

UNIVERSITY OF PUNE

**SYLLABUS
FOR
THIRD YEAR
B.ARCH (INTERIOR DESIGN)**

**FACULTY OF ENGINEERING
BOARD OF STUDIES IN ARCHITECTURE**

Third Year B. Arch (Interior Design)

Sub. Code	Subject	Teaching Scheme			Examination Scheme		
		Lecture periods	Studio periods	Total	Sessional Viva-Voce	Paper	Total
313481	Architectural & Interior Design-III	2	10	12	200	100	300
313482	Construction, Services & Materials-III	2	4	6	200	100	300
313424	Theory of Structures-III	2	1	3	50	100	150
313483	History of Architecture, Art, Culture & Interiors -III	2	0	2	50	100	150
313484	Estimation & Costing	2	1	3	50	100	150
313485	Environmental Studies.	1	2	3	100	-	100
313486	Furniture Design-I	2	3	5	100	-	100
313487	Computer Applications	0	2	2	50	-	50
	Total	13	23	36	800	500	1300

313481- ARCHITECTURAL & INTERIOR DESIGN- III

Lectures-2 nos./Week
Studios-10 nos./Week

Examination scheme
Paper : 100
Sessional(Internal) : 100
Sessional (External) : 100

OBJECTIVES:

Introduce students to site planning, i.e. campus design with more than one building accommodated in the same premises. Understanding of complex relationship between the form, function, structure and aesthetics in a building. Contextual Design. Management of a design project

COURSE OUTLINE:

UNIT – I:

1. Introduction to Campus design with reference to design development of campuses developed in past.
2. Integrating function, structure and services in a building. choice of structural system and resultant effect on visual form / aesthetics of building.

UNIT – II :

Introduction to design philosophy.

UNIT – III :

1. Development of building design program from clients or users requirements and other social, economic and climate context.
2. Managing a design project - Management of time, information, others and self.
3. Labouring the design process. Communicating the design.

UNIT – IV :

1. Analyzing multiple building to be accommodated within a campus and understand their relationship with each other in context to continuity of form, construction and materials and also design theme.
2. Analyzing activities around the buildings .within a campus and understand the same in context to relation of built form and open spaces, elements of landscape, pedestrian and vehicular movement, their segregation, managing sloping sites, contours, etc.

UNIT – V :

Designing of progressively complex spaces and buildings together with site planning. Complexes of low rise and medium rise nature, e.g. - Shopping Mall, Nursing homes/ Hospitals with residences, Educational campus for schools, Auditoriums for Cinema/

performing arts. Museum, Small industrial complexes, Medium scale hotels and resorts, etc.

UNIT – VI:

Study of Theme town environment - Visit to nearby town developed around a specific activity such as pilgrimage, tourism, regional market, transport hub, administrative center, etc. to study the anatomy of its work/ market districts. Study of public spaces, Study of effect of composition of the work force as different from that of a general town. Study of built form in general and the changes effected because of central activity.

SESSIONAL WORK :

1. At least two long duration and two short duration projects shall be covered in the year.. One project shall be related to Town studied.

2. Out of two long duration projects one will be a Campus design project with interior layouts, street furniture , signages etc. and the other a project for large multifunctional spaces like shopping malls, hospitals etc with focus on interior detailing .

3. Focus should also be given on the application of the knowledge the students get in different subjects like, Construction ,Services and materials as well as environmental design.

4. Working drawing of design project or its part shall be prepared as a part of sessional work. The project shall be sufficiently complex so as to include r.c.c/load bearing structure, stair, toilets etc. Since the subject of Working Drawing is clubbed with Architectural Design, maximum care shall be taken to cover the subject in depth and due weightage shall be given while assessing the sessional work.

5. Construction and services details of the project of which working drawing is prepared shall be worked out as part of sessional work. It is expected that student should understand the process of conceptualization of his design to preparation of complete set of working drawings which will include Architectural, Constructional, Services and drawings required for submission to various authorities such as Municipal Corporation etc.

(e.g. Special Facilities and services In Hotels and Hospitals

- Fumigation
- A/c for rooms, lobbies, lounges,OT
- Central gas/suction supply
- Electrification for various spaces and gadgets like CT scan, radiology MRI etc
- Waste management with incinerator etc.
- Laundry
- Hot water, Boiler, Solar
- Emergency lighting, Food management/movement/ kitchen layouts/ stores/ eating places)

6. Stress shall be given on three-dimensional studies through sketch perspectives and models prepared at various stages of design process.
7. All Architectural Design Assignments and submission shall lay emphasis on designing Earthquake Resistant Structures, which will be worked out in consultation with the Teacher of Structures and the submission work will reflect various technologies adopted.

