

PPFM

This section consists of recorded lectures derived from the FSEG five day short course, Principles and Practice of Fire Modelling (PPFM). Material consists of the theory of human behaviour associated with fire and the basics of the SMARTFIRE fire modelling software.

	Title	Speaker	Duration (hh:mm:ss)
Day 1	Fire Field Modelling General Introduction	Prof Ed Galea	00:36:18
	Introduction To Fire Safety Engineering - Lecture 1	Prof Ed Galea	00:29:21
	Material Properties And Fundamental Concepts - Lecture 2	Prof Ed Galea	00:07:43
	Heat Transfer - Conduction - Lecture 3a	Prof Ed Galea	00:39:50
	Heat Transfer - Radiation - Lecture 3b	Prof Ed Galea	00:16:12
	Heat Transfer - Convection - Lecture 3c	Prof Ed Galea	00:14:30
	Fire Development - Lecture 4	Prof Ed Galea	00:59:33
	Zone Modelling (closed) - Lecture 5a	Prof Ed Galea	01:04:67
Day 2	Zone Modelling (open) - Lecture 5b	Prof Ed Galea	00:32:29
	Field Modelling Concepts - Lecture 6a	Prof Ed Galea	00:44:44
	Solving Algebraic Equations - Lecture 6b	Prof Ed Galea	01:08:41
	Concepts Of Fire Field Modelling - Lecture 7	Prof Ed Galea	00:24:58
Day 3	General Equations - Lecture 8	Dr Mayur Patel	00:39:01
	Discretisation And Boundary Conditions - Lecture 9	Dr Mayur Patel	00:55:47
	Sub Models - Turbulence - Lecture 10a	Dr Mayur Patel	00:42:48
	Sub Models - Combustion - Lecture 10b	Dr Mayur Patel	00:53:09
	Sub Models - Radiation - Lecture 10c	Dr Mayur Patel	00:22:38
	Sub Models - Sprinklers - Lecture 10d	Dr Mayur Patel	00:30:41
	Introduction to SMARTFIRE environment	Dr John Ewer	00:44:36
	Introduction to Post Processing - Lecture 11	Dr John Ewer	00:24:53
Day 4	Fire Modelling Guidance - Lecture 12	Dr John Ewer	00:57:47
	Complex Geometry - Lecture 13	Dr John Ewer	00:31:59
	Working with CAD - Lecture 14	Dr John Ewer	00:25:13
	Guidance on correct usage of CFD based fire modelling-Errors - Lecture 15	Dr John Ewer	00:58:18
Day 5	Coupled Fire and Evacuation Simulations - Lecture 16	Dr John Ewer	00:20:59
	SMARTFIRE - Parallel Implementation - Lecture 17	Dr Angus Grandison	00:18:29