

1.12 Principles of Fire Safety Engineering

1	Duration	5 days
2	Aim	The aim of this course is to develop in students a basic understanding of the principles of fire safety engineering standards and techniques in order that they are better able to interpret building designs and fire safety solutions developed using these techniques.
3	Target Public	<ul style="list-style-type: none"> • Building designers - all aspects • Fire engineers • Architects • Construction specialists • Inspectors
4	Prerequisites	Official technical diploma or degree and CFPA Europe diploma in fire prevention (Technical or Management cycle) or other advanced course (equivalence will be assessed by a written test)
5	Objectives	<p>Upon successful completion of the course students will be able to:</p> <ul style="list-style-type: none"> • interpret and understand the principal European rules on fire safety engineering in the construction sectors (EC 89/106 and its interpretative document - if appropriate) • evaluate fire safety equivalence with prescriptive guidance in building design • be aware of the behaviour of fire in compartmented and non compartmented structures
		<ul style="list-style-type: none"> • European and national regulations • Standards and specifications • Introduction to the essential requirements of fire safety engineering • Technical approach to fire safety • The principles involved in attaining the fire safety objectives: <ul style="list-style-type: none"> • fire prevention • stability of structures • prevention of smoke and heat spread (within and beyond the enclosure of origin) • Safe evacuation • Safety for rescue-teams and fire fighters • Fire modelling and calculation of fire phenomena intended as an aid in the decision-making process • Consolidated models for fire growth and smoke movement. • Practical application of fire protection engineering principles to the design of buildings (both compartment and non-compartmented buildings will be designed using criteria for life safety, property protection and business continuity)
7	Related CFPA-E Guidelines	• 4:2003 F; 13:2006 F; 19:2009 F
8	Examination	Written examination
9	Certificate - Diploma - Attest	Certificate
10	Countries Running the Course	<ul style="list-style-type: none"> • Italy (isfop@networkaias.it, www.isfop.it) • Spain (mrodriguez@cepreven.com, www.cepreven.com) • UK (training@thefpa.co.uk, www.thefpa.co.uk)