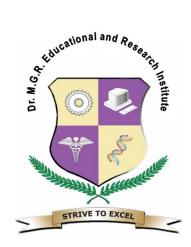
## FACULTY OF ARCHITECTURE

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

### Dr. M.G.R

# EDUCATIONAL & RESEARCH INSTITUTE UNIVERSITY

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



# M.Arch Interior Architecture SYLLABUS - 2016

Approved by BOS vide meeting Dt: 03.06.2016

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

# Dr. M.G.R EDUCATION & RESEARCH INSTITUTE UNIVERSITY

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

## M.ARCH

### **Interior Architecture**

#### **SEMESTER-I**

Code No	COURSE TITLE	L	T	P/S	С
THEORY					
MAR16I001	Basic Environmental science for Interiors	2	0	0	2
THEORY CU	M STUDIO				
MAR16I002	Theory of aesthetics & Concepts of Design	1	0	2	2
MAR16I003	Interior Design Materials & Construction - I	1	0	2	2
MAR16IIL1	Advanced CAD	1	0	3	3
STUDIO					
MAR16IIL2	Workshop - I	0	0	5	3
MAR16IL01	Interior Design Studio - I	0	0	13	7
	Sub Total	5	0	25	19

#### **SEMESTER - II**

Code No	COURSE TITLE	L	T	P/S	C	
THEORY	THEORY					
MAR16I004	Theory & history of Interior Design	2	0	0	2	
THEORY CU	M STUDIO					
MAR16I005	Interior Design materials & Construction – II	1	0	2	2	
MAR16I006	Building service systems for Interiors	2	0	0	2	
MAR16I007	Furniture Design & Detailing	1	0	2	2	
STUDIO	STUDIO					
MAR16IIL3	Critical Research Seminars	0	0	3	2	
MAR16IIL4	Workshop – II	0	0	3	2	
MAR16IL02	Interior Design Studio – II	0	0	14	7	
	Sub Total	6	0	24	19	

#### **SEMESTER - III**

Code No	COURSE TITLE		T	P/S	С
THEORY					
MAR16I008	Graphic communication & Signage	2	0	0	2
THEORY CU	M STUDIO				
MAR16I009	Ergonomics & Product Designing	1	0	2	2
MAR16I010	Lighting Design	1	0	1	2
	Elective - I	1	0	1*	2
STUDIO					
MAR16IL03	Dissertation	0	0	7	4

MAR16IL04	Interior Design Studio – III		0	14	7
	Sub Total	5	0	25	19

#### **SEMESTER - IV**

Code No	COURSE TITLE	L	T	P/S	C
THEORY					
MAR16I011	Interior Project Management & Practice	2	0	0	2
	Elective - II	*		*	2
STUDIO					
MAR16IL05	Interior Design Studio - IV Thesis	0	0	**	14
	Sub Total	4	0	**	18

<sup>\*\*</sup> Undeterminable Number of Hours, It may be 25 – 30 hrs duration/ week. p

#### **ELECTIVE**

		COURSE TITLE	L	T	P/S	С	
THEORY CUM STU	THEORY CUM STUDIO						
	MAR16IE01	Interior Landscaping	1	0	2	2	
SEMESTER - III	MAR16IE02	Traditional Indian Spaces	1	0	2	2	
THEORY	MAR16E009	Research Methodologies In Architecture	2	0	0	2	
THEORY							
SEMESTER - IV	MAR16IE04	Psychology & Human Behavior	2	0	0	2	
SEIVIESTER - IV	MAR16IE05	Interior Photography	1	0	0	2	

**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 Project & Dissertation – Internal Assessment – 50%

- External Viva - 50%

For Advance CAD, Workshops & Seminars the assessment shall be only Internal.

<sup>\*</sup> As per Elective

#### SEMESTER - I

#### MAR16I001 BASIC ENVIRONMENTAL SCIENCE FOR INTERIORS

LTPC 2002

#### UNIT I THERMAL COMFORT

10

Thermal comfort in interior spaces, comfort zone, thermal neutrality, thermal indices – metabolic rate, clothing insulation, air temperature, mean radiant temperature, air speed, relative humidity, predicted mean vote (PMV).

