

L J UNIVERSITY
L J SCHOOL OF DESIGN
Syllabus for Bachelors of Design
Third Year I Semester 5

CODE	SUBJECT	CREDIT
10180503	Material & Technology - 5	2
AIM		
	<ul style="list-style-type: none"> • Understanding roof and roof coverings. • Understanding of thermal insulation and acoustics related to design of wall, floor and roof. • Sound proof partitions and doors for recording studios, Cinemas, broadcasting studios etc. • Applications and fundamentals of wet and dry cladding. 	
CONTENT:-		
	<ul style="list-style-type: none"> • ROOFS: Technical terms Different types of roof (Flat, Pitch, Shell & Dome) Roof coverings • THERMAL INSULATION: Technical terms Fundamentals Different types of insulating materials Methods • BUILDING ACOUSTICS : Terminology in acoustics – Factors influencing hearing conditions. Sound in spaces, between spaces, effect of opening and surfaces. Criteria for acoustics environment, criteria for reverberation in spaces. Reverberation time. Background noise, structure borne sound. Sound absorption, acoustical materials. Sound insulation for equipment's. Acoustics for auditoriums and lecture halls. Design for good hearing, loudness and distributing, reflection and diffusion of sound. Various sound amplifying systems. • WET AND DRY CLADDING:. Fundamentals Applications 	
METHODOLOGY:-		
	<ul style="list-style-type: none"> • Interactive discussions and presentations on topics, • Assignments based on theory portions, • Live case study to understand systems 	
REFERENCE BOOK:-		
	<ul style="list-style-type: none"> • Engineering materials – S.C.Rangwala • Building Materials – B.C. Punamia • Construction of Building- R. Barry • Building construction – W.B.Mckay • Building construction – B.C. Punamia • Building Materials- S.K. Duggal • Building construction handbook – Roy Chudley & Roger Greeno 	