

Course Code	Course Name	Course Type	Cd	L	T	P	Marks		
							Sessional	Final Exam	Total
CE-613	Design of Steel Structures Lab	PCC	1	0	0	2	50	0	50

**COURSE OUTCOMES**

At the end of the course the student will be able to:	
CO1	Conduct tests on steel bars.
CO2	Draw the sectional diagram of steel structures and various elements.
CO3	Design Steel beams.
CO4	Design Multi storey steel structure.
CO5	Analyse Steel Trusses.

**List of Experiments of Design of Steel Structure Lab**

S. No.	Experiments
1	To determine tensile strength of steel bars.
2	To determine elongation of steel bars.
3	To study bend and re-bend test of steel bars.
4	To determine the deflection and bending stress of simply supported subjected to concentrated load at the center.
5	To conduct torsion test on mild steel specimen to find modulus of rigidity of the materials.
6	Draw the layout of different types of connections and joints.
7	Draw the plan and elevation of slab base.
8	Draw the plan and elevation of Gusset base.
9	Draw the neat sketch of column made by channel section with necessary arrangement of lacing and battening.
10	Draw the neat sketch of column made by angle section with necessary arrangement of lacing and battening.
11	Analysis and design of steel beams in Staad. Pro.
12	Design of Steel Stiffeners to a Steel Beam in Staad. Pro.
13	Creating 3D Model for Multi-storeyed Steel Structure in Staad. Pro.
14	Analysis of 3D Model for Multi storied Steel Structure in Staad. Pro.
15	Creating a 3D Model of steel truss in Staad. Pro.
16	Analysis of Steel Truss in Staad. Pro.