Significance of thermal comfort, sick building syndrome, indoor air quality.

Factors influencing thermal comfort, operative temperature. Thermal comfort models – Elevated air speed method, Local thermal discomfort, adaptive comfort model. Thermoregulation – physiological, behavioural. Effects of natural ventilation on thermal comfort. Thermal comfort in different regions. Thermal stress.

#### UNIT II LIGHTING

10

History of lighting, Light fixtures – types and characteristics. Types of lighting – task, accent & general lighting and its methods. Forms of lighting – indoor & outdoor. Lamps – ballast, fluorescent, halogen, neon, LED & CFL. Photometric studies. On stage & set lighting. Photometry – Illuminance, Luminance, Lux. Color properties – colour temperature, color rendering index.

#### UNIT III ACOUSTICS

10

History of acoustics, fundamental concepts of acoustics, sound propagation, frequency, transduction in acoustics. Acoustic material, properties and sound absorbents.

**TOTAL: 30 PERIODS** 

- 1. Building Systems: Design Technology and Society.By Kiel Moe, Ryan.E.Smith
- 2. Fundamentals of Lighting, 2nd Edition by Susan M. Winchip
- 3. Handbook of Acoustics by Malcolm J. Crocker
- 4. The Theory of Sound, Volume One: Unabridged Second Revised Edition by J. W. S. Rayleigh
- 5. Theoretical Acoustics by Philip McCord Morse

#### MAR16I002 THEORY OF AESTHETICS & CONCEPTS OF DESIGN

LT P C 1 0 2 2

#### UNIT I INTRODUCTION TO AESTHETICS

10

History of aesthetics – greek, indian, African, arab& western medieval aesthetics. Modern aesthetics – AG Baungarten, Fredrick Wilhelm, Joseph, Schelling, Adolf Loos, Aesthetic realism. Aesthetics & science.

Introduction to the western aesthetics & Indian Aesthetics Relating to the spaces, surfaces and interior designing with aesthetics Study of relation between the traditions of architecture & aesthetics

#### UNIT II CRITICAL JUDGEMENT & COGNITIVE LEARNING

10

Understanding the concept of critical judgment Design related cognitive learning

#### UNIT III ADVANCED STUDY ON COLOUR

10

Physics of colour, spectral colours, colour of objects. Perception, Theories of colour – Trichromatic theory. Additive & Subtractive colours. Traditional colour theories, colour wheel, RYB colour model, Warm & cool colours, tint and shades, colour harmony. Psychology of colour, Color & mood, Principles of color psychology, brand meaning.

#### UNIT IV SPACE & FORM

**15** 

Principles of design – Unity, harmony, balance, hierarchy, scale & proportion, emphasis, similarity & contrast.

Line, colour, shape, texture, space, form, material.

**TOTAL: 45 PERIODS** 

- 1. Colour in Interior Design, Pile.
- 2. Lighting Spaces Yee. VRP Publications
- 3. The Fundamentals of Interior Architecture, Coles ,AVA
- 4. http://plato.stanford.edu/entries/aesthetic-judgment/
- 5. Essay: Beatriz Colomina. Sexuality and space: The split wall: Domestic Voyeurism,
- 6. Essay: Mark Wigley, White Walls, Designer Dresses: The Fashioning of Modern Architecture.
- 7. Essay: WILLIAM W. BRAHAM. A Wall of Books: The Gender of Natural Colors in Modern Architecture
- 8. Colour Harmony, Bride M Whelan
- 9. Essay: Adolf Loos "Ornament and Crime" 1908
- 10. Essay: Adolf Loos: Spoken into void Collected Essays 1897 1900: The principles of cladding

#### MAR161002 INTERIOR DESIGN MATERIALS & CONSTRUCTION – I

LTPC 1022

#### UNIT I WOOD

10

Physical properties – growth rings, knots, heart wood and sap wood. Colour, water content, structure. Hard wood and soft wood. Joineries – dovetail, scissor joint etc., Uses & defects of wood.

