GUJARAT TECHNOLOGICAL UNIVERSITY

BACHELOR OF INTERIOR DESIGN

Subject Code: 2X45106

Subject Name: INTERIOR SERVICE II

Prerequisite:
It is mandatory to complete Interior Services I in order to opt for this course.

Rationale:
HVAC, Firefighting, Acoustics, Sound.

Teaching and Assessment Scheme:

Teaching Scheme			Credits	Examination Marks				
				External exam		Internal exam		Total Marks
Lectures	Tutorials	Practical	C	(ESE) Theory	(ESE) Viva	(PA) Theory	(PA) Viva	
2	0	0	2	50	NA	50	NA	100

Content:

Sr. No.	Content	Total Hours*	Weightage* (%)
1	**Unit 1**: **HVAC** • Principles of air-conditioning, chilled water cooling system, air handling package unit and their installation. • Supply and return air ducting systems, VRF system, Window A.C., Split A.C., Floor Standing A.C., other types of A.C.	12	35
2	**Unit 2**: **Firefighting** • Causes of fire in buildings, spread of fire, production of smoke and poisonous gases, fire safety and preventive measures, firefighting regulations with reference to National Building Code, Provisions for fire safety in buildings. • Fire escape stairways and escape routes, Water demand for firefighting, storage tanks, fire hydrants etc. dry and wet risers. • Devices for fire detection, fire alarms, manual and automated fire extinguishing systems.	8	30

3	**Unit 3: Acoustics** • Understanding acoustic fundamentals those influe nce behavior of space. exploration of various methods and techniques to control the effect. • Terminology in acoustics – Factors influencing he aring conditions. • Sound in spaces, between spaces, effect of openin g and surfaces. • Criteria for acoustics environment, criteria for rev erberation 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 distributin g, reflection and diffusion of sound • Various sound amplifying systems. • Aesthetics of services.	12	35

*: indicative

Thrust / Projects

- Case studies of different types of day lighting and HVAC systems.
- Market survey of materials & costs.

Reference Books:

- Neufert: Architect data.
- Time Savers Standards for Interior Design and Space Planning.

*- this is suggestive for common purpose. Faculty may decide on this, considering student group and institution philosophy.