NOTE: In order to have parity in nature and complexity of Design Projects it is suggested that teachers from all the Colleges : teaching the subject of Architectural Design shall meet at the beginning of First and Second Term and finalize broad outline of the subject topics, its extent and complexity and also the submission requirements.

RECOMMENDED READING:

1. Campus design in India.; - Kanvinde & Miller. ,
2. Campus Planning. Richard Dober.
- 3, Urban Design: The Architecture of towns and cities. ..-Paul Spreirengen.
4. Exterior design in Architecture. - Ashihara Yoshinibu.
5. Modern Language of Architecture. - Bruno Zevi.
6. Modern Movements in Architecture. - Charles Jencks. .
7. Language of Post-modern Architecture. - Charles Jencks.
8. Complexities and contradictions in Architecture. - Robert Ventun.
9. Architectural Composition.- Rob Krier.
10. Pattern Language. - Christopher Alexander.
- 11 .Town Design. - Fredrick Gibberd.
- 12 .Various monographs and periodicals.

313482- CONSTRUCTION, SERVICES AND MATERIALS-III

Teaching scheme
Lectures-2 nos./Week
Studios-4 nos./Week

Examination scheme
Paper : 100 (3 Hours)
Sessional (Internal) : 75
Sessional (External) : 75
Viva-voce : 50

OBJECTIVES:

- To expose students to more advanced and complex structural systems in R.C.C and steel having medium to large spans.
- To study more complex foundation systems suitable for soils having less bearing capacity, mass and R.C.C retaining walls , basement construction.
- To study more about doors and windows in steel, wood, aluminium and P.V.C etc.
- To study modular co-ordination and prefabricated and precise building construction.
- To study interior working details of false ceilings, paneling , cladding and simple joinery in wooden furniture.
- More about finishing materials for internal and external applications.
- To introduce students to advanced building services pertaining to mechanical ventilation, and their application to built form .
- Fire-fighting methods, rules, regulations and equipment.

COURSE OUTLINE:

Note: Portion covered in Third Year out of following topics shall be taught with special reference to Earthquake Resistant Detailing with local practices and regional responses.

- Foundations, Soil Stabilization, Retaining Walls Plinth Filling
- Flooring, Walls, Openings.
- Roofs, Parapets, Terraces, Boundary Walls.
- Underground and Overhead Tanks.
- Staircases and isolation of structures.

UNIT I :

Foundation:

- 1.0 Soil types and behaviors under different loading conditions.
- 2.0 Foundation on weak strata.
 - 2.1 Raft Foundation.
 - 2.2 Pile Foundation
- 3.0 R.C.C. stub columns and stanchion fixing details
With option of Pad and Stanchion Footings
(Sketches and notes only.)

UNIT II :

Super Structure:

- 1.0 Study of R.C.C. structure with specific studies of stairs, balconies and canopies.
Application of same in Steel Structure (Sheet 1 no.)
- 2.0 Steel structure using built-up sections, medium span roof trusses, lattice construction, castellated beams, cladding details, rain water disposal, etc.
Introduction to Various standard Sections and Steel Tables, Types of Girders, Composite Sections, Connections .(Sheet 1 no.)
- 3.0 Retaining walls and its terminology, mass retaining wall-in bricks, stones, etc. and cantilever retaining wall in R.C.C (Case Study with Sketches and notes only).
- 4.0 Reinforced brickwork including reinforced brick walls, piers of different thickness, reinforced brick lintols, reinforced brick slabs. (Sketches and notes)
- 5.0 Decorative Brick work for Jalis, Screen, Masonry and Bonds for Elevations etc.
(Sketches, notes and case study etc.)

UNIT III :

Roofs & Floors:

- 1.0 Introduction to long span construction in steel & concrete, intermediate floors, lofts (Sketches, notes, models etc).
- 2.0 Modular co-ordination. Theory and Concepts.
Pre- cast building components and systems developed by C.B.R.I and other renowned National and International research organizations. (sketches and notes only)

UNIT IV :

Doors & Windows:

- 1.0 Sliding & sliding-folding doors in wood/ steel, and bay windows in wood
- 2.0 Aluminium Doors, Aluminium Windows, PVC Doors, PVC Window
Study of Various Sections (Extruded), methods of fixing (sketches and notes only).