UNIT II METAL

**10** 

Ferrous & non ferrous metals – steel, copper, brass. Steel – material properties, types of steel, treatments, history of steel making. Copper – physical characteristics, history, applications, degradation. Brass – physical properties, corrosion resistance, history, applications.

UNIT III STONE

10

Natural & engineered stones. Granite –types of granite – based on composition, finishes. Uses of granite. Marble – composition & physical characteristics, finishes. Uses & applications of marble. Engineered stones – composition, properties. Uses & applications.

#### UNIT IV CASE STUDY & PORTFOLIO

**15** 

Consolidated study of the above material application in the form of portfolio.

**TOTAL: 45 PERIODS** 

- 1. Construction materials for interior design:
- 2. principles of structure and properties of materials
- 3. By, William Rupp, Arnold Friedmann, Philip F. Farrell
- 4. Modern projects in wood, metal, & plastics, Patrick E. Spielman

MAR16IIL1	ADVANCED CAD	LTPC 1033
UNIT I	3D MODELING & RENDERING	15
3D Modeling	using Revit, auto cad .Wire frame , surface & solid modeling.	
Rendering us	ing 3DSMax & Presentation Techniques	
UNIT II	WALKTHROUGH	15
Presentation	through still images & walkthrough	
UNIT III	GRAPHICS	15
Adobe Photos	shop & Illustrator for graphic design & corrections	
Aldus Photos	tyle, Abobe premiere sound forge, Director & razor pro for A-V Editing	
Alternative so	oftwares – Accu render, Artisan, Spotlight ray tracer .	
UNIT IV	SIMULATION SOFTWARE	15
Light scape; (	CATIA ; Eco Software .	
	TOTAL:	60 PERIODS

- 1. Mastering Autodesk Revit Architecture 2013
- 2. Phil Read, James Vandezande, Eddy Krygiel
- 3. Interior Design Visual Presentation: A Guide to Graphics, Models and Presentation
- 4. Published in 2012 by Wiley

MAR16IIL2	WORKSHOP – I_	LTPC 0053
UNIT I	WOOD & JOINERY	20
Working with	n wood & wood products to understand material para v Details	imeters
UNIT II	CARPENTARY FINISHES	20
Application of	f veneer / laminates on different timber surfaces	
Wood polishi	ng, painting and other finishes	
UNIT III	ORNAMENTAL DETAILING	20
Engraving &	carving	
UNIT IV	CANE	15
Types of cane	e & its properties - joinery & its finishes	
Colour & sur	ace quality	

#### **REFERENCES:**

- 1. Workshop Idea Book (Taunton Woodworking), By Andy Rae
- 2. The Complete Book Of Wood Joinery, By R. J. DeCristoforo
- 3. Metal Craft Discovery Workshop, By Linda O'Brien, Opie O'Brien

**TOTAL: 75 PERIODS** 

#### MAR16IL01

#### INTERIOR DESIGN STUDIO - I

L T P C 0 0 13 7

Resolving complex issues in interior spaces through design language

Evolving method of studies, analysis & design process.

Institutional spaces & Exhibition Displays

**TOTAL: 195 PERIODS** 

- 1. Rethinking Design and Interiors: Human Beings in the Built Environment, By Sashi Caan.
- 2. Interior Design -John Pile; Harry . N.Abraham, Inc. Publishers.
- 3. Interior design Illustrated; Francis.D.K.Ching.
- 4. Time Saver standards for Interior Design & Space Planning Joseph de Chiara, Julius Panero, and Martin Zelnic 2003.

#### **SEMESTER - II**

#### MAR16I004 THEORY & HISTORY OF INTERIOR DESIGN

LTPC 2002

8

#### UNIT I UNDERSTANDING STYLES & THEORIES OF INTERIOR DESIGN

Categorizing design into key elements, including space, light, display, storage, and offering new terminology to describe each area, the author breaks new ground in the field of interior design in an approach that brings vitality and clear communication to a misunderstood and often free-wheeling design discipline.

#### UNIT II UNIVERSAL DESIGN MOVEMENTS

8

Landmark events in the history of international design movement historical development of artifact overview of major styles like Regency, Colonial, Romanticism, Art Nouveau, Electicism, Art Deco, Cubism, Modernism, Late Modernism, Post Modernism & Deconstructivism.

