

**L J UNIVERSITY**  
**L J SCHOOL OF DESIGN**  
Syllabus for Bachelors of Design  
Second Year I Semester 3

CODE	SUBJECT	CREDIT
10180309	Basic Structure-I (Elective)	2
<b>AIM</b>		
<b>CONTENT:-</b>		
	<p>Glossary of technical words, natural structures and intuitive understanding of their behaviour, their relationship with man-made structures.</p> <p>Functions of structures. Primary and secondary forces acting on structures – gravitational force, live load, wind, temperature variation. Types of supports &amp; their characteristics.</p> <p>Analysis &amp; design – Design criteria</p> <p>Primary elements of structure and their behaviour.</p> <p>Factor of safety &amp; factors affecting it. Characteristics of Structural design – strength, stiffness and stability. Discussion on factors affecting them and ways of satisfying these requirements.</p> <p>Study of behaviour of structures through models and testing them for given load.</p>	
<b>METHODOLOGY:-</b>		
	Through class lectures, Presentations, site visits, case studies and making models & testing them.	
<b>REFERENCE BOOK:-</b>		
	<p>Structure in Architecture - Mario Salvadori</p> <p>Building Structure Primer - James E Ambrose</p> <p>Structures – Schodeck</p> <p>Elements of Structure – Morgan</p> <p>Structural Concepts and Systems for Architecture &amp; Engineers - T.Y.Lin.</p>	