UNIT V :

Furniture & Interior Construction:

1.0 Simple joinery in wood (Total Joinery) Wood to Wood, Wood to Metal, Metal to Metal.(Sketch and Notes only)

2.0 Paneling .

3.0 Space dividers using wood, aluminium and steels skeleton and various finishing materials such as Veneers, Fiber Boards, Gypsum Board.Metal Sheets, Plastic extruded section etc. Single skin & double skin .(Proprietary system for Partitioning and paneling and Curtain Walling) (One Drwg. only)

4.0 Suspended ceiling in teak wood with A.C. sheets, Gypsum Boards, Fiber Boards, etc. as finishing material. Proprietary system for suspended ceiling. (One Drwg only)

5.0 Simple Furniture units in wood or wood derived boards. Simple residential furniture like Divan, Bed, Dining Table, Storage Cabinet, Kitchen Cabinet, etc. Shall be studied. (Any 4 items) (Modular and knock down Kits in the form of presentation)

UNIT VI :

Special Construction:

Basement Construction, Water Proofing details, etc .(Single Basement shall be considered.) Terrace Water Proofing , Toilet Water Proofing (Sketches, notes etc.)

UNIT VII :

Misc. Constructions;

1.0 Setting out of structures.

2.0 Escalator & Elevators general construction and provisions in buildings. (One Drwg)

UNIT VIII :

Materials:

(Sketches, notes, market surveys , collecting material samples, brochures, visits to sites, manufacturers etc.)

1.0 Light weight Concrete

2.0 Guniting

3.0 Water Proofing, cement based and chemical based, bituminous and other proprietary systems.

4.0 Glass & Glass products applicable in building industry.

5.0 Metal alloys and stainless steel & their application in building industry.

6.0 Polishing of wood.

7.0 Painting , External & Internal surfaces of bricks, stones, concrete, plaster, etc. and painting of wood & steel,

8.0 Specialized internal & external rendering with stone cladding, aluminium cladding etc.

UNIT IX: Services

Detailed Study of:

1. Mechanical ventilation (active)

- a) Forced ventilation - Types of fans used, simple calculations to decide no. of fans required.
- b) Air conditioning (heating and cooling.)
 - Air distribution.
 - Air conditioning equipment.
 - Costing data and space requirements.

2. Fire fighting

- Cause and spread of fire, combustibility of building , materials, structural elements and their fire resistance.
- Passive control-fire protection in a building, safety codes, rules and regulations prescribed for buildings.
- Active control - fire fighting using fixed and portable fire fighting equipment.

Marking of sessional work:

a) Mechanical Ventilation.

Journal- sketches and notes ,Detail study- drawings, calculations - 15 marks.

b) Fire Fighting.

Journal - sketches and notes, Detail study, drawings, and calculations. 10 marks.

Total- 25 marks.

RECOMMENDED READING:

To understand basic fundamental principles in construction following books are recommended.

- 1) Elements of Structures by MORGAN.
- 2) Structures in Architecture by SALVADORI
- 3) Study standard building construction
- 4) Building Construction by MACKAY WB. Vol. I to 4
- 5) Construction of Building by BARRY Vol. 1 to 5
- 6) Construction Technology by CHUDLEY R. Vol. 1 to 6
- 7). Building Construction illustrated by CHING FRANCIS D.K.
- 8). Elementary Building Construction by MITCHELL.
- 9). Structure and Fabric by EVERET

To study building materials.

- 1) Engineering Materials by Chaudhary
- 2) Building Construction -Materials by M.V. NAIK.
- 3) Civil Engineers Hand Book by KHANNA.
- 4) Vastu Rachana by SHRI.Y.S.SANE
- 5) National Building Code and I.S.I. Specifications.
- 6) Materials and Finishes by EVERET.
- 7) A o Z Building Materials Architecture by HORNBOSTLE.

To study building services

- 1) ABC of air conditioning • Ernest Tricomi.
- 2) Heating and air conditioning of buildings.
- 3) Environmental science - Smith, Philips and Sweeney
- 4) Environmental Acoustics - Doelle Leslie
- 5) Acoustical designing in architecture- Knudsen and Harris.
- 6) Acoustics in building design - K.A. Siraskar.
- 7) Architectural Acoustics - F.R. Watson.
- 8) National Building Code

313424 - THEORY OF STRUCTURES- III

Lectures-2 