#### UNIT III MODERN DESIGN MOVEMENTS IN INDIA

8

Industrialization changes in technology and production systems impact on lifestyle & interiors Modern movement & its impact in India Shift from historical to modern methods of building spaces, change in the interior elements of design Elements of Interior Design.

#### UNIT IV INDIAN STYLES IN INTERIOR DESIGN

6

Indian Elements of space making – Concepts of Traditional symbols and spatial organization. Creative and ethnic approaches to interior elements and its adaptations in the Contemporary design methods. The adaptive re-use of Architectural Built forms for the modern Interiors.

TOTAL: 30 PERIODS

- 1. A History of Interior Design -John Pile; Harry . N.Abraham, Inc. Publishers.
- 2. Interior design Illustrated; Francis.D.K.Ching.
- 3. History of Interior Design 2<sup>nd</sup> edition 2005 John Wiley & Sons.Inc
- 4. Handbook of Human Factors & Ergonomics Gavriel Salvendy
- 5. Geoffrey Broadbent Design in Architecture Architecture & the human sciences John Wiley & Sons , New York , 1981.
- 6. Nigel Cross Developments in Design Methodology, John Wiley & Sons.1984

MAR16I005 INTERIOR DESIGN MATERIALS & CONSTRUCTION – II L T P C 1 0 2 2

UNIT I GLASS 10

Types of Glass, ingredients, properties & application. Stained glass.

Glass in Green Buildings.

#### UNIT II PLASTICS 10

History, types of plastics. Polystyrene, Nylon, Rubber and its properties. Environmental effects of plastics. Recycling of plastic. Common plastics and its uses.

Types of moulding plastics – blow moulding, extrusion moulding, injection moulding.

#### UNIT III TEXTILES 10

Role of textiles in interior design. Properties and applications.

#### **UNIT IV** Materials for finishes

15

Miscellaneous materials such as linoleum, asphalt, cork, rubber, leather, paper, rexine, paints & varnishes, laminates & veneers.

**TOTAL: 45 PERIODS** 

- 1. Construction materials for interior design: principles of structure and properties of materials
- 2. William Rupp, Arnold Friedmann, Philip F. Farrell
- 3. Inside: interiors of colour, fabric, glass, light. By, Sibylle Kramer, Iris van Hülst

#### MAR16I006 BUILDING SERVICE SYSTEMS FOR INTERIORS

LTPC 2002

#### UNIT I WATER SUPPLY & SANITATION

8

Comprehensibility of all the building services - water supply, plumbing - implications on interior layout

#### UNIT II HVAC

8

HVAC, Air Conditioning methods & equipments - Air distribution system - Calculation of Ac loads

#### UNIT III REGULATIONS OF SAFETY & SERVICES

8

Regulations of NBC for all the services mentioned

Fire fighting systems

#### UNIT IV BUILDING SERVICES AND DESIGN SOLUTIONS

6

Understanding all services & their components - studio work for proposals with emphasis to above services for small as well as large scale projects

**TOTAL: 30 PERIODS** 

- 1. Managing Water Supply and Sanitation in Emergencies (Oxfam Skills and Practice Series) by John Adams (Nov 1, 1999)
- 2. Building Services Handbook by Fred Hall and Roger Greeno
- 3. HVAC Design Sourcebook by W. Larsen Angel

# MAR16I007 FURNITURE DESIGN & DETAILING L T P C 1 0 2 2

#### UNIT I HISTORY & CONCEPTS OF FURNITURE DESIGN

10

History of furniture from early days to industrial revolution.

Study of various styles, systems & products available in the market.

#### UNIT II THEORY OF FURNITURE DESIGN & DESIGN PARAMETERS

**10** 

Descriptive & normative theories, intensive studies of furniture, theory of manufacturing and usability, beauty and aesthetics of furniture, semiotics of furnitures, aesthetics of furnitures.

