

ADVANCED DIPLOMA IN FIRE SAFETY MANAGEMENT
**(Affiliated to West Bengal State Council of Technical &
Vocational Education and Skill Development)**

Course Structure
1 Year (Full Time) Course

1st SEMESTER:

Subject Code	Subject of Study	Contact Hrs		Marks Allotted		
		Th	Tu	Theory	Internal Assessment	Total
Theoretical Papers						
FSM – 101	Basics of Fire Science					
	Group A: Chemistry of Fire					
	Group B: Physics of Fire					
	Group C: Fire Science					
	Group D: Products of Combustion					
	Overall	50	10	70	30	100
FSM– 102	Fire Risk in Hazardous Elements					
	Group A: Fire Risk in Explosives, Plastics & Rubbers, Radioactive Materials					
	Group B: Fire Risk in Flammable Liquids and Gases & Dust					
	Group C: Electricity and Fire Risks					
	Group D: Aircraft & Ship Fire					
	Overall	50	10	70	30	100
FSM – 103	Fire Fighting Agents & Appliances					
	Group A: Fire Fighting Agents					
	Group B: Fire Fighting Equipments					
	Group C: Fire Service Equipments – Pumps, Hoses, Ladders, etc.					
	Group D: Personal Protective Equipments					
	Overall	50	10	70	30	100
FSM – 104	Fundamentals of Fire Protection & Control Technology					
	Group A: Hydraulics and Water Relay					
	Group B: Fire Hydrant System and Sprinkler System					
	Group C: HV & MV Water Spray and					

	Foam System					
	Group D: Fire Detection & Alarm System					
	Overall	50	10	70	30	100
FSM – 105	Fire Safety in Buildings					
	Group A: Building Studies					
	Group B: Smoke Movement in Building					
	Group C: Heating, Ventilation & Air Conditioning System					
	Group D: Fire Safety Requirements					
	Overall	50	10	70	30	100
FSM– 106	Fundamentals of Industrial Safety					
	Group A: Safety Hazards					
	Group B: Safety Incidents					
	Group C: Personal Protective Equipments					
	Group D: Behaviour Based Safety					
	Overall	50	10	70	30	100
Sessional Papers						
FSM – 107	Practical/ Field Training	100			200	200
Total		460		420	380	800
FSM – 108	Dissertation (would be conducted concurrently throughout the Semester)	250			200	200
Total (1st Semester)		710		420	580	1000

2nd SEMESTER:

Subject Code	Subject of Study	Contact Hrs		Marks Allotted		
		Th	Tu	Theory	Internal Assessment	Total
Theoretical Papers						
FSM – 201	Industrial Safety Management					
	Group A: Safety Philosophy					
	Group B: Safety Organisations					
	Group C: Safety in Construction					
	Group D: Occupational Health					
	Overall	50	10	70	30	100
FSM – 202	Fire & Industrial Safety Management & Administration					
	Group A: Safety Management					
	Group B: Safety Administration					
	Group C: Fire Service Management					
	Group D: Fire Service Ground Operation and Administration					
	Overall	50	10	70	30	100
FSM – 203	Fire Prevention & Life Safety					
	Group A: Means of Egress					
	Group B: Fire & Evacuation Drill					
	Group C: Various Rescue Techniques					
	Group D: First Aid & Resuscitation					
	Overall	50	10	70	30	100
FSM – 204	Risk Assessment & Safety Audit					
	Group A: Risk Assessment					
	Group B: Safety Audit					
	Group C: Emergency Management Plan					
	Group D: Routine Inspection and Reporting					
	Overall	50	10	70	30	100
FSM – 205	Design Engineering and Drawing of Fire Protection System					
	Group A: Basic Principles of Drawing					
	Group B: Design Basis with Schematic Diagram of Fire Protection & Detection System					
	Group C: Foam Based Protection System					
	Group D: Chemical Based Fire Protection System					

	Overall	50	10	70	30	100
FSM – 206	Fire & Industrial Safety Management Legislation					
	Group A: Fire & Industrial Safety Acts & Rules					
	Group B: NBC of India Part 4					
	Group C: Fire Safety Standards					
	Group D: Fire Safety Policy & Guidelines					
	Overall	50	10	70	30	100
Sessional Papers						
FSM – 207	Practical/Field Training	100		200	200	
Total		460	420	380	800	
FSM – 208	Internship	250		200	200	
Total (2nd Semester)		710	420	580	1000	
	GRAND TOTAL	12 months		2000		

Th: Theoretical

Tu: Tutorial