

FACULTY OF ARCHITECTURE

(CA / 5 / Academic – TN41 dt. 28.07.11)

Dr. M.G.R

EDUCATIONAL & RESEARCH INSTITUTE

Deemed to be University

(Declared as Deemed -to- University, u/s. 3 of UGC Act 1956)



M.Arch Interior Architecture SYLLABUS - 2021

Approved by BOS vide meeting Dt: 21.04.2021

Sponsored by,
Dr. M.G.R. Educational and Research Institute Trust, Chennai – 600 095

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SEMESTER - I

Code No	COURSE TITLE	L	T	P/S	C
THEORY					
MAR21I001	Theory of aesthetics & Design	2	0	0	2
THEORY CUM STUDIO					
MAR21I002	Interior Service Systems	2	0	2	3
MAR21I003	Interior Design Materials & Construction	1	0	4	3
STUDIO					
MAR21IL01	Graphical Spatial Narratives	1	0	4	3
MAR21IL02	Interior Design Studio - I	0	0	16	8
	Sub Total	6	0	26	19

SEMESTER - II

Code No	COURSE TITLE	L	T	P/S	C
THEORY					
MAR21I004	Theory & history of Interior Design	2	0	0	2
THEORY CUM STUDIO					
MAR21I005	Lighting design	2	0	2	3
	Elective - I	2	0	2	3
STUDIO					
MAR21IL03	Indian Crafts & Interiors	2	0	4	4
MAR21IL04	Interior Design Studio – II	0	0	12	6
	Sub Total	8	0	20	18

SEMESTER - III

Code No	COURSE TITLE	L	T	P/S	C
THEORY					
MAR21I006	Research Methodologies in Architecture	2	0	0	2
THEORY CUM STUDIO					
MAR21I007	Furniture Design & Detailing	2	0	2	3
	Elective - II	2	0	2	3
STUDIO					
MAR21IL05	Interior Architecture - Internship	X	X	X	3
MAR21IL06	Dissertation	0	0	8	4
MAR21IL07	Interior Design Studio – III	0	0	10	5
	Sub Total	6	0	22	20

SEMESTER - IV

Code No	COURSE TITLE	L	T	P/S	C
THEORY					
MAR21I008	Interior Project Management & Practice	2	0	0	2
STUDIO					
	Elective - III	2	0	2	3
MAR21IL08	Interior Design Studio – IV Thesis	0	0	**	13
	Sub Total	4	0	**	18

** Undeterminable Number of Hours, It may be 25 – 30 hrs duration/ week.

ELECTIVES

	Code No	COURSE TITLE	L	T	P/S	C
THEORY CUM STUDIO						
	MAR21IE01	Sustainable Interiors	2	0	2	3
	MAR21IE02	Ergonomics & Product design	2	0	2	3
THEORY CUM STUDIO						
	MAR21IE03	Interior Landscaping	2	0	2	3
	MAR21IE04	Traditional Indian Spaces	2	0	2	3
STUDIO						
	MAR21IE05	Advanced CAD & Interior design Portfolio	2	0	2	3
	MAR21IE06	Interior Journalism & Photography	2	0	2	3

Total No of Credits: 75

Minimum marks for passing in each subject – 50% Weightage for Internal Exam – 50%
Weightage for University Exam – 50%

For STUDIO Subjects – Internal Assessment – 50%

– External Viva voce – 50%

SEMESTER I

MAR21I001	THEORY OF AESTHETICS & DESIGN	L T P C
		2 0 0 2

Course Objective:

Aesthetic response is most frequently stimulated by visual information, largely because the vision system provides data more immediately and at higher rates than the other senses. This course aims student to understand the way of aesthetic stimulated design.

Course Contents:**UNIT I : INTRODUCTION TO AESTHETICS** **7**

Defining aesthetics - Human response to aesthetics - Relation between art & Aesthetics - The Western Aesthetics and Indian aesthetics – reflection of the aesthetic philosophy of thinkers and philosophers on the aesthetics of the interior spaces - Relation between interior spaces & aesthetics with a few cases in western and Indian context

UNIT II : DESIGN VOCABULARY **9**

Defining design - The purpose of design, various fields of design - The nature of good design - Discussion on the theoretical basis to all present day design disciplines – Critical judgement – Speculative & Creative design – Understanding Speculative & Creative designs with select cases in interior architecture

UNIT III : DESIGN, AESTHETICS AND NATURE **7**

Relationships between Nature, Art, Aesthetics, Design – Understanding Nature as an influence on design – Exploring the relationships of Nature in interior spaces

UNIT IV : AESTHETIC APPRECIATION AND EVALUATION **7**

Perception and response to Visual phenomena - Appreciation of various arts : painting, murals, architecture, sculpture, modern day UI, UX, etc - Design in the context of various arts – Appreciation and evaluation of Interior Spaces – Exploring and documenting Aesthetic experiences of a specific building especially its interiors

TOTAL PERIODS: 30 PERIODS**REFERENCES:**

- Palmer, Jerry, and Mo Dodson. Design and aesthetics: a reader. Psychology Press, 1996.
- Folkman, Mads Nygaard. The aesthetics of imagination in design. MIT Press, 2013.
- Moffat, James Clement. An introduction to the study of aesthetics. Moore, Wiltach, Keys & co., 1856.
- Heskett, John. Design: A very short introduction. Vol. 136. Oxford University Press, 2005.
- Lidwell, William, Kritina Holden, and Jill Butler. Universal principles of design, Rockport Pub, 2010.
- Puhalla, Dennis. Design Elements, Form & Space: A Graphic Style Manual for Understanding Structure and Design. Rockport Pub, 2011.
- Visser, Willemien. The cognitive artifacts of designing. Lawrence Erlbaum Associates, 2006.
- Albers, Josef, and Linda Holtzschue. Interaction of Color. Vol. 909. Yale University Press, 1979.
- Lou Michel. Light: the shape of space: designing with space and light. John Wiley & Sons, 1995.