#### UNIT III MATERIALS IN FURNITURE DESIGN

**10** 

Bentwood, tubular steel, plywood, chipboard, plastics, paper. Its properties, applications and designers who patronized them.

#### UNIT IV TRENDS IN FURNITURE DESIGN

**15** 

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.

**TOTAL: 45 PERIODS** 

- 1. Furnish Furniture & Interior Design for the 21st Century Sophie Lovell
- 2. Product design: Tucker Veimeistu
- 3. Product design & manufacturing: John R Lindbeck

MAR16IIL3

#### CRITICAL RESEARCH SEMINARS

LTPC 0032

#### **RESEARCH METHODS**

Introduction to the nature & purpose of research and its role in problem solving and theory in the field of interiors.

Discussion of various principles & approaches to research

#### **SUGGESTED AREAS OF RESEARCH**

Studies of indian art & craft. Influence of location, tradition, culture and socio-economic development on art & craft in rural and urban india. Visit to trditional craft pockets, documenting people, life, culture & craft and understand the materials, tools, technology, processes and forms. Suggest suitable changes in the technology to improve the products so as to make it acceptable in today's context. Approach & techniques for conservation, maintenance and management of conserved buildings and Landscape.

- Studies of work of different interior designers through observation, interview, and research.
   Understanding the concepts of space, structure, oganisation, symbolism, form, colour, modes of presentation etc.
- The student may choose any other area of interest in consultation with the concerned faculty for research. The study would be presented has term with supporting illustrations. It will be periodically reviewed and presented as a seminar for final assessment.
- In the course of the semester students shall present 3 seminars on approved subjects and each shall be assessed internally. Students are also encouraged to publish their subjects of research.

**TOTAL: 45 PERIODS** 

- 1. Research Methods and Statistics: A Critical Thinking Approach by Sherri L. Jackson
- 2. Design Research: Methods and Perspectives by Brenda Laurel and Peter Lunenfeld
- 3. Nigel Cross Developments in Design Methodology, John Wiley & Sons. 1984.

#### MAR16IIL4 WORKSHOP – II

LTPC 0032

#### UNIT I CERAMICS

**15** 

Understanding of ceramic products for interior spaces. Processes and techniques of forming & decorating ceramics slab work, throwing, pinching, coil work and firing. Colour figments and design qualities. Making ceramic tiles, plaster slab and carving

#### UNIT II METALS 15

Types of metals, properties, methods of working with metals, fixing and joinery in metals, finishing and treatment of metals. Metal products & furniture forms used in interiors

#### UNIT III PLASTICS 15

Plastic, F.R.P and acrylic products – design process, tools & technology development of innovative forms for interiors elements with colour variations.

**TOTAL: 45 PERIODS** 

- 1. The Workshop Guide to Ceramics: A Fully Illustrated Step-by-Step Manual: Techniques and Principles of Design by Duncan Hooson and Anthony Quinn
- 2. Sheet Metal Work (Workshop Pratice Series, No. 8) by R. E. Wakeford

#### MAR16IL02

#### INTERIOR DESIGN STUDIO - II

LT PC 0 0 14 7

Resolving complex issues in interior spaces through design language

Evolving method of studies, analysis & design process.

Commercial spaces. Barrier free interiors. Interiors for children or the elderly

**TOTAL: 210 PERIODS** 

- 1. The Fundamentals of Interior Architecture, Coles ,AVA
- 2. Interior Design -John Pile; Harry . N.Abraham, Inc. Publishers.
- 3. Interior design Illustrated; Francis.D.K.Ching.
- 4. Time Saver standards for Interior Design & Space Planning Joseph de Chiara, Julius Panero, and Martin Zelnic 2003.

#### **SEMESTER - III**

#### MAR16I008 GRAPHIC COMMUNICATION & SIGNAGE

LTPC 2002

#### UNIT I GRAPHIC COMMUNICATION

8

History of communication- graphics, communication, visual communication & communication design. Graphic design- typography, visual arts, page layout. Graphic representation, graphicacy.

#### UNIT II VISUAL COMMUNICATION SYSTEMS

8

Gestalt Theory, Aldous Huxley. Image analysis & its perspectives. Visual Aids & its types. Visual aids media- simple to advanced.

