

VEER SURENDRA SAI UNIVERSITY OF TECHNOLOGY, BURLA

Semester: 6th

LESSON PLAN

Subject: ARCHITECTURAL ACOUSTICS

Session: Jan 2017 – May 2017

Theory / Sessional

Branch/Course: Architecture

Name of the Faculty Member: **Ar.Sahabaz Quadri**

Period	Module/Number	Topic to be covered	Remarks/ Sign. of Faculty Member
01	1	Need to study acoustics, pioneers and their works,	
02		Acoustics examples from the past, methods used for good acoustics,	
03		Basic theory, generation, propagation, transmission,	
04		reception of sound, frequency, wave length and velocity of sound, sound intensity	
05		inverse-square law, decibel scale, decibel addition	
06		small numerical examples in intensity of sound	
07	2	Human ear, Loudness perception, subjective effects, characteristics of sound in speech and music,	
08		Aweighted sound levels, Room acoustics,	
09		behaviour of sound in enclosed spaces,	
10		Ray-diagrams, sound paths, effect of geometry and shapes, sound adsorption, sound absorption	
11		coefficients, Sabine's formula and resonant panels	
12	3	Acoustic design process and different types of buildings, Auditoriums,	
13		Acoustic design process in concert halls, cinema halls,	
14		seminar rooms, lecture halls, class rooms and open offices,	
15		case study of an auditorium with a report containing drawings	
16		calculations of reverberation time etc	
17		Detailed acoustic design for any one type of building	
18	4	Noise reduction, sound isolation, transmission loss TL, TL for walls	
19		vibration isolation guidelines,	
20		characteristics of duct system, noise in AC ducts	
21		vibration isolation of pumps and generators,	
22		Speech privacy, annoyance, background noise, communication in open plans	
23		electronic sound systems, loud speaker's layout	
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Signature of the Faculty Member :

Date:

Counter Signature of H.O.D.

SIXTH SEMESTER

AR 15601 ARCHITECTURAL ACOUSTICS (3-0-0-0) CR-03

Module I

Need to study acoustics, pioneers and their works, Acoustics examples from the past, methods used for good acoustics,

Module II

Module III

Module IV

Reference Books