# **Global Engineering Solutions**



Serving Globally

Global Engineering solutions



## Global Engineering Solutions

presents,

introduction to:

# "STRUCTURAL DESIGN CONCEPT"







#### WHAT IS STRUCTURAL DESIGN?

'STRUCTURAL DESIGN' is a method by which we find out safe and economical specifications of a structure or a member of the structure sufficient to carry the load.

In other words finding out cross-sectional dimension, grade of material, amount of reinforcement etc. necessary to withstand the internal forces that we have got from structural analysis.





#### WHAT IS STRUCTURAL DESIGN?

Structural Design is the science of ensuring stability, strength, and rigidity of structures so that resist all applied loads without failure. This discipline is concerned with designing a physical structure in such a way that the load-bearing members (such as beams and columns in the case of a building) of the structure support each other in sharing the load or stress

Structural Design is a part of civil engineering. A great deal of what structural designers do involves designing structures such as buildings, bridges, and tunnels. The primary tasks of a structural designer include: Analyzing configurations of the basic structural components; calculating the pressures, stresses, and strains that each component is likely to experience; considering the strength of various materials, e.g. concrete, steel, and brick to be used to create the structures; making drawings, specifications and computer models of structures for building contractors and using CAD.





#### Role Of Structural Designers in Industries:

- ✓ Structural Designers use CAD to produce drawings of structures for buildings to bridges.
- ✓ Using CAD, they create complex drawings and 2D and 3D renderings of structural components, including framework, foundations, roofs and retaining walls.
- ✓ CAD helps designers outline designs, gather data, perform graphic imaging, draw sketches
  of existing structures and interpret structural markups.

✓ The software also helps them perform computations, administrative tasks, documentation and generate project reports.







At GLOBAL ENGINEERING SOLUTIONS, we have designed some of structures for Adventure activities such as Tower design for Arial trekking , cycling , climbing etc.

















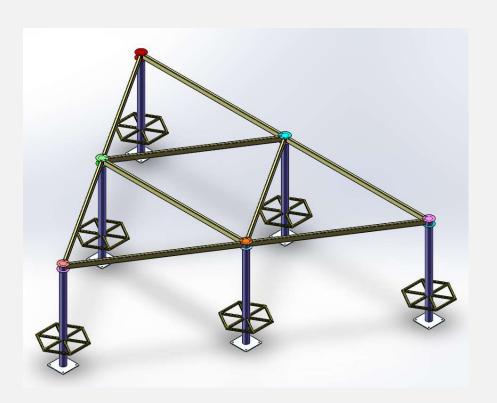


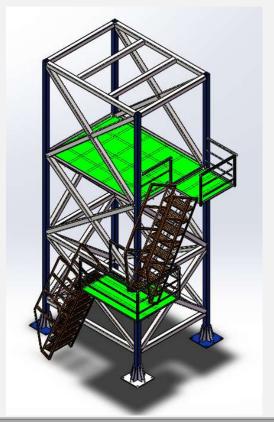




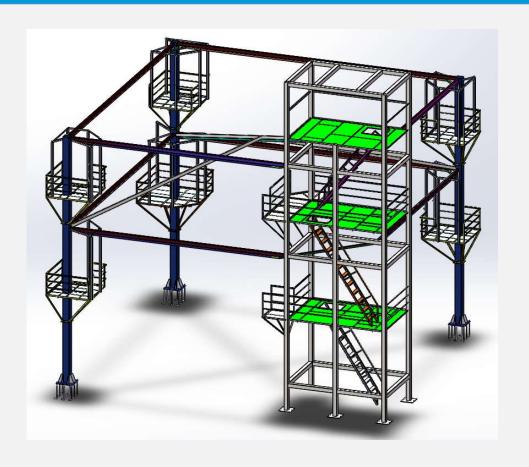


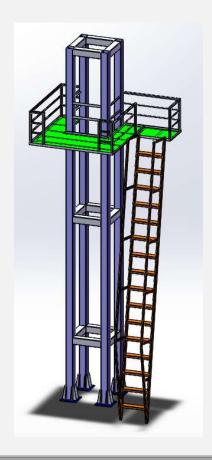














#### Thank you for your attention

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