Name of Subject	Strength of Materials	
L-T-P	3-1-0	
Credits	4	
Name of the Department	Civil Engineering	
Status of the subject	(a) Semester: Spring (b) Level of Subject: 1st year UG (c) Nature of Subject: Core (d) Semester to be offered: 2nd (e) Programme in which the course is included: B.Tech. (H) in Civil Engineering	
Prerequisites	None	
Objectives	The present course introduces the concepts of stresses, strains and their relationship in deformable bodies. In this course the students will learn to compute various stress resultants of elastic bodies having simple geometry. Actions such as axial forces, bending moments, shearing forces and twisting moments and their resulting deformations are discussed.	
Names of the faculty members of the department who have the necessary expertise to teach the course	All Structural Engineering Faculty	
Any overlap with existing subjects	NONE	
Recommended Text Books	1. Elements of Strength of Materials, S. P. Timoshenko and D. H. Young, Publisher : Affiliated East-West Press Private Limited	
Topics to be Covered	**Name of the Topic**	**Hourly Breakup**
	Tension, Compression and Shear	3 hours
	Biaxial Tension and Compression	3 hours
	Torsion	3 hours
	Bending Moment and Shear Force	12 hours
	Bending Stresses	4 hours
	Shearing Stresses	4 hours
	Analysis of Plane Stress and Plane Strain	4 hours
	Deflection of Beams	12 hours
	Mechanical Properties of Materials	3 hours