MAR21I002**INTERIOR SERVICE SYSTEMS****L T P C**
2 0 2 3**Course Objective:**

Understand human comfort in an enclosed space and the service systems that enable the same. Integrate service systems as part of design solutions in interior spaces.

Course Contents:**UNIT I : HVAC****15**

Importance of human comfort in interior spaces - Heat flow within buildings - Thermal properties of materials - Climate and material choices for interior spaces - Human response to the thermal environment – HVAC - Air Conditioning, Heating and Mechanical Ventilation , Air Conditioning methods & equipments - Air distribution system - Calculation of Ac loads

UNIT II : ELECTRICAL**15**

Information and telecommunications systems - Control systems - Security and access - Detection and alarm systems; Electrical circuits - Transformer substations, Emergency power, UPS / Central battery, Voice / Data communication, TV, Security systems like CCTV surveillance system, Access control System, Public address system, Building management system (BMS), Fire alarm system, aircraft warning lights, Traffic Barrier, Surge Protection system, and Lightning protection system; Power supply and distribution.

UNIT III : PLUMBING**10**

Water Supply – Potable water (hot & cold) - Drainage and Sanitation - Solid Waste Management - Gas Supply – system of pipes, valves, plumbing fixtures & fittings, tanks, and other apparatus

UNIT IV : CASE STUDY & DESIGN INTEGRATION**20**

Regulations of NBC, standards of ISHRAE, ECBC for the services – BIM (building information modeling) - Understanding HVAC, Electrical and Plumbing in a specific case of Interior Architecture by means of a case study – Applying the knowledge of services in anyone of the ongoing design studio project part of Interior Design Studio – 1 and produce necessary service drawings.

TOTAL PERIODS: 60 PERIODS**REFERENCES:**

- Godsey, Lisa. Interior design materials and specifications. A&C Black, 2012.
 Mehta, Madan, Building construction: Principles, materials, and systems. Pearson Prentice Hall, 2008.
 Bindra, S.P. and Arora, Building Construction: Planning Techniques and methods of Construction
 J. Rosemary Riggs; Materials and Components of Interior Architecture
 R. Chudley – Building Construction Handbook – BLPD, London 1990.
 Charangith shah, Water supply and sanitary engineering , Galgotia Publishers
 William. J. Guinness; Mechanical and Electrical Systems for Buildings
 M.H. Lulla, Air conditioning
 Peter Templeton & Saunders – Detailing for Architectural Acoustics – Architectural press, 1994.
 TTT Institute (Madras), Environmental Engineering, Tata McGraw – Hill publishing Company Limited
 V.K. Jain, Fire Safety in Buildings

MAR21I003 INTERIOR DESIGN MATERIALS & CONSTRUCTION-I L T P C
1 0 4 3

Course Objective:

This course aims the exploration of interior construction concepts, materials, and assemblies and their influence on interior design. This course covers concepts, materials, and assemblies associated with development of planar interior elements as well as attention to related human factors, testing, detailing, specifications writing and end-use application.

Course Contents:**UNIT I: INTERIOR DESIGN MATERIALS - PROPERTIES AND CONSTRUCTION 15**

Physical, behavioral and visual properties of materials - their use in the construction of floor, walls, ceilings, doors, windows, staircase, built in furniture and other components of interior architecture – Explore wide range of materials available in market, not limiting to wood, metal, stone, plastics, glass, textiles, etc.

Behaviour of sound in enclosed spaces - Sound Insulation and Noise Control - Understanding acoustics and its integration with interior design - Sound absorbents porous materials, panel or membrane absorbers & resonators - Absorption coefficient of various acoustical materials - Human responses to the sensation of sound

Qualitative experience of interior materials – comfort and ease in construction and usage of interior elements

UNIT II: FIELD STUDY (SELF-STUDY /ASSIGNMENT) 45

Market surveys of latest material & construction techniques in interiors –Case studies - Site visits to understand the system of construction & details - Study of material application in the form of a Portfolio - Creation of a sample materials book – Exploring current trends & technologies applicable in interior design materials & construction like kinetic surfaces, robotic construction and similar types - Material collection: digital & physical samples – Documenting construction and joinery details – Regular presentation of portfolio & documentations – Applying the knowledge of Materials in anyone of the ongoing design studio project part of Interior Design Studio - 1, by creating material specification & procurement list, sample boards, etc.

TOTAL PERIODS: 60 PERIODS**REFERENCES:**

Herzog, Thomas, et al. Timber construction manual. Walter de Gruyter, 2004
 Godsey, Lisa. Interior design materials and specifications A&C Black, 2012
 Detail, Interior magazine
 Binggeli, Corky. Materials for interior environments John Wiley & Sons, 2008
 Modern projects in wood, metal, & plastics, Patrick E. Spielman
 Inside: interiors of colour, fabric, glass, light By,Sibylle Kramer, Iris van Hülst

MAR21IL01**GRAPHICAL SPATIAL NARRATIVES****L T P C**
1 0 4 3**Course Objective:**

This course aims to develop the student to proficient in visual communication skills and space planning considering with human factors and by the application of various narrative mediums.

Course Contents:**UNIT I : EXPLORING SPATIAL NARRATIVES – WITH GRAPHICS 20**

Decipher spatial stories – Space as story telling medium – Narrations of spaces – Identify, Understand & explore cases pertaining to interior architecture – Create Graphics based on inferences of study.

