- low-rise building
- medium-rise building
- high-rise building (over 25 metres)
- building over 50 metres in height
- building classifications in the National Construction Code (NCC)

For each project that you submit, you will be required to provide the following evidence:

- a project plan and methodology for the design tasks
- detailed designs for fire detection and warning systems using computer aided design software
- documentation and provision of ongoing support for the installation of fire systems
- final fire system drawings, specifications and commissioning support documentation

If you have not completed designs for one or more of the above building types, or are unable to provide the specific evidence listed above for a particular project, you may still be eligible for RPL (see next section).

Can I enrol in RPL if I don't have all the above evidence?

- Your Portfolio of Evidence does not have to be based on work that you have completed prior to enrolling in the course.
- If you meet some of the above requirements, but are short in some areas, it is possible to enhance your portfolio with work examples that you undertake after you enrol.
- It is not unusual for an RPL candidate to have experience, but not be able to provide the evidence required by the qualification. If you don't have the necessary evidence, you can use a current work task to create the evidence in a format that meets the requirements of the course.
- Additionally, you can undertake certain individual units via a training course pathway as part of the RPL enrolment. For example, if you don't have CAD skills and haven't produced 2D CAD drawings of a fire detection and warning systems design, you can complete this part of the course via a training pathway, without it affecting your RPL application.
- This approach makes RPL easier to achieve for some people. It relies on you using your existing skills and knowledge to prepare evidence that aligns with the expectations of the units of competency.

How long does it take?

- The RPL pathway typically takes 6-12 months to complete.
- Participants are required to complete the course within 24 months of enrolling.

How is the course delivered?

- The RPL Pathway requires submission of current and valid evidence of completing fire systems design work across a range of building types and environments.
- The RPL Pathway is delivered via a distanced-based delivery model using an online learning and assessment system.
- The RPL pathway for this course also requires you to complete knowledge assessments and assignments and undertake course work to complete parts of the course.
- Participants are supported throughout the RPL and learning process by our industry experts.

Other Evidence Requirements

In addition to the portfolio of evidence, you will be required to complete a range of assessment tasks that include:

- short answer questions to verify your knowledge
- conducting detailed research into fire systems technologies and components
- completion of training and assessment course work on:
 - o Applying Work Health and Safety requirements, policies and procedures
- Producing 2-D architectural drawing and specifications of a plumbing and services layout for a single building using a computer-aided design (CAD) architectural program

What does the course cover?

The course validates your skills and knowledge as a fire systems designer of fire detection and warning systems.

The course covers:

- Determining the requirements for fire systems in accordance with relevant legislation, codes and standards
- Evaluating fire system technologies and components
- Creating detailed designs and specifications for fire detection and warning systems including smoke detection and alarm systems, zone and air pressurisation systems, smoke and heat vents, smoke exhaust systems, occupant warning and communication systems
- Producing 2D drawings of fire systems
- Providing design documentation to support installation and commissioning processes
- Undertake and manage fire systems design project work including resolution of design challenges and disputes

How does the course link to Licensing or Accreditation requirements?

- This course meets the FPAS application requirements for Fire Systems Design for:
 - o Fire Detection and Alarm Systems (Level 1, 2 and 3)
- Practitioners who hold an engineering degree from an Australian university or a program accredited by Engineers Australia, can enrol in this course to meet the FPAS requirements. They be able to use Recognition of Prior Learning to reduce the amount of training and assessment to be completed to finish the qualification.

Need help with licensing and accreditation requirements

- Visit www.fia.edu.au/advice for information on state and territory requirements or to obtain a detailed training plan that will demystify licensing and accreditation requirements and identify your training needs.

Additional training opportunities

- Participants can combine this course with an additional short course to include water based systems design or fire safety assessment.
- These short courses can either be combined into a single enrolment or you can undertake them after completing the Diploma.
- The relevant short courses available include:
 - o **FPAS FSA Advanced Practitioner course**, which meets the accreditation requirements for Fire Safety Assessment; or
 - o **Designing Water Based Systems 'Add On' Course for Detection Systems Designers**
- Alternatively, you might be interested in a combined stream Diploma course. The following courses are available to choose from:
 - o **Diploma Fire Systems Design - Annual Certifier & Detection Streams**
- Please contact our support team to discuss combining courses to ensure you benefit from the best combination of courses to meet your specific needs.

How do I enrol?

Further information on course fees and enrolment details can be found at www.fia.edu.au/courses

Course outcomes

On successful completion of this course, participants will be awarded the qualification **CPC50520 Diploma of Fire Systems Design – Fire Detection and Warning Systems Stream**

The qualification includes the following units of competency

Unit Code	Description
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
CPCPCM4013	Produce 2D 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
BSBPMG535	Manage project information and communication
BSBPMG430	Undertake project work
CPCCBC4024	Resolve business disputes