



CPC50520 DIPLOMA OF FIRE SYSTEMS DESIGN WATER BASED SYSTEMS STREAM

This course is for practitioners to learn how to prepare detailed technical designs and documentation for water-based fire suppression systems including fire sprinkler, fire hydrant and fire hose reel systems.

The course is designed for inexperienced fire system designers, or anyone wanting to extend their skills and knowledge.

Are there any special requirements needed to take this course?

- Participants must be employed in the fire industry and have the capacity to complete fire systems designs and documentation for actual construction projects.
- Participants require access to a personal computer or tablet to enable use of the on-line learning system.
- Participants must have access to the following software to support production of designs and documentation:
 - o Computer Aided Design (CAD) or appropriate drawing software
 - o Hydraulic analysis software, such as Hyena
 - o Word processing and spreadsheets

What if I already have experience?

- This course can be completed using a Recognition of Prior Learning (RPL) pathway.
- Further details on the RPL pathway for this course can be found by visiting www.fia.edu.au/courses.

What does the course cover?

The course provides participants with the skills and knowledge for a successful career as a fire systems designer of water based fire 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 sprinkler systems
- Creating detailed designs and specifications for fire hydrant and hose reel systems
- Creating detailed designs and specifications for fire systems water supplies
- Assessing issues relating to on-site installation and the production of specifications and supporting documentation for fabrication of pipework.
- Producing 2D drawings of a plumbing or services layout for a basic building
- Providing design documentation to support installation and commissioning processes

How long does it take?

- The course is delivered over a period of 18 months across four learning blocks, each of approximately 4 months in duration.

How is the course delivered?

- The course is delivered via a combination of on-line learning and workshops.
- The workshops will be delivered through a combination of online and in-person sessions.
- Participants are supported throughout the learning process by our industry experts.

How does the course link to Licensing or Accreditation requirements?

- This course meets the FPAS application requirements for Fire Systems Design for:
 - Fire Sprinkler Systems (Level 1, 2, 3 and 4)
 - Fire Hydrant and Fire Hose Reel 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 fire detection and warning 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:
 - FPAS FSA Advanced Practitioner course**, which meets the accreditation requirements for Fire Safety Assessment; or
 - Designing Detection Systems 'Add On' Course for Water Based Systems Designers**
- 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 - Water Based 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
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