



Alkhebra Consulting, LLC
Engineering, Enviroment, Education, Research

الخبرة للإستشارات ذ.م.م.
هندسة، بيئة، تعليم، بحوث

Civil Engineering Learning Series

Course Title: DESIGN OF STEEL STRUCTURES ACCORDING TO BS 5950

Course Duration: Five Days (9.00 am – 4.00 pm)

Course Description:

This course is devoted to the designers of steel structures. It aims to provide the designers with extensive knowledge concerning the design of the different elements of steel structures.

The design procedure adopted in this course is based on the latest version of the standard British Code for the design of steel structures (BS 5950).

The procedure followed in this course depends on providing applied solved examples to explain – in detail – the aide behind the code instructions and how to apply it.

Course Objectives:

1. To introduce to the designers the theory and applications of the design of the different steel elements according to BS 5950.

2. To provide the designers with extensive knowledge concerning the behavior of the different steel elements under different straining actions, and its reflections in the design procedure.
3. To improve the ability of the designers in using the BS code for the different design cases.

Course Content:

1. Introduction.
2. Steel Codes.
3. Steel grades and steel cross sections.
4. Loads and Load Combinations.
5. Types of structural analysis.
6. Design Methods.
7. Design of Steel Beams According to BS 5950.
8. Design of Tension Members.
9. Bracing Systems of Steel Structures.
10. Design of Compression Members According to BS 5950.
11. Design of Composite Steel Beams According to BS 5950.
12. Design of Connections.
13. Available Softwares for Steel Design.

Instructor:

Dr. Mohdmed Nemir

Biography:

- Over 42 years of extensive academic and practical consulting experience in the design and supervision of steel and concrete structures using the advanced design software.
- Experience in the design of many different types of building structures for industrial, educational, commercial, residential, healthcare and leisure uses, both steel and reinforced concrete including bridges, sports halls, high risers and malls.
- Wide experience in the design, supervision and management of Repair, Strengthening and Heightening of the existing operational buildings.

- Long experience in teaching structural and design courses for both post and under graduate Civil Engineering students.
- A wide range of academic research in Egypt, UK and USA.