



*Training Course:  
Structural Design for Non-Structural Engineers*

*18 - 22 October 2026*

*Cairo (Egypt)*

*Holiday Inn & Suites Cairo Maadi, an IHG Hotel*

## Training Course: Structural Design for Non-Structural Engineers

Training Course code: EN6086 From: 18 - 22 October 2026 Venue: Cairo (Egypt) - Holiday Inn & Suites Cairo Maadi, an IHG Hotel Training Course Fees: 4410 € Euro

### Introduction

Structural design is a fundamental aspect of engineering projects, ensuring that buildings and infrastructure are safe, stable, and capable of withstanding loads and environmental conditions. For non-structural engineers, understanding the basics of structural behavior and design principles is essential for effective coordination, decision-making, and project success.

This program, designed by Global Horizon Training Center, provides a practical and accessible approach to structural design, equipping participants with essential knowledge to interpret structural systems, collaborate with specialists, and contribute effectively to engineering projects.

### Course Objectives

By the end of this program, participants will be able to:

- Understand fundamental concepts of structural engineering
- Identify different structural systems and components
- Recognize types of loads and their effects on structures
- Interpret basic structural drawings and specifications
- Understand material behavior concrete, steel, etc.
- Apply simplified design concepts and checks
- Coordinate effectively with structural engineers
- Identify potential structural risks and considerations

### Target Audience

This program is designed for:

- Mechanical, Electrical, and Civil Engineers non-structural roles
- Project Managers and Site Engineers
- Architects and Design Professionals
- Construction Supervisors
- Facility and Infrastructure Professionals
- Anyone involved in engineering projects requiring structural awareness

### Outline

#### Day 1: Fundamentals of Structural Engineering

- Introduction to structural design concepts
- Types of structures and systems frames, trusses, shells
- Load types dead, live, wind, seismic
- Structural behavior basics
- Safety factors and design philosophy

#### Day 2: Structural Materials and Their Behavior

- Properties of concrete, steel, and composite materials
- Stress-strain relationships
- Strength, stiffness, and durability
- Material selection criteria
- Introduction to design codes and standards

#### Day 3: Structural Elements and Load Paths

- Beams, columns, slabs, and foundations
- Load transfer and distribution
- Structural detailing concepts
- Reading and interpreting structural drawings
- Common design considerations

#### Day 4: Basic Design Concepts and Coordination

- Simplified structural calculations and checks
- Design considerations for stability and safety
- Coordination between disciplines MEP, architecture, structure
- Identifying design conflicts and solutions
- Risk awareness in structural design

#### Day 5: Practical Applications and Case Studies

- Review of real project examples
- Common structural issues and lessons learned
- Best practices in project coordination
- Introduction to structural software tools
- Case studies and real-world applications

## Registration form on the Training Course: Structural Design for Non-Structural Engineers

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Complete & Mail or fax to Global Horizon Training Center (GHTC) at the address given below

### Delegate Information

Full Name (Mr / Ms / Dr / Eng): .....  
 Position: .....  
 Telephone / Mobile: .....  
 Personal E-Mail: .....  
 Official E-Mail: .....

### Company Information

Company Name: .....  
 Address: .....  
 City / Country: .....

### Person Responsible for Training and Development

Full Name (Mr / Ms / Dr / Eng): .....  
 Position: .....  
 Telephone / Mobile: .....  
 Personal E-Mail: .....  
 Official E-Mail: .....

### Payment Method

- Please find enclosed a cheque made payable to Global Horizon
- Please invoice me
- Please invoice my company

### Easy Ways To Register

Telephone:  
+201095004484 to  
provisionally reserve your  
place.

Fax your completed  
registration  
form to: +20233379764

E-mail to us :  
info@gh4t.com  
or training@gh4t.com

Complete & return the  
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to: Global Horizon  
3 Oudai street, Aldouki,  
Giza, Giza Governorate,  
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