

Schemes and Syllabus

(For academic session 2025-26 onwards)

M. Voc. in Fire and Safety



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SECTION 1

Program Outcomes and Program Specific Outcomes

Program Outcomes

PO1: Demonstrate fire prevention practices, per NFPA 1021 guidelines.

PO2: Demonstrate knowledge of the financial processes associated with the fire service.

PO3: Demonstrate and apply fire-ground operations management, to include applicable NFPA standards and guidelines.

PO4: Demonstrate knowledge of fire service organization and management.

PO5: Demonstrate knowledge of an effective emergency management program to include applicable NFPA standards and guidelines.

PO6: Demonstrate knowledge of basic fire protection engineering concepts, fire protection systems evaluation and design, as it relates to risk reduction.

PO7: Demonstrate fundamental knowledge of the functions of planning, organizing, directing and controlling as applicable to leadership in fire and industrial safety.

PO7: Demonstrate fundamental knowledge of the local, state and national standards appropriate to fire safety.

PO8: Demonstrate fundamental knowledge of human resources and safety management as it relates to the work place.

PO9: Demonstrate written and oral communication skills, applicable to fire and industrial safety.

SECTION 2

Semester wise Scheme

First Semester

Course Code	Course Title	L	T	P	CH	CP	Int. A	ESE	Total
M. Voc. FS-101	Fundamentals of Fire & Safety	4	-	-	4	4	40	60	100
M. Voc. FS -102	Industrial Hazards and Risk Management	4	-	-	4	4	40	60	100
M. Voc. FS -103	Occupational Health & Safety	4	-	-	4	4	40	60	100
M. Voc. FS-104	OJT-I (On Job Training NSQF Level-9)	-	-	36	36	18	500		500
	TOTAL	12	-	36	48	30			800

Second Semester

Course Code	Course Title	L	T	P	CH	CP	Int. A	ESE	Total
M. Voc. FS-201	Disaster Management & Emergency Response	4	-	-	4	4	40	60	100
M. Voc. FS -202	Electrical & Fire Safety	4	-	-	4	4	40	60	100
M. Voc. FS -203	Safety Management Systems & Audits	4	-	-	4	4	40	60	100
M. Voc. FS-204	OJT-II (On Job Training NSQF Level-9)	-	-	36	36	18	500		500
	TOTAL	12	-	36	48	30			800

Third Semester

Course Code	Course Title	L	T	P	CH	CP	Int. A	ESE	Total
M. Voc. FS-301	Advanced Fire Dynamics	4	-	-	4	4	40	60	100
M. Voc. FS -302	Safety in Chemical & Process Industries	4	-	-	4	4	40	60	100
M. Voc. FS -303	Industrial Hygiene and Toxicology	4	-	-	4	4	40	60	100
M. Voc. FS-304	OJT-III (On Job Training NSQF Level-9)	-	-	36	36	18	500		500
	TOTAL	12	-	36	48	30			800

Fourth Semester

Course Code	Course Title	L	T	P	CH	CP	Int. A	ESE	Total
M. Voc. FS-401	Security Management & Fire Protection Systems	4	-	-	4	4	40	60	100
M. Voc. FS -402	Research Methodology and Safety Analytics	4	-	-	4	4	40	60	100
M. Voc. FS -403	Environment, Health and Safety (EHS)	4	-	-	4	4	40	60	100
M. Voc. FS-404	OJT-IV (On Job Training NSQF Level-9)	-	-	36	36	18	500		500
	TOTAL	12	-	36	48	30			800

Assessment Criteria (100 Marks Per Subject)
(For General Components)

S. No.	Components	Maximum Marks
1	Assignment-1	20
2	Assignment-2	20
3	ESE	60

Assessment Criteria (500 Marks) for OJT
(For Skill Component)

S. No.	Components	Maximum Marks
1	Attendance	50
2	General Behavior & Discipline	50
3	Technical Skill	200
5	Presentation Skill	200