#### UNIT III SIGNAGES & AUDIO VISUALS

8

History of signages. Functions of signs. Sign technologies- banner, bill boards, digital signs, street signs, neon signs, LED signs. Digital signs & its different applications.

Graphics & Image making – audio visuals and graphic systems.

#### UNIT IV GRAPHIC AS A SPACE

8

Graphic as a space – making element. Graphic as space transforming element.

**TOTAL: 30 PERIODS** 

- 1. Graphic Communications Today, 4E (Design Concepts), William E Ryan, Theodore E. Conover
- 2. Signage Systems and Information Graphics, Andreas Uebele
- 3. Technical Graphics Communication, Gary Robert Bertoline, Eric N. Wiebe
- 4. Signage Design Manual, Edo Smitshuijzen
- 5. Bob Gordon and Maggie Gordon Digital Graphic Design Thames & Hudson
- 6. Louise Bowen Ballinger Perspective Space & Design Van Nostrand Reinhold Company
- 7. Fred A Stitt System Graphics Mcgraw Hill Company

#### MAR16I009

#### **ERGONOMICS & PRODUCT DESIGN**

LTPC 1022

#### UNIT I ERGONOMICS

5

Introduction to ergonomics & human factor design. Domains of specialization in the discipline of ergonomics. Methods of analysis.

#### UNIT II PRODUCT DESIGN

9

Product design process. Trends in product design. History of industrial design. Exampoles of iconic industrial design. Product development & its stages.

#### UNIT III FABRICATION

8

Manufacturing & fabrication. Prefabrication & its advantages. Composite fabrication, metal fabrication, micro fabrication & optics fabrication. Rapid proto typing, solid free form fabrication.

#### UNIT IV DIGITAL MODELING & FABRICATION

8

Machines for fabrication- CNC router, laser cutter, 3D printers. Softwares for modeling- Blender, Form Z, Rhinoceros 3D, Cadwork, 3D Studo Max, Sketchup.

**TOTAL: 30 PERIODS** 

- 1. Product Design: Tucker Veimeistu
- 2. Product Design & Manufacturing John R Lindbeck
- 3. Furnish Furniture & Interior Design for the 21st Century Sophie Lovell
- 4. Handbook of Human Factors & Ergonomics Gavriel Salvendy

#### MAR16I010

#### LIGHTING DESIGN

LTPC 1012

#### UNIT I LIGHT - AS A DESIGN PARAMETER

7

Daylighting, Daylight factor, reflection, refraction, Light tube, light shelves, light reflectors, Photometry – Illuminance, Luminance, Lux. Color properties – colour temperature, color rendering index, Lumen, luminous flux, light pressure.

#### UNIT II LIGHTING DESIGN

9

Specification of illumination requirements for each given use area-Analysis of lighting quality - Designing illumination for complex project types, including analysis of lighting criteria, development of design concepts and complete documentation requirements.

#### UNIT III LIGHTING SYSTEMS, ENERGY CONSUMPTION & AUTOMATION

7

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 LIGHT as ART

7

Light art, Light sculptures. Examples of light art works by Chul Hyun Ahn, Dan Flavin, Olafur Eliasson, James Turrel, WAtraut Cooper, Bruce Munro, Dan Roosegaarde+

**TOTAL: 30 PERIODS** 

- 1. Architectural Lighting Design by Gary R. Steffy
- 2. The Architecture Of Light: A textbook of procedures and practices for the Architect, Interior Designer and Lighting... by Sage Russell
- 3. Interior Lighting for Designers, 4th Edition by Gary Gordon (Jan 28, 2003)

MAR16IL03 DISSERTATION

LTPC 0074

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

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: 105 PERIODS** 

- 1. The Dissertation Journey: A Practical and Comprehensive Guide to Planning, Writing, and Defending Your Dissertation... by Carol M. Roberts
- 2. Demystifying Dissertation Writing: A Streamlined Process from Choice of Topic to Final Text by Peg Boyle Single and Richard M. Reis (Sep 2009)

#### MAR16IL04

#### **INTERIOR DESIGN STUDIO - III**

LT P C 0 0 14 7

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

Recreational spaces like theatres, clubs, etc

**TOTAL: 210 PERIODS** 

- 1. The Fundamentals of Interior Architecture, Coles ,AVA
- 2. Interior Design John Pile; Harry . N. Abraham, Inc. Publishers.
- 3. Interior design Illustrated; Francis.D.K.Ching.
- 4. Time Saver standards for Interior Design & Space Planning Joseph de Chiara, Julius Panero, and Martin Zelnic 2003.

