

Government of India  
Ministry of Home Affairs  
**NATIONAL FIRE SERVICE COLLEGE**  
NAGPUR-440013  
**SYLLABUS**

**NATIONAL BUILDING CODE OF INDIA 2016 PART IV (FIRE & LIFE SAFETY) COURSE**

**COURSE OBJECTIVE:** The objective of this module is to impart knowledge & skills of National Building Code of India 2016 Part IV (Fire & Safety).

**ENABLING OBJECTIVE:** After completion of this program, the participant will be able to:

1. Describe the fundamentals of the Fire Prevention, Life Safety & Fire Protection.
2. Classify the types of occupancies.
3. Define exit components and means of escape.
4. Calculate the fire load, occupant load & travel distance of the occupancies.
5. Explain the minimum requirements of fire fighting of the high rise buildings.
6. Conduct inspection and surveying the various occupancies as per the NBC 2016 Part IV.
7. Evaluate the compliance of the various occupancies with respect to NBC 2016 Part IV.
8. Act as trainer to create awareness and capacity building.

**DURATION:** 2 Weeks (one period of 40 minutes)

Sr. No.	Topics	Session	Period
<b>Instruction Components</b>			
1	MODULE 0 INTRODUCTION 1. Scope 2. Changes & Revision from 2005 to 2016. 3. Aspects of IS Code 4. Revision & Referring of NBC. 5. Interrelation of Part & Section of NBC 2016 Part (iv). 6. Annexure	Lecture	1
2	MODULE 1 FIRE PREVENTION Classification of Building Based on Occupancy	Lecture	1
3	MODULE 1 FIRE PREVENTION 1. Fire Zones. 2. Types of Construction 3. Fire Load	Lecture	1
4	MODULE 1 FIRE PREVENTION General Requirements of all Individual Occupancies.	Lecture	3



5	MODULE 1 FIRE PREVENTION Guidelines for Fire Drill & Evacuation Procedures for High Rise Buildings.	Lecture	2
6	MODULE 2 LIFE SAFETY General Definitions	Lecture	1
7	MODULE 2 LIFE SAFETY General Exit Requirements	Lecture	1
8	MODULE 2 LIFE SAFETY Occupant Load Travel Distance	Lecture	1
9	MODULE 2 LIFE SAFETY Egress Component	Lecture	2
10	MODULE 2 LIFE SAFETY Compartmentization	Lecture	1
11	MODULE 2 LIFE SAFETY Smoke Control	Lecture	1
12	MODULE 2 LIFE SAFETY 1. Gas Supply 2. Role of Fire Officers 3. Fire Drills & Fire Orders	Lecture	1
13	MODULE 2 LIFE SAFETY Occupancy wise life safety requirements.	Lecture	2
14	MODULE 2 LIFE SAFETY Additional Requirements for High Rise Buildings.	Lecture	2
15	MODULE 2 LIFE SAFETY Atrium	Lecture	1



16	MODULE 2 LIFE SAFETY Car Parking Facilities	Lecture	1
17	MODULE 2 LIFE SAFETY Commercial Kitchens	Lecture	1
18	MODULE 3 FIRE PROTECTION Minimum requirements based on Building Occupancy classified (Table 7)	Lecture	2
19	MODULE 3 FIRE PROTECTION 1. Fire Extinguishers/Fixed Fire Fighting Installations 2. Static Water Storage Tanks & Pump House	Lecture	1
20	MODULE 3 FIRE PROTECTION 1. Automatic Sprinkler Installations. 2. Fixed Foam Installations 3. Gas Based Suppression System 4. Extinguishing System with Clean Agent.	Lecture	1
21	MODULE 3 FIRE PROTECTION 1. Fire Detection & Alarm System 2. Automatic Water Mist System 3. Automatic High Velocity & Medium Velocity Water Spray Systems.	Lecture	1
22	MODULE 3 FIRE PROTECTION Fire & Life Safety Requirement for metro station	Lecture	2
23	MODULE 3 FIRE PROTECTION Fire Protection Consideration for venting in industrial Buildings	Lecture	1
<b>Skills Components</b>			
24	MODULE 0 INTRODUCTION	Activity	1
25	MODULE 1 FIRE PREVENTION 1. Classification of Building Based on Occupancy. 2. Fire Zones. 3. Types of Construction 4. Fire Load	Activity	1
26	MODULE 1 FIRE PREVENTION General Requirements of all Individual Occupancies.	Activity	1



27	MODULE 1 FIRE PREVENTION Guidelines for Fire Drill & Evacuation Procedures for High Rise Buildings.	Activity	1
28	MODULE 2 LIFE SAFETY Occupant Load Travel Distance	Activity	1
29	MODULE 2 LIFE SAFETY Egress Component	Activity	1
30	MODULE 2 LIFE SAFETY 1. Compartmentization 2. Smoke Control 3. Gas Supply 4. Role of Fire Officers 5. Fire Drills & Fire Orders	Activity	1
31	MODULE 2 LIFE SAFETY Occupancy wise life safety requirements.	Activity	1
32	MODULE 2 LIFE SAFETY 1. Additional Requirements for 1. High Rise Building 2. Atrium	Activity	1
33	MODULE 2 LIFE SAFETY 1. Car Parking Facilities 2. Commercial Kitchens	Activity	1
34	MODULE 3 FIRE PROTECTION 1. Fire Extinguishers/Fixed Fire Fighting Installations 2. Static Water Storage Tanks & Pump House	Activity	1
35	MODULE 3 FIRE PROTECTION	Activity	1
36	MODULE 3 FIRE PROTECTION 1. Fire & Life Safety Requirement for metro station 2. Fire Protection Consideration for venting in industrial Buildings	Activity	1
37	Field Visit	Activity	11



Evaluation			
38	ASSIGNMENT DAY 01 & REVIEW OF ASSIGNMENT	Practice	1
39	ASSIGNMENT DAY 02 & REVIEW OF ASSIGNMENT	Practice	1
40	ASSIGNMENT DAY 03 & REVIEW OF ASSIGNMENT	Practice	1
41	ASSIGNMENT DAY 04 & REVIEW OF ASSIGNMENT	Practice	1
42	ASSIGNMENT DAY 05 & REVIEW OF ASSIGNMENT	Practice	1
43	ASSIGNMENT DAY 06 & REVIEW OF ASSIGNMENT	Practice	1
44	ASSIGNMENT DAY 07 & REVIEW OF ASSIGNMENT	Practice	1
45	Examination	Exam	4
Miscellaneous			
46	Opening Address & Validation	-	1
47	TRAINING BRIEFING MODULE 0 INTRODUCTION Overview of the full short training program.	-	1
48	Field Visit	-	11
49	Closing Ceremony	-	2
50	Feedback	-	2
<b>TOTAL</b>			<b>80</b>

*Y. ghul*  
*3/11/24*

(PARSHANT KUMAR)  
ASSISTANT DIRECTOR  
COURSE COORDINATOR