UNIT II : EXPLORING SPATIAL NARRATIVES – WESTERN 15

Interrelationships between Arts, philosophies on design movements – Explore select art forms from the western world – explore how it has transformed to design language in interior spaces - Create Graphics inspired by art form (Western) for select traditional or historical spaces

UNIT III : EXPLORING SPATIAL NARRATIVES – TRADITIONAL 15

Explore cases in traditional & historic buildings of India – Explore old art forms and philosophies to reinterpret & narrate spatial stories - Create Graphics inspired by an Indian art form for select traditional or historical spaces

UNIT IV : DESIGNING & REPRESENTING A UNIQUE NARRATIVE 20

Designing a Graphical Spatial representation unique to your Interior Architecture design – Evolution of a unique way of representing spaces students have designed in the current project as part of Interior Design Studio - 1 – Creation of a signature style unique to the student as a culminated understanding of the prior units

TOTAL PERIODS: 75 PERIODS**REFERENCES:**

- Elements of Spacemaking Paperback – Touch and Feel, 1 December 2013 by Yatin Pandya
 Concepts of Space in Traditional Indian Architecture Paperback – Import, 1 December 2013 by Yatin Pandya
 Buildings As Ideas: The Un-Built Work of Charles Correa (2nd Edition, 2017) Paperback – 1 January 2017 by Charles Correa Foundation
 Paths Uncharted: Balkrishna Doshi Paperback – 1 July 2019 by Balkrishna Doshi
 Daniel Libeskind: Jewish Museum Berlin (Museum Building Guides) by Daniel Libeskind , Cilly Kugelmann, et al.
 The Poetics of Space Paperback – 30 December 2014 by Mark Z. Danielewski (Foreword), Gaston Bachelard (Author), Richard Kearney (Introduction), Maria Jolas (Translator)
 Architecture and Narrative: The Formation of Space and Cultural Meaning by Sophia Psarra
 Mastering Autodesk Revit Architecture 2013, Phil Read, James Vandezande , Eddy Krygiel
 Interior Design Visual Presentation: A Guide to Graphics, Models and Presentation, Published in 2012 by Wiley

MAR21IL02**INTERIOR DESIGN STUDIO – I****L T P C**
0 0 16 8**Course Objective:**

The focus of the Comprehensive Interior Design Studio is the integrated design and detailed development of an interior space including all of its requisite systems.

Course Contents:

Resolving complex issues in interior spaces through design language Evolving method of studies, analysis & design process.

PRE PROJECT: FOUNDATION PROGRAM**45**

Understand the depths of knowledge that goes in the understanding, analysing & designing of spaces for human use; through review of literature, analysis of spatial case studies and design interventions in spaces commonly used by the student.

DESIGN PROJECT 1: PEDAGOGICAL EXPLORATIONS**90**

Collaborative approach be it Vertical, Cross disciplinary or any new approach towards a compelling design problem.

A Collaborative design approach tries to bridge the various design studios present in the eco system of Faculty of Architecture. Appropriate International or National level Design Competitions can be taken up as part of the design problem. By taking up international or national competitions, the students get to understand their peers & their works on a global or national forum.

DESIGN PROJECT 2:**90**

To come up with design propositions and strategies for an interior space - This may include Institutional spaces, Exhibition Displays, and such similar scale interior typologies. – Design Process starts from study stage, concept evolution with deeper understanding of the site (an existing built environment) and its context, Spatial conception, holistic Spatial design – Detailed Representation of the entire design process and its outputs – Design Representation: schematic sketches, schematic models, detailed drawings for each space through specific plan, sections, wall elevations, furniture detailing, joinery details, detailed 3d models – Material specifications & other necessary details

TOTAL PERIODS: 225 PERIODS**REFERENCES:**

Language of Space by Bryan Lawson, ISBN 9781138581302, Published October 23, 2001 by Routledge
Linda O'Shea, ; The Interior Design Reference & Specification Book; Rockport Publishers; 2013
Interior Design; The New Freedom, BarbaralecDiamonstein, Rizzoli International Publications, New York, 1982.

Interior Colour by Design, Jonathan Poore, Rockport Publishers, 1994.

Simon Dodsworth Cardoso; The Fundamentals of Interior Design

Karlen Mark, Space planning Basics

Course Contents:**UNIT I: LIGHT – AS A DESIGN PARAMETER 10**

Perception - Visible Light - The Eye - The Brain - Brightness Perception - Color Perception - The Sense of Sight - Psychology - Emotional Impact - Degrees of Stimulation - Degrees of Brightness Contrast - The Three Elements of Light - Subjective Impressions -Variation

UNIT II: LIGHTING – BRIGHTNESS, COLOUR, DAYLIGHT 15

Direction and Distribution of Light - Surface Finishes and Reflectance - Three-Dimensional Form 31
Glare and Sparkle - Color - Color Temperature - Color Rendering - Subjective Impressions - Surface Finishes and Color of Light - Daylight - Daylight Design - Shading Devices - Glazing Materials - Quantity - Energy Control - Understanding of National Lighting code (NLC)

UNIT III: LIGHTING SYSTEMS, ENERGY CONSUMPTION & AUTOMATION 15

Illumination - light fixtures, methods of lighting, forms of lighting- indoor & outdoor - Lamps, fixtures and its types - Lighting systems, light pollution- energy consumption, light exposure – Lighting control systems for buildings - Smart lighting- minimizing energy usage, major techniques of smart lighting

UNIT IV: LIGHTING DESIGN 20

Design - Visual Clarity - Architectural Surfaces - Task Lighting - Ambient Lighting - Lighting Art - Balance of Brightness - Energy-Effective Design - Integrating Light and Interior spaces through explorative learning & assignment using lighting simulation softwares prevalent in the lighting industry – Specific Lighting Design for the design project01 in Interior design Studio - 2

TOTAL PERIODS: 60 PERIODS**REFERENCES:**

Architectural Lighting Design by Gary R. Steffy

The Architecture Of Light: A textbook of procedures and practices for the Architect, Interior Designer and Lighting... by Sage Russell

Interior Lighting for Designers, 4th Edition by Gary Gordon (Jan 28, 2003)

MAR21IL03**INDIAN CRAFTS & INTERIORS****L T P C****2 0 4 4****Course Objective:**

Focuses on a trans-disciplinary research, emphasizing on the role of Craft & Technology in the discipline of Interior-Architecture

Course Contents:**MODULE 1 – INTERIOR ARCHITECTURE AND CRAFT & TECHNOLOGY 50**

Establishing Inter- Relationships and Exploring Applications. Discourse - Interior- Architecture: Documenting Knowledge and Skills, Traditional Knowledge Systems and the ingenious skills of the communities

Interior-Architecture: Documenting Materials; Tools and Techniques, Traditional Knowledge Systems and the Indigenous materials; tools and techniques, Discourse

