

GUJARAT TECHNOLOGICAL UNIVERSITY
BRANCH NAME: M. Arch. (INTERIOR ARCHITECTURE)
SUBJECT NAME: INTERIOR DESIGN AND SERVICES – LIGHTING AND INTERIOR BUILDING SERVICES
SUBJECT CODE: X36203
2nd Year: Semester-III

Pre requisite: It is assumed that students have developed the basic understanding of interior services: Lighting, Acoustics, Air-conditioning, Fire safety and related services, their introduction, and design guidelines in buildings.

Rationale: The course intends to introduce various services coordinated to illumination and lighting in public buildings. The course also aims to develop the skillsets for preparation of scaled working drawings/onsite layouts of the allied interior services within the project premises.

Teaching and Assessment Scheme:

TEACHING SCHEME			CREDIT S	EXAMINATION MARKS				TOTAL MARK S	UNIVERSITY EXAM TYPE
Field work	Lectures	Studio	C	External Marks		Internal Marks		100	Theory Exam
NA	2	2	04	(ESE) Theory (E)	(ESE) Viva (V)	(PA) Theory (M)	(PA) Viva (I)		
				40	00	40	20		

Content:

SR No	Content	Total Hours	Weight age
1	<p>Interior Illumination</p> <p>Design systems - Analysis of various design and layouts in various commercial spaces, such as Museum, gallery, Retail showroom, Offices, etc. Understanding the implications of electric lighting on place making, spatial ordering, health, and human activities in indoor spaces.</p> <p>Planning lighting - General aims, lighting needs, calculation of lighting levels, intensity levels, energy and installation costs and other factors, selection of fixtures, location and placing of fixtures.</p> <p>Principle of schematic lighting design and energy codes.</p> <p>Smart lighting systems - Exploration of current tools, trends, materials, technology and energy efficient designs in lighting systems.</p>	12	20%

2	Case Studies: Services in Civic Buildings Shopping mall theatres, auditoriums, sports halls, retail outlets, bus ports, studies on lighting and natural ventilation, electrical and allied services.	16	30%
3	Design Project: Mapping, Designing and developing the proposals related to Interior Design services considering- Lighting, Ceilings, surface lightings, Preparation of working drawings for the same and coordination for related services in Selected Public Building(s)/ Part(s) of Building or /Institution(s).	36	50%

*: indicative

REFERENCE BOOKS:

1. John.F. Pile, Interior Design, 2nd edition, illustrated, H.N.Abrams, 1995.
2. Wanda jankowski, Lighting: In Architecture and Interior Design, pbc intl, 1995.
3. Moore Fuller, Concepts and practice of Architectural Day lighting, Van Nostrand Reinhold co., New York, 1985.
4. David Egan. M. Concepts in Architectural lighting Mcgraw Hill Book Company, New York, 1983.
5. Electrical Codes, Standards, Recommended Practices and Regulations. National Lighting Code- Published by Govt of India, 2011.
6. Greeno, Roger, "Building Services Technology and Design", Longman Scientific and Technical, Harlow.
7. Sustainability in Interior Design by Sian Moxon , Lawrence King Publishing , 2012
8. Sustainable Design for Interior Environments, second Edition, Susan M.Winchip, 2007

Lectures/Tutorial work shall consist of presentations on various topics of the subject. AV projects may be introduced to students for documenting best practices and advances through case studies. Coursework shall consist of lectures/presentation on various topics listed above supported with visuals in form of drawings, sketches, photographs, models etc. Written assignments with sketches, drafted drawings for construction detailing and model making exercises, presentations etc can be given to students. Site visits, market surveys and various other ways to engage with industry must be incorporated in this course

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

