

## Empowering Future Engineers

# Electrical Design Training Program

### For Industrial, Commercial & Residential Buildings

The demand for skilled electrical engineers in India is on the rise, driven by industrial growth, infrastructure development, and the expansion of renewable energy and electric vehicle sectors. This growth is projected to continue, with increasing opportunities in areas like smart grids, renewable energy, and electric vehicle infrastructure.

To address this skill gap, NFE aims to provide training and certification for electrical design in buildings for young soon-to-be engineers, such that they are market ready.

#### Based on

National Electrical Code of India 2023 / IS 732

### Why This Training Matters?

- ✓ India's rapid industrial & infrastructure growth
- ✓ Surge in EVs, smart grids, and renewable power
- ✓ Critical skill gap in qualified electrical designers
- ✓ Students need real-world, regulation-based training

### Solution :

- ✓ NFE's Hands-On Electrical Design Training
- ✓ Bridge the skill gap, become industry-ready

**Exclusive for Colleges with NFE Students Chapter**

**Making Bharat Electrically Safe**

NFE has been conducting nation wide electrical safety program based on the National Electrical Code of India 2023 supported by the Bureau of Indian Standards

## About NFEES

NFE is a group of passionate engineering professional working in the field of electrical safety. Our members have decades of experience in working with electrical inspectorates of state and central governments, electrical designers, safety officers, and engineers in the field of quality and standards.

## Vision

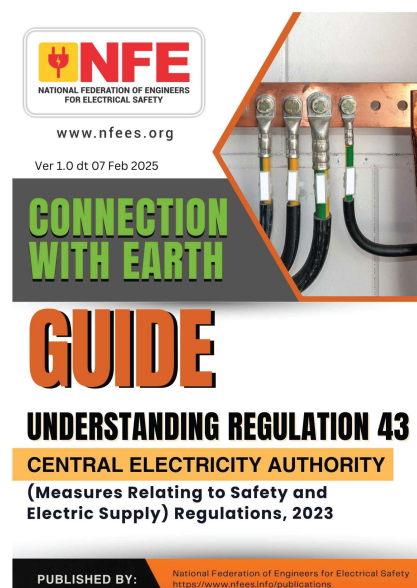
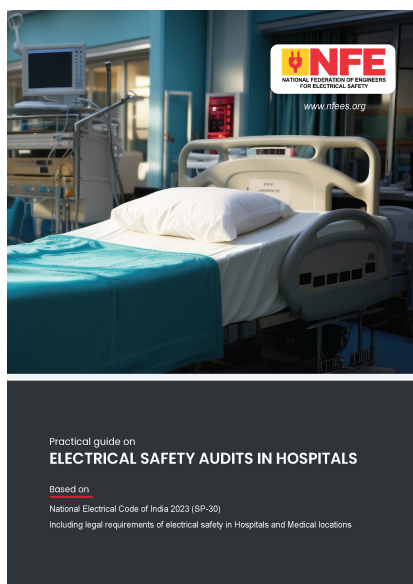
To make every electrical installation free of accidents such as electrocution and fire due to short circuits and increasing the reliability of the electrical installation, thus contributing to the saving of life and property and supporting sustainable development.

## Mission

We shall strive to achieve our vision through getting accredited for product and personnel certification which shall focus on electrical safety by design, manufacturing, installation and maintenance of electrical product & installation by competent and qualified manpower using quality resources including product, processes and procedures.

### NFE's Programs and Publications for Electrical Safety

- Conducted 44 one-day programs based on the National Electrical Code of India 2023 (Supported by BIS).
- Completed over 100 webinars on various electrical subjects.
- Electrical Safety Professionals Certification Scheme (ESPCS) based on ISO 17024
- FLIT Training and certification



## Subjects Covered in the Training Programme:

- a. Types of sources (AC/DC, single phase, three phase, centre tap, multiple sources, change over, synchronisation, location and clearances).
- b. Types of loads (resistive, inductive and capacitive).
- c. Types of protective devices.
- d. Types of cables and wires, and the correlation of current carrying capacity with their installation methods.
- e. Coordination between load, protective devices, and cables.
- f. Earthing system and basics to electrical safety.
- g. Symbols, schematics, and structure for electrical design.
- h. Selectivity and discrimination of protective devices.
- i. Thermal withstand capacity of cables.
- j. Calculation required for designing (correction factors, power factor correction and harmonics).
- k. Integration of solar PV/EV.
- l. Electrical standards and regulations.
- m. Practical design examples of industrial, commercial, and residential

## Test & Certification

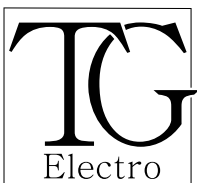
**For certification, the candidates should carry out**

- Open Book Written Test on the subjects covered above.
- Design your very own residential and industrial electrical schematics for the given models.

## Eligibility

Final Year EEE/ECE, B Tech/BE or above who are members of NFE student chapter. The candidates should have own personal computer.

Supported by:



## After Training, You Will:

- ✓ Become Job-Ready
- ✓ Understand Real Electrical Design
- ✓ Get Certified – Boost Your Resume
- ✓ Learn Safety & Compliance
- ✓ Be Industry Preferred



**Become A Skilled Engineer, be ready for Employment.**

**NFE opens you to the world of opportunities**

**FOR FREE**

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**MoU for Colleges & Universities**



**To Become NFE Member**



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