Creative and Cultural Industries: Understanding Definition; Significance and Scope, Building Crafts: Definitions; perspectives and frameworks, Building Crafts: Craft and Technology and its Role in

creating/enhancing Interior- Architecture, Discourse
 Best Studies related to the Craft Sector, Case Studies From Gujarat, Rajasthan, Uttrakand
 Craft and Technology in Interior Architecture: Decoding Systems and Transformation through Time,
 Discourse - Overview of the Craft Sector Today, Issues and Challenges, Policies and Reforms, Gaps,
 Summary & Discourse

MODULE 2 – FIELD WORK**70**

Select case of South India - Continuity and Revival: Research and Documentation Perspective, Education and Training Perspective, Innovation and Development Perspective, Resource Building and Dissemination Perspective, Summary & Discourse

TOTAL PERIODS: 120 PERIODS**REFERENCES:**

Role of Craft and Technology in Interior – Architecture, By Prof. Smriti Saraswat, IIT Roorkee (NPTEL Course)
 Coles, J and House, N. “The Fundamentals of Interior-Architecture”, Ava Publishing, 2007
 Chhiber, Neelam. “Stone Craft of India”, vol.1 & vol.2, Crafts Council of India, Chennai, with assistance from Department of Culture and Development Commissioner, Handicrafts, Govt. of India, 2002
 Dave, B; Thakkar, J. and Shah, M. “Pratha – Kath Khuni Architecture of Himachal Pradesh”, Research Cell, School of Interior Design, CEPT, 2013
 Hudson, J. “Interior-Architecture Now”, Laurence King Publishers, 2007
 Jaitly, Jaya. “The Craft Traditions of India”, Lustre Press Pvt.Ltd, New Delhi, 1990
 Jaitly Jaya. “Crafts Atlas of India”, Niyogi Books, N.Delhi, 2012

MAR21IL04**INTERIOR DESIGN STUDIO – II**

L	T	P	C
0	0	12	6

Course Objective:

The focus of the Comprehensive Interior Design Studio is the integrated design and detailed development of a interior space including all of its requisite systems.

Course Contents:

Resolving complex issues in interior spaces through design language Evolving method of studies, analysis & design process.

DESIGN PROJECT 1:**CONCEPT TO CREATION for a small scale Interior Project**

To come up with detailed design propositions and strategies for a small scale Interior Project (with specified area) - Commercial spaces, Barrier free interiors, children friendly spaces, elderly friendly spaces - Spaces with emphasis on ‘Sustainable Interiors’; Design Process : study stage, concept evolution with deeper understanding of the site (an existing Small scale built environment) and its context, Spatial conception, holistic Spatial design – Detailed Representation of the entire design process and its outputs – Design Representation: schematic sketches, schematic models, detailed drawings for each space through specific plan, sections, wall elevations, furniture detailing, joinery details, service drawings, detailed 3d models – Material specifications & other necessary details; BoQ; Cost Estimation, Material Procurement List; Workable models, etc

TOTAL PERIODS: 180 PERIODS**REFERENCES:**

Language of Space by Bryan Lawson, ISBN 9781138581302, Published October 23, 2001 by Routledge
 The Fundamentals of Interior Architecture, Coles ,AVA
 Interior Design -John Pile; Harry . N.Abraham, Inc. Publishers.
 Interior design Illustrated; Francis.D.K.Ching.
 Time Saver standards for Interior Design & Space Planning – Joseph de Chiara,Julius Panero, and Martin Zelnic – 2003.

SEMESTER III

MAR21I006	RESEARCH METHODOLOGIES IN ARCHITECTURE	L T P C
		2 0 0 2

Course Objective:

To make the students to distinguish various theoretical ideologies influencing the philosophy and values of architecture

To establish the sense of systematic inquiry in students mind to analyze and infer the issues and aspects relating to Architecture

Course Contents:

UNIT I	INTRODUCTION	7
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Basic research issues and concepts- orientation to research process- types of research: historical, qualitative, co-relational, experimental, simulation and modeling, logical argumentation, case study and mixed methods- illustration using research samples

UNIT II	RESEARCH PROCESS	9
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Elements of Research process: finding a topic- writing an introduction- stating a purpose of study- identifying key research questions and hypotheses- reviewing literature- using theory- defining, delimiting and stating the significance of the study, advanced methods and procedures for data collection and analysis- illustration using research samples

UNIT III	RESEARCHING AND DATA	7
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Library and archives- Internet: New information and the role of internet; finding and evaluating sources- misuse- test for reliability- ethics

Methods of data collection- From primary sources: observation and recording, interviews structured and unstructured, questionnaire, open ended and close ended questions and the advantages, sampling-

Problems encountered in collecting data from secondary sources

UNIT IV	REPORT WRITING	7
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Research writing in general- Components: referencing- writing the bibliography - developing the outline- presentation; etc. Case studies illustrating how good research can be used from project inception to completion- review of research publications

TOTAL PERIODS: 30 PERIODS

REFERENCES:

Linda Groat and David Wang; Architectural Research Methods;
 Wayne C Booth; Joseph M Williams; Gregory G. Colomb; The Craft of Research, 2nd Edition;
 Chicago guides to writing, editing and publishing;
 Iain Borden and Kaaterina Ruedi; The Dissertation: An Architecture Student's Handbook; Architectural Press; 2000
 Ranjith Kumar; Research Methodology- A step by step guide for beginners; Sage Publications; 2005
 Laurel, Brenda. Design research: Methods and perspectives. MIT press, 2003.
 Kothari, C. R. Research methodology: Methods and techniques. New Age International, 2004.
 Gupta, S. P., and M. P. Gupta. Business statistics. Sultan Chand & Sons, 2010.
 Sanoff, Henry. Visual research methods in design. John Wiley & Sons Incorporated, 1991.
 Snyder, James C., ed. Architectural research. Vol. 6. Van Nostrand Reinhold Company, 1984.
 McMillian, J; Research in education: A conceptual introduction , Harpers Collins College Publishers; NY; 1997

MAR21I007	FURNITURE DESIGN & DETAILING	L T P C
		2 0 2 3

Course Objective:

This course aims to learn the dimensions and the availability of designs used for furniture based on ergonomics applied to furniture design that related end-user needs.

