

# Professional Standard: Certified Fire Investigator Requirements

## Authority

This standard was endorsed by the EMPS Panel in March 2019.

## Context

The Emergency Management Professionalisation Scheme (the Scheme) is a program to recognise the skills, abilities and experience of emergency management practitioners.

Established by AFAC, the national council and peak body for fire, land management and emergency service agencies in Australia and New Zealand, the Scheme is an initiative designed to promote emergency management as a profession.

The Scheme is open to career and volunteer personnel of AFAC member agencies, as well as individuals from other approved organisations.

## Scope of application

This standard applies to applicants seeking recognition in the role of Certified Fire Investigator.

Hazard specific expertise will be evaluated as part of the credentialing process, but credentials are not awarded by hazard class.

Applicants may be career staff or volunteers of AFAC member agencies or personnel from commercial, not for profit or other government entities.

## Credential

The Certified Fire Investigator credential is awarded to an individual who has successfully fulfilled all eligibility requirements. Individuals will be recognised as possessing advanced capability in carrying out complex origin and cause fire investigations involving factors such as significant size of fire, high value loss, serious criminal action, limited indicators to determine fire spread or substantial destruction of the scene. Certified fire investigators are expected to be able to present credible evidence in court in the capacity of expert witness, based on a detailed fire investigation report, and to appropriately defend their conclusions in the event that their evidence is contested.

## Eligibility – Certified Fire Investigator

An applicant must be able to provide evidence to demonstrate that he or she:

- Has committed to the EMPS Code of Ethics.
- Has the equivalent of three years or more applicable experience and has investigated and reported on at least three complex fire scenes.
- Is in compliance with the Professional Standard: Continuing Professional Development.
- Is supported in their application by their home agency or jurisdiction.

## Education requirements for Certified Fire Investigators

Applicants must be able to demonstrate:

1. Successful completion of one or more of the education components and all associated prerequisites as specified in Table 1
2. Capabilities as described in the Professional Standard: Fire Investigator Capabilities; and
3. Written documentation as evidence of meeting the requirements of this standard.

Table 1:

Course or Program
PUA60919 Advanced Diploma of Public Safety (Fire Investigation)
A tertiary qualification awarded after formal assessment by an institution legally permitted to award qualifications of that nature in its jurisdiction of establishment, and which in the view of the Panel provides evidence of the Applicant's competence in complex fire investigation at least equivalent to PUA60919 Advanced Diploma of Public Safety (Fire Investigation).

## Definitions

<b>Complex fire scene:</b>	Is a fire scene involving factors such as significant physical size of the fire, high value loss, serious criminal action, limited indicators to determine fire spread or substantial destruction of the scene, as determined by the Panel.
<b>Equivalent three years' experience:</b>	Is experience as a fire investigator at complex fire scenes for at least three years, or in the case of an individual who is Registered as a fire investigator under EMPS, for at least two years following Registration, as determined by the Panel.

## Review

This standard will commence 15 March 2019. The Panel will review this standard after two years or as required.

## Continuing professional development

The following Continuing Professional Development requirement, which must be recorded and reported in accordance with the EMPS Professional Standard: Continuing Professional Development applies to Certified Fire Investigators:

- Thirty recorded hours of knowledge development per year, which is exposure to external learning in relation to fire investigation through training courses, seminars, conferences, online learning, reading journal articles and research
- Attend and supervise or conduct two complex fire investigations over a rolling two year period.

## Areas of competency

Certified fire investigators should have and maintain at a minimum an up-to-date sound knowledge of the following topics relevant to their area of expertise. Exposure to these topics should occur within a three year cycle. If an asterisked\* topic is irrelevant to a practitioner's field of practice e.g. for a specialist bushfire fire investigator, the requirement does not apply to that topic.

1. Safety related to fire investigation
2. Fire science
3. Fire chemistry
4. Thermodynamics
5. Thermometry
6. Fire dynamics
7. Explosion dynamics\*
8. Computer fire modelling
9. Fire investigation process, methodology and technology
10. Fire analysis
11. Hazardous materials\*
12. Fire protection systems\*
13. Evidence documentation, collection, and preservation
14. Electricity and electrical systems
15. Presenting of evidence in judicial settings as an expert witness
16. Research relating to fire cause and emerging fire trends
17. Wildfire fire behaviour\*
18. Arson.

## Related professional standards

- Code of Ethics (2017).
- Professional Standard: Certified Fire Investigator Capabilities (2019).
- Professional Standard: Continuing Professional Development (2018).

Other sources of professional and ethical guidance for fire investigators include:

- Code of Practice for Investigators of Fires and Explosions for the Criminal Justice Systems in the UK (Institute of Fire Engineers, 2017)
- NFPA 921 Guide for Fire and Explosion Investigations (2017)