



DESIGN OF CONNECTIONS IN STEEL STRUCTURES

PROF. ANIL AGARWAL

Department Of Civil Engineering
IIT Hyderabad

PRE-REQUISITES : Structural Analysis, Construction materials

INTENDED AUDIENCE : Undergraduate and graduate level students of structural engineering, practicing structural engineers and consultants, architects.

INDUSTRY SUPPORT : Structural design firms, Architectural firms, Steel construction companies and fabricators

COURSE OUTLINE :

The course “Design of Connections in Steel Structures” helps students understand the fundamental mechanism of how different types of connections behave and how the analysis and design process accounts for the same. The course also includes solved examples of various types of steel connections, such as, simple connection, ordinary moment connections, ductile moment connections, connections in members subjected to axial forces, gusset plate design, etc.

ABOUT INSTRUCTOR :

Prof. Anil Agarwal is a faculty at IIT Hyderabad. Prof. Agarwal did his B.Tech. and M.Tech. from IIT Kanpur and PhD. From Purdue University. His areas of research include the behavior and design of steel and composite structures. He has significantly contributed towards improving the state of the art in fire resistance design of steel and composite structures.

COURSE PLAN :

1. Basic principles of bolted connection design
2. Basic principles of welded connection design
3. Connections in non-seismic frames
4. Connections in seismic frames
5. Connections in braces and truss members
6. Additional topics