Course Contents:

UNIT I	HISTORY & CONCEPTS OF FURNITURE DESIGN	15
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History of furniture from early days to industrial revolution – Intensive Study of various Furniture styles – Exploring new emerging furniture concepts: space saving, modular, flexible and similar types

UNIT II	MATERIALS & MANUFACTURING IN FURNITURE DESIGN	15
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Bentwood, tubular steel, plywood, chipboard, plastics, paper - Its properties, applications and designers who patronized them – Manufacturing processes: Injection Molding, Investment casting, Sheet metal work, Die casting, Blow- molding, Vacuum – Forming, etc

UNIT III	FURNITURE DESIGNERS	10
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Marcel Bruer, Harry Bertoia, Mario Bellini, Achille Castiglioni, Antonio Citterio, John Cobb, Joe Colombo, Ray & Charles Eames, Tom Dixon, Gio Ponti, Arne Jacobsen, Florence Knoll, Ross Lovegrove, Mackintosh, Enzo Mari, Verner Panton, Jean Provue, Patricia Urquiola, Philippe Starck, Karim Rashid.

UNIT IV	DRAWING AND DESIGNING FURNITURE	20
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Furniture categories - Design approaches in furniture design – Ergonomics basics - Measured drawing of a piece of furniture - Plan, elevation and drawings on full scale - measuring and drawing to scale - Reduction and enlargement of drawings - Specific Furniture Design for the design project01 in Interior design Studio - 3

TOTAL PERIODS: 60 PERIODS

REFERENCES:

Furnish – Furniture & Interior Design for the 21st Century – Sophie Lovell

Product design: Tucker Veimeistu

Product design & manufacturing: John R Lindbeck

MAR21IL05

INTERIOR ARCHITECTURE - INTERNSHIP

L T P C
X X X 3

Course Objective:

To help in developing depth of knowledge and inquiry in any one of a chosen area of specialty in Interior Architecture

To enable interacting with practicing architects allied professionals, researchers and organisations working in the field of specialty in Interior Architecture

Course Contents:

The students will undertake the Internship Training in any organisation engaged in activities relating to a specialised area of Interior Architecture for a period of 4 weeks. The Internship Training is expected to make aware how specific areas in Interior architecture can be pursued to depth in the realm of practice and research. The Internship Training can thus be in allied Interior architectural practice/ research organisation/ university, etc., where there are such pursuits. Through the Internship Training, the students could obtain mastery in a specific area of practice or research. For instance design practices or organisations focusing on and not limiting to areas like Furniture design, Lighting design, product design, adaptive reuse, Sustainability, etc should be chosen by the student for their internship. The students may also utilise the Internship Training to strengthen their ability to do Thesis in the subsequent semester. The students are expected to complete the Internship Training in the Summer Vacation between second and third semesters, before the commencement of the third semester, and enroll for the course in the third semester. The students shall submit an Internship Training Report, as instructed. The students shall be evaluated on the basis of the Report submitted, through a Viva-Voce Examination.

MAR21IL06

DISSERTATION

L T P C
0 0 8 4

Course Objective:

To show advanced understanding and application of the knowledge of design systems in general and specific to the focus area through the culmination in a dissertation.

Course Contents:

Importance, Purpose and Scope of the Dissertation in Interior architecture in terms of design, technology, environment, economic and behavioral areas

Identification of Dissertation Topic and Area, Hypothesis Formulation, Objectives and Methodology

The topic chosen should be related to the design thesis and may involve the following areas of study in four stages:

- An in depth investigation into any aspect of the chosen area
- Analysis of data, inferences to establish underlying principles
- Evaluation of existing theory in new concepts

- Establishment of a hypothesis and its substantiation

Related Research, Literature and Field Studies; Submission of the above in report form

The particulars of schedule, content presentation, format etc, as decided by the department from time to time, shall be strictly followed. The progress will be periodically reviewed by internal jury members.

TOTAL PERIODS: 120 PERIODS

REFERENCES:

The Dissertation Journey: A Practical and Comprehensive Guide to Planning, Writing, and Defending Your Dissertation... by Carol M. Roberts

Demystifying Dissertation Writing: A Streamlined Process from Choice of Topic to Final Text by Peg Boyle Single and Richard M. Reis (Sep 2009)

Iain Borden and Katerina Ruedi, 'The Dissertation: An Architecture Student's Handbook', edition 2, Architectural Press, 2005

Ranjith Kumar, 'Research Methodology- A Step by Step Guide for Beginners', 4th Edition, Sage Publications, 2014.

Richard Coyne, 'Interpretation in Architecture: Design as Way of Thinking', Routledge, 2005.

Stephen Bailey, 'Academic Writing: A Handbook for International Students', Routledge, 2011.

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Adam Sharr, 'Reading Architecture and Culture', Routledge, 2012.

Vian Ahmed, Alex Opoku, Zeeshan Aziz, 'Research Methodology in the Built Environment', Routledge, 2016.

MAR21IL07

INTERIOR DESIGN STUDIO – III

**L T P C
0 0 10 5**

Course Objective:

The focus of the Comprehensive Interior Design Studio is the integrated design and detailed development of an interior space including all of its requisite systems.

Understand the depths of knowledge that goes in the understanding, analysing & designing of spaces for human use.

Course Contents:

Resolving complex issues in interior spaces through design language Evolving method of studies, analysis & design process.

