

GUJARAT TECHNOLOGICAL UNIVERSITY

Syllabus for B.Arch.

FIFTH SEMESTER (W.E.F. JULY 2014)

SUBJECT NAME: StructureV

SUBJECT CODE: 1055004

Focus: Design of steel structures

Content:

- Introduction to structural steel, Rolled steel sections.
- Design of Tension members, compression member & flexural member.
- Types of connections – Riveted, welded and bolted. Methods of riveting, welding and bolting. Design of Riveted and welded connections. Design of Tension members, compression member & flexural member.
- Concept of built up beams and columns – recommended uses.
- Concept of lacings, battening & importance of bracings.
- Design of truss members, gusset plate.
- Introduction to footings for steel columns.
- Conceptual study of general connections – Beam to beam connections – Beam to column connections – column to column connections – column to foundation connection.

Reference Books:

SR.NO.	TITLE	AUTHOR
01.	Design Of Steel Structures	Arya & Ajmani
02.	Design Of Steel Structures	A.K.Jain
03.	Design Of Steel Structures	Duggal
04.	Design Of Steel Structures	Bresler, Lin & Scaly