#### **SEMESTER - IV**

#### MAR16I011 INTERIOR PROJECT MANAGEMENT & PRACTICE

LTPC 2002

#### UNIT I INTERIOR PROJECT MANAGEMENT - INTRODUCTION

7

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

Execution of work – planning, scheduling and control. Project monitoring , programming of works. Tools & techniques for project management; bar charts, network techniques

#### UNIT III ESTIMATION & COSTING

7

Project cost analysis – methods of estimating, total budgeting and schedule of payment of various agencies

#### UNIT IV PROFESSIONAL PRACTICE, MARKET TRENDS & SURVEY

7

Interior design profession: survey of various interior designers, working procedures. Fee systems. Professional interior design societies, licensing & registering

**TOTAL: 30 PERIODS** 

- 1. The Interior Design Business Handbook: A Complete Guide to Profitability  $\sim$  Mary V. Knackstedt
- 2. Architect's Essentials of Negotiation (The Architect's Essentials of Professional Practice)
- 3. Becoming an Interior Designer, Piotrowski, Wiley Publications.

#### **MAR16IL05**

#### **INTERIOR DESIGN STUDIO IV - THESIS**

0 0 \*\* 14

Study in the chosen field would be caused out in two stages:

Data collection & analysis

An in-depth investigation into the aspects of the chosen area

Analysis of data, inferences to establish underlying principles

Review of existing practices/theory in view of current contexts

#### **DESIGN**

Prepare programme

Design on basis of Data collection & analysis

**TOTAL: \*\* PERIODS** 

- 1. Indian Design (Daab Design Book) ~ Ralf Daab
- 2. Detail + Interior + Architecture Series From Archiworld
- 3. Interior World, Series From Archiworld
- 4. Interior Spaces, Series From Archiworld

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

#### **ELECTIVES**

# MAR16IE01 INTERIOR LANDSCAPING L T P C 1 0 2 2 UNIT I INTERIOR LANDSCAPE 12

Types of indoor plants, plant characteristics, size, biology, soil, moisture, light, nutrient, atmospheric conditions, growing medium, pests & diseases. Market survey & costs

# UNIT II FLOWER & ARRANGEMENTS 9

Flowers, its colours, texture and its visual perception in various indoor spaces. Science of flower arrangement.

#### UNIT III IRRIGATION SYSTEMS 12

Manual versions automatic irrigation , costing & installation of micro irrigation systems

#### UNIT IV INTERIOR DESIGNS 12

Interior landscape application for residential, commercial and other public use spaces.

**TOTAL: 45 PERIODS** 

- 1. Interior Landscaping By Tokuji Furuta, Debra Sievers, Vernon Artman 1983, Reston pub. Co
- 2. Interior Landscape design by Nelson Hemmer,1991, McGraw Hill.

#### **MAR16IE02**

#### TRADITIONAL INDIAN SPACES

LTPC 1022

#### UNIT I PRINCIPLES & FUNCTIONS OF INDIAN SPACES

**12** 

Principles of Space making in Ancient Hindu Architecture; Shatras behind the Space planning; The effective vernacular elements that withstand the climate, geographic conditions, & cultural setting, in a range of architectural ex's like temples, vernacular houses, palaces, mosques, etc.

#### UNIT II SPACE ARTICULATION & INDIAN AESTHETICS

9

Detailed Study on Indian Aesthetics and its Reflections in Indian Spaces. In a range of architectural ex's like temples, vernacular houses, palaces, mosques, etc.

#### UNIT III SPACE AND ENERGY

**12** 

A discursive approach to understanding Energy in space based on examples of Spaces in Temples.