DESIGN PROJECT 1:

To come up with design propositions and strategies for an interior space - This may include Recreational spaces like theatres, clubs, or of similar scale – Design Process starts from study stage, concept evolution with deeper understanding of the site (an existing built environment) and its context, Spatial conception, holistic Spatial design – Detailed Representation of the entire design process and its outputs – Design Representation: schematic sketches, schematic models, detailed drawings for each space through specific plan, sections, wall elevations, furniture detailing, joinery details, service drawings, detailed 3d models – Material specifications & other necessary details

SUGGESTED PEDAGOGICAL EXPLORATIONS:

Collaborative approach be it Vertical, Cross disciplinary or any new approach towards a compelling

design problem. A Collaborative design approach tries to bridge the various design studios present in the eco system of Faculty of Architecture. Appropriate International or National level Design Competitions can be taken up as part of the design problem. By taking up international or national competitions, the students get to understand their peers & their works on a global or national forum.

TOTAL PERIODS: 180 PERIODS

REFERENCES:

The Fundamentals of Interior Architecture, Coles ,AVA

Interior Design -John Pile; Harry . N.Abraham, Inc. Publishers.

Interior design Illustrated; Francis.D.K.Ching.

Time Saver standards for Interior Design & Space Planning – Joseph de Chiara,Julius Panero, and Martin Zelnic – 2003.

Language of Space by Bryan Lawson, ISBN 9781138581302, Published October 23, 2001 by Routledge

SEMESTER IV

MAR21I008	INTERIOR PROJECT MANAGEMENT & PRACTICE	L T P C
		2 0 0 2

Course Objective:

To understand the relevance of Construction Project Management in the Interior Architecture realm

Course Contents:

UNIT I	INTERIOR PROJECT MANAGEMENT – INTRODUCTION	7
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Introduction to interior project management, its objectives, resources & team - Client contact & relationship issues, design development stage and co ordination with various agencies -

UNIT II	MANAGEMENT TECHNIQUES	9
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Execution of work – planning, scheduling and control - Project monitoring , programming of works - Objectives of the project - Task required to completing it; Duration of projects; Cost target of the projects; Plan the most efficient organization of tasks; Re-evaluate tasks relationships and schedules and finally carry out the project - Tools & techniques for project management; bar charts, network techniques – Projected Project Scheduling & management for thesis project

UNIT III	ESTIMATION & COSTING	7
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Project cost analysis – methods of estimating, total budgeting and schedule of payment of various agencies - Estimation & Costing for thesis project

UNIT IV	PROFESSIONAL PRACTICE , MARKET TRENDS & SURVEY	7
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Interior design profession: survey of various interior designers, working procedures - Fee systems. Professional interior design societies - licensing & registering

TOTAL PERIODS: 30 PERIODS

REFERENCES:

The Interior Design Business Handbook : A Complete Guide to Profitability ~ Mary V. Knackstedt

Architect's Essentials of Negotiation (The Architect's Essentials of Professional Practice)
Becoming an Interior Designer, Piotrowski, Wiley Publications.

MAR21IL08**INTERIOR DESIGN THESIS****L T P C**
0 0 ** 13**Course Objective:**

This course aims to develop research aptitude of students and motivate students to involve in individual research. This course enables to train them in handling research projects independently to further their intellectual and personal development in the chosen field. The project can be defined as a scholarly inquiry into a problem or issues, involving a systematic approach to gathering and analysis of information / data, leading to production of a structured report.

Course Contents:

Each student is expected to research under a department approved guide / adviser. The students will synthesize the areas of knowledge, skills and techniques acquired in the various courses of the previous semesters through a thesis project of their choice. This thesis project would be a design project with a strong research component. The project shall desirably have the potential to serve as a starting point for practice and/ or further research.

Design Representation: intensive study and research, conceptual sketches, schematic drawings, schematic models, detailed drawings for each space through specific plan, sections, wall elevations, furniture detailing, joinery details, service drawings, detailed 3d models – Material specifications & other necessary details.

The particulars of schedule, content presentation, report making, etc., as decided by the department from time to time, shall be strictly followed. The progress will be periodically reviewed by internal & external jury members.

TOTAL PERIODS: ** PERIODS

** Undeterminable Number of Hours, It may be 25 – 30 hrs duration/ week.

REFERENCES:

The Fundamentals of Interior Architecture, Coles ,AVA

Interior Design -John Pile; Harry . N.Abraham, Inc. Publishers.

Interior design Illustrated; Francis.D.K.Ching.

Time Saver standards for Interior Design & Space Planning – Joseph de Chiara,Julius Panero, and Martin Zelnick – 2003.

Language of Space by Bryan Lawson, ISBN 9781138581302, Published October 23, 2001 by Routledge

ELECTIVES

MAR21IE01

SUSTAINABLE INTERIORS

L T P C
2 0 2 3

Course Objective:

This course aims to enhance the students to develop their knowledge and skill for the efficient use of our natural resources with the consideration of futures as green Interiors is becoming an essential parameter in designing.

Course Contents:

UNIT I : THE CONCEPT OF SUSTAINABILITY 15

Definition, Meaning and Importance - Sustainability and the Human Future - Earth and the Sustainability Crisis - The Challenge of Sustainability

UNIT II : STRATEGIES FOR SUSTAINABLE DESIGN 15

Community Participation in developing sustainable designs - Participatory approaches to learning and development - Building and planning requirements - Green Building Evaluation Systems: LEED, GRIHA - Legal instruments/ incentives for sustainable buildings - New concepts and trends in green buildings, national and international

UNIT III : SUSTAINABLE CONCEPT IN INTERIOR DESIGNING 15

The Concept of Sustainable Interiors - Sustainable interiors designing by adopting various policies - Principles of Sustainable Interior Design - Benefits of Green Interiors - Indoor Environment Quality (IEQ) - Elements associated to IEQ

UNIT IV : CASE STUDY (SELF-STUDY / ASSIGNMENT) 15

Conduct a study on concept of green building. Visit any green building; absorb the place, design, interior elements, materials and construction techniques. Interview with appropriate persons and make a case study report.

TOTAL PERIODS: 60 PERIODS

REFERENCES:

Lemons, John, Laura Westra, and Robert Goodland. Ecological sustainability and integrity: Concepts and approaches. Vol. 13. Springer Science & Business Media, 1998.

Marten, Gerald G. Human ecology: Basic concepts for sustainable development. Earthscan, 2001.

