

Capsule Course on National Building Code of India 2016 -

"<u>Structural Design</u>"

28 – 30 August 2025

at HYBO, BIS, Hyderabad



NATIONAL INSTITUTE OF TRAINING FOR STANDARDIZATION

BUREAU OF INDIAN STANDARDS

Ministry of Consumer Affairs, Food & Public Distribution Government of India **National Building Code of India 2016 (NBC 2016)** is a prestigious publication of Bureau of Indian Standards (BIS) which is widely used by the various stakeholders, such as building regulatory departments, government construction departments, builders/developers, private construction agencies/contractors, building material manufacturers and suppliers, building professionals (like civil engineers, structural engineers, architects, urban designers, landscape architects, town planners and building services engineers) and consultants, academic institutions and R&D organizations.

NBC 2016 is intended to help regulate and guide the building construction activity in the whole of the country, particularly the municipal corporations, municipalities, development authorities and other local bodies, public works departments and other construction departments and agencies dealing with land development and building construction. NBC 2016 thus serves as a model for adoption by PWDs and other construction departments, local bodies and other construction agencies. The Code focuses on functionality, accessibility, sustainability and safety covering structural safety, fire safety, health safety and public safety. The Code covers aspects such as administration; development control rules; general building requirements; fire and life safety; selection of building materials; structural design using various material streams; construction project management, practices and safety; various building and plumbing services; sustainability in buildings and built environment; and asset and facility management.

The country is on the path of rapid urbanization and development. Considering the importance of the Code in ensuring quality and safety of the buildings and related infrastructure, it is important that various stakeholders contributing to building planning, design, construction and operation and maintenance are well aware of the provisions of NBC 2016 for judicious implementation of the provisions and intent of the Code. **Bureau of Indian Standards (BIS)**, being the National Standards Body of the country through its training arm, the **National Institute of Training for Standardization (NITS)** has designed the following short-term courses on NBC 2016 for national capacity building:

- 1. Accessibility in Buildings and Built Environment;
- 2. Fire and Life Safety;
- 3. Structural Design;
- 4. Soil and Foundation Engineering;
- 5. Air Conditioning, Heating and Mechanical Ventilation; and
- 6. Plumbing Services.

Learning Objectives

•	Bridging the competence gap in the skills of personnel currently involved & working
	with the municipal corporations, municipalities, development authorities, public
	works departments and other construction agencies, builders/developers, building
	professionals, etc. involved in land development and building construction
	activities.

• Making participants skilled enough to be achieving proficiency in building design and construction including matters relating to quality, safety and accessibility.

Who should attend?

• All those concerned with city planning, building regulation, and planning, design, construction and maintenance of buildings and built assets and facilities.

Course Schedule & Duration

• The Course is of 3 days duration scheduled during **28 – 30 August, 2025** at **HYBO**, **BIS**, Hyderabad.

Fees

Rs. 2,000/- plus applicable GST (for three-day course)

How to Apply?

• Application has to be made through BIS Training Portal through the following link **www.manakonline.in** or through emailing filled up application form to **nits@bis.gov.in.**

Criteria for Selection and Batch Size

- Batch size 40
- Selection on First come First serve basis

Certification

• Certificate of participation on completion of the course.

Venue

• The course will be run by NITS, Noida at HYBO, BIS, Hyderabad:

HYDERABAD BRANCH OFFICE

Plot No.1, Survey No.367/1, ZTS-NFC Main Road,

Industrial Development Park,

Moula-Ali, Hyderabad-500 040

	Training Module
Nationa	l Building Code of India 2016 - Structural Design (16 – 18 JuLY, 2025)
Time	Торіс
	DAY 1: 28 August 2025 (Thursday)
10:00 h - 11:30 h	Introduction
	Framework of NBC 2016 : Chapters and Provisions
	Loads, Forces and Effects
11:30 h - 11:45 h	Tea Break
11:45 h - 13:15 h	Masonry
	Materials, masonry design including earthquake resistant building design
13:15 h - 14:15 h	Confined masonry Lunch Break
13:15 h - 14:15 h 14:15 h - 15:45 h	Plain, Reinforced and Prestressed Concrete
14:15 n - 15:45 n	Fundamentals of design and analysis
	Limit state design
	Fundamentals of Liquid retaining RC structures
15:45 h - 16:00 h	Tea Break
16:00 h - 17:30 h	Plain, Reinforced and Prestressed Concrete
	Fundamentals of prestressed concrete
	Examples and case studies
	DAY 2: 29 August 2025 (Friday)
10:00 h - 11:30 h	Glass & Glazing
10:30 h - 11:45 h	Tea Break
11:45 h - 13:15 h	Plain, Reinforced and Prestressed Concrete
	Concrete making materials
	Concrete durability, mix proportioning, production, placing and compaction, etc.
	Concreting under special conditions
43.45 h 44.45 h	Quality control and acceptance criteria
13:15 h - 14:15 h	Lunch Break
14:15 h - 15:45 h	Timber and Bamboo
15:45 h - 16:00 h	Tea Break
16:00 h - 17:30 h	Discussions on defects in construction leading to adverse impact on structural
	performance
	DAY 3: 30 August 2025 (Saturday)
10:00 h - 11:30 h	Prefabricated Concrete
11:30 h - 11:45 h	Tea Break
11:45 h - 13:15 h	Steel Design
	Materials & basic concepts in steel structure design
13:15 h - 14:15 h	Examples and case studies Lunch Break
	Soil and Foundation
14:15 h - 15:45 h	Subsurface investigation
	Subsurface investigation Concepts of foundation design
	Subsurface investigation Concepts of foundation design Tea Break