#### UNIT IV RESEARCH WORK ON INDIAN INTERIORS

**12** 

Detailed study on one ancient building.

**TOTAL: 45 PERIODS** 

#### **REFERENCES:**

1. Indian Temple Architecture: Form and Transformation : the Karṇāṭa Drāviḍa Tradition, 7th to 13th Centuries, Adam Hardy.

#### MAR16E009 RESEARCH METHODOLOGIES IN ARCHITECTURE

LTPC 2002

#### **OBJECTIVES:**

- 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.

#### UNIT I INTRODUCTION

9

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

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 COLLECTION

6

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

6

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: 30 PERIODS**

#### **OUTCOMES:**

- The student will develop the skill to identify, decipher and interpret the issues relating to Architecture, based on research enquiry methods.
- The student will widen the information and will prepare the students for scientific method of researching and research process.

- 1. Linda Groat and David Wang; Architectural Research Methods;
- 2. Wayne C Booth; Joseph M Williams; Gregory G. Colomb; The Craft of Research, 2nd Edition; Chicago guides to writing, editing and publishing;
- 3. lain Borden and Kaaterina Ruedi; The Dissertation: An Architecture Student's Handbook; Architectural Press; 2000
- 4. Ranjith Kumar; Research Mehodology- A step by step guide for beginners; Sage Publications; 2005

#### **MAR16IE04**

#### **PSYCHOLOGY & HUMAN BEHAVIOR**

LTPC 2002

#### UNIT I HUMAN BEHAVIORAL PATTERN

7

Analysis of human mind & his or her image world. Human being and social behavioural patterns in various public & private areas.

#### UNIT II TERRITORIAL & GROUP PSYCHOLOGY

7

Human behavior in a group of two, three, and more. Activities and its relationship with grouping of people. Privacy, territoriality & defensible space.

#### UNIT III MODERNIZATION & IMPACTS ON HUMAN BEHAVIOUR

7

Modernization, change in society, change in thought process and behavioral patterns. Behavior and its co relation to design elements.

#### UNIT IV BEHAVIOUR PATTERN & SPACE PLANNING

9

Relation of behavior patterns of human being in space planning for public areas like theatre lounge, waiting rooms, hotel foyer, café and other rooms

**TOTAL: 30 PERIODS** 

- 1. An Introduction to Social Psychology, Chapter 8: Behavior Patterns: Their Nature and Development By, Luther Lee Bernard
- 2. The Psychology of the Interior, Agnieska Mlicka
- 3. Baudrillard, J. (1996). The System of Objects (Verso English Edition). United Kingdom: Bookmarque.
- 4. Mackenzie, N.E.; M.A. Wilson (2000). "Social Attributions Based on Domestic Interiors". Journal of Environmental Psychology 20: 343–354.
- 5. Rice, Charles (2007). The Emergence of the Interior. Oxon: Routledge.
- 6. Edwards, M.J.; W.G. Gjertson (September 2008). "La Maison de Verre: Negotiating a Modern Domesticity". Journal of Interior Design

#### MAR16IE05

#### INTERIOR PHOTOGRAPHY

LTPC 1002

#### UNIT -I PRINCIPLES OF PHOTOGRAPHY

7

Technical definitions, understanding a camera, anatomy of a SLR camera, technical setting in a SLR camera, different types of lenses

#### UNIT - II PRINCIPLES OF INTERIOR LIGHTING

7

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. Exercise in interior lighting photography with artificial light and black and white photos

#### UNIT - III PRINCIPLES OF COLOR

7

Color rendering in photographic medium, color rendering in photographs under different lighting condition, lighting colors and its effect on a photograph, color filters in a camera Exercise on color photography of interiors

#### UNIT - IV INTEGRATION

9

Project work/exercise in integrating all prior units

**TOTAL: 30 PERIODS** 

- 1. Point view The art of architectural photography, E.Manny A Ballan, VNR
- 2. Professional photography photography buildings, David Wilson, Rotovision
- 3. Direction & Quality of Light: Your Key to Better Portrait Photography Anywhere by Neil van Niekerk