Gauzin-Mueller, Dominique, and Nicolas Favet. Sustainable architecture and urbanism: concepts, technologies, examples. Springer Science & Business Media, 2002.

Kim, Jong-Jin; Qualities, Use, and Examples of Sustainable Building Materials, CSS, University of Michigan, 1998.

Binggeli, Corky. Materials for interior environments. John Wiley & Sons, 2008.

American Institute of Architects; Environmental Resource Guide Subscription. Washington: AIA; 1992.

Sassi, P Strategies for Sustainable Architecture; New York, Taylor and Francis, 2006

MAR21IE02**ERGONOMICS & PRODUCT DESIGN****L T P C****2 0 2 3****Course Objective:**

This course aims to enable the students in the area of product design with the consideration of ergonomic aspects. This course will explore the innovative ideas to the students in the field of product design that applicable to interiors.

Course Contents:**UNIT I : PRODUCT DESIGN PROCESS****15**

Exploration - Generation - Evaluation - Design methods - Computer aided design - views on product development - Holistic product view - Hierarchy of user needs - Views of product characteristics - Product development from a process theory perspective - Definitions of users and related terms - Inclusive design

UNIT II : INTRODUCTION TO ERGONOMICS**15**

Categories of ergonomics - Physical ergonomics, Psychological ergonomics, Organisational ergonomics; Ergonomics in the context of product development - Nature of ergonomics information directed to design - Ergonomics in product design specifications - Cooperation and communication of ergonomics in design

UNIT III : PRODUCT PROTOTYPING**15**

Fabrication and proto typing - Techniques, material & processes employed as per industry standards; Product design prototypes -Sales prototypes - Design validation prototypes - Display only prototypes - Working test mock-ups - 3D printing & rapid prototyping

UNIT IV : CASE STUDY**15**

Understanding human factors : Methods and operation design - System and interface design - Product and equipment design - Task and job design - Workstation and work arrangement design - Information design - Working environment design

EXAMPLE OF A CASE : Analysis of Ergonomics interface at a Computer workstation

TOTAL PERIODS: 60 PERIODS**REFERENCES:**

Roozenburg, Norbert FM, and Johannes Eekels. Product design: fundamentals and methods. Vol. Chichester: Wiley, 1995.

Cross, Nigel. Engineering design methods: strategies for product design. John Wiley & Sons, 2008.

Green, William, and Patrick W. Jordan, eds. Human factors in product design: current practice and future trends. CRC Press, 1999.

<https://www.ideareality.design/services/design/>

Bridger, Robert. Introduction to ergonomics. CRC Press, 2008.

Product Design: Tucker Veimeistu

Product Design & Manufacturing - John R Lindbeck

Handbook of Human Factors & Ergonomics – Gavriel Salvendy

MAR21IE03	INTERIOR LANDSCAPING	L T P C
		2 0 2 3

Course Objective:

The objective of this course is to enable the students to understand the components and principles that help to understand design and represent landscape in interiors.

Course Contents:

UNIT I	INTERIOR LANDSCAPE COMPONENTS	15
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Types of indoor plants, plant characteristics, size, biology, soil, moisture, light, nutrient, air quality, atmospheric conditions, growing medium, pests & diseases – planting checklist

UNIT II	INDOOR LANDSCAPE MATERIALS & CONSTRUCTION	15
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Walling systems – Living Walls – Types of flooring system – Irrigation systems - Manual versions automatic irrigation, costing & installation of micro irrigation systems – Maintenance & Management

UNIT II	TYPES OF INDOOR GARDENS	15
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Vertical gardens – Terrace gardens - Courtyards – Patios – Atria

UNIT IV	INTERIOR LANDSCAPE DESIGNS	15
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Role of Landscape in Interiors – Behavioural Impact Of Interior Landscaping On Human Psychology – Biophilic concept - Psychological Factors That Affect Human Perception Of A Space - Concepts of Refuge, shelter, privacy - Case studies , Analysis & Interpretation

TOTAL PERIODS: 60 PERIODS

REFERENCES:

Interior Landscapes: Horticulture and Design Book by Jerome Malitz and Seth Malitz
 Interior landscape dictionary, Book by Joelle Steele
 The indoor garden book, Book by John Brookes
 Professional Interior Plantscaping, Book by Barbara L. Collins
 Interior Gardens: Designing and Constructing Green Spaces in Private and Public Buildings, Book by Haike Falkenberg
 Green Infrastructure: Incorporating Plants and Enhancing Biodiversity in Buildings and Urban Environments, Book by John W. Dover

MAR21IE04	TRADITIONAL INTERIORS OF INDIA	L T P C
		2 0 2 3

Course Objective:

The objective of this course enables the students to understand the components and principles that help to recognize and appreciate beauty & complexities of Indian traditional interiors.

Course Contents:

UNIT I : PRINCIPLES & FUNCTIONS OF INDIAN SPACES	15
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Principles of Space making in Ancient Hindu Architecture - Shatras behind the Space planning – Indian Aesthetics – Exploring the traditional & vernacular buildings, their similarities & variations - effective

ways vernacular & traditional elements withstand the climate, geographic conditions, & cultural setting

UNIT II : INTERIORS - SOUTHERN & EASTERN REGIONS OF INDIA 15

Spatial planning, Cultural aspects, Symbolism, Colour, Aesthetics - Materials of interior construction and design techniques of:

Select Temples, vernacular Houses and palaces of Kerala, Tamil Nadu, Andhra Pradesh, Telangana, Karnataka, Odisha, West Bengal, North Eastern States

UNIT III : INTERIORS - NORTHERN & WESTERN REGIONS OF INDIA 15

Spatial planning, Cultural aspects, Symbolism, Colour, Aesthetics - Materials of interior construction and design techniques of :

Select Temples, vernacular Houses and palaces of Maharashtra, Madhya Pradesh, Bihar, Jharkand, Punjab, Haryana, Himachal Pradesh

UNIT IV : RESEARCH WORK ON TRADITIONAL INDIAN INTERIOR SPACES 15

Forms spatial planning, Cultural aspects, Symbolism, Colour, Aesthetics - Materials of interior construction and design technique of one Traditional typology from South India – the selection could be a worship place or a house

TOTAL PERIODS: 60 PERIODS

REFERENCES:

Paul Oliver, Encyclopedia of Vernacular Architecture of the World, Cambridge University Press, 1997.

Amos Rapoport, House, Form & Culture, Prentice Hall Inc. 1969.

R W Brunskill: Illustrated Handbook on Vernacular Architecture, 1987

V.S. Pramar, Haveli – Wooden Houses and Mansions of Gujarat, Ahmedabad, 1989

Kulbushanshan Jain and Minakshi Jain – Mud Architecture of the Indian Desert, Aadi Centre, Ahmedabad 1992.

G.H.R. Tillotsum – The tradition of Indian Architecture Continuity, Controversy – Change since 1850, Oxford University Press, Delhi, 1989.

Carmen Kagal, VISTARA – The Architecture of India, Pub: The Festival of India, 1986.

S. Muthiah and others: The Chettiar Heritage; Chettiar Heritage 2000

**MAR21IE05 ADVANCED CAD & INTERIOR DESIGN PORTFOLIO L T P C
2 0 2 3**

Course Objective:

This course is intensive visualization skill based course that requires a lot of time and commitment. This course aims to develop the student's ability to communicate their ideas, thoughts and feelings about the field of interior design in a visual form.

Course Contents:

MODULE 1 : ADVANCED CAD 20

Improve 2d and 3d skills using softwares like Sketchup Pro, 3dsmax, Revit & Vray plugin to aid in Interior spatial design with a focus on the comprehensive interior scene with all the interior design elements.

MODULE 2 : PORTFOLIO**40**

The Design Portfolio is not simply a collection of work. Rather, it is a personal statement of creative ability and design thinking. The portfolio is a self-presentation tool that creatively communicates the students' design outlook and level of development through a variety of media and skill sets. The portfolio should include a selection of design works and at least one example of the development of design work in the area of interior design. The portfolio submitted for consideration must clearly indicate students' potential for graduate study to the reviewers. Computer access is strongly recommended for this course, especially to visualization part. Please note, there is no typical model of a successful portfolio. Students need to think of the progression of their work; show how each project builds on another or stand-alone projects that show their diverse talents. There is no minimum or maximum number of required pages, but the content counted on the basis of a number of projects available in the portfolio.

TOTAL PERIODS: 60 PERIODS**REFERENCES:**

Infographics: The Power of Visual Storytelling Paperback – 16 August 2013 by Jason Lankow
 The Elements of Graphic Design: Second Edition Paperback – 15 March 2011 by Alex W. White
 The Graphic Design Idea Book: Inspiration from 50 Masters Paperback – 10 May 2016 by Steven Heller (Author), Gail Anderson
<https://www.firstinarchitecture.co.uk/portfolio-tips-for-architecture-students/>

MAR21IE06**INTERIOR JOURNALISM & PHOTOGRAPHY****L T P C
2 0 2 3****Course Objective:**

To introduce basic objectives, methods and skills for practice of professional journalism with
 To introduce and explore photography as an important aspect of journalism and as a standalone particular emphasis on architectural journalism

Course Contents:**UNIT I : JOURNALISM - TECHNIQUES AND SKILLS `****15**

Introduction to journalism, its key concepts and objectives - Different types of journalism -Architectural journalism as a specialised area - Outline of aspects related to journalism - research, reporting, writing, editing, photography, columns, public relationship, criticism - Knowledge about copyright, policies, etc., Code of ethics - Basic knowledge of press laws, Press Council of India - Understanding the individual demands in the context of newspapers, radio, film, and television - Role of the editor - Editing of articles, features and other stories - Editing for online newspaper and magazines - Text preparation, mode of presentation, standards and guidelines for documentation - Multimedia/ online journalism and digital developments - Exercises in the above - Regional, national and international discussion forums

UNIT II : DISCUSSIONS AND ISSUES ON INTERIORS**15**

Changes in contemporary and historical design practices - Discussions on topics needed in an architectural journal and current issues - Types of journals - Works of key journalists in Interior Architecture - Public discourse on the internet - Mass media and public opinion - Critique on selected pieces of Interior journalism - Exercises in the above

UNIT –III PRINCIPLES OF PHOTOGRAPHY**15**

Technical definitions, understanding a camera, anatomy of a SLR camera, technical setting in a SLR camera, different types of lenses - Technical definitions, lighting sources, types of lighting fixtures, types of lamps, calculating lighting levels, flash photography, types of flashes, controlling lighting levels with flash photography

UNIT IV: INTERIOR PHOTOGRAPHY**15**

Introduction to Interior photography and role of the photographic image in the global world - Basics of photo journalism - Equipment - cameras and lenses – Techniques - film speed, exposure measurement, gray scale, photofinishing and editing digital images. Perspectives- single point, two- point, three- point and methods of correcting distortions. Lighting - interior - Exercise in interior lighting photography with artificial light and black and white photos

TOTAL PERIODS: 60 PERIODS**REFERENCES:**

Edward Jay Friedlander and John Lee, 'Feature Writing for Newspapers and Magazines',
David Fuller and Patricia Waugh, eds., 'The Arts and Sciences of Criticism', Oxford: Oxford
thEdition, Pearson, 2010. James Foust, 'Online Journalism Principles and Practices of News for the
Web', Routledge, University Press, 1999. 2011 Martin Huckerby,
'The Net for Journalists: A Practical Guide to the Internet for Journalists in
M. Harris, 'Professional Interior Photography', Focal Press, 2003.
Developing Countries', UNESCO/Thomson Foundation/ Common wealth Broadcasting S. J. A. Ward,
'Philosophical Foundations of Global Journalism Ethics', Journal of Mass Association, 2005.
Gerry Kopelow, 'Architectural Photography: The Digital Way', Princeton Architectural Press, M.
Heinrich, 'Basics Architectural Photography', Birkhauser Verlag AG, 2008. Media Ethics, Vol. 20, No. 1,
3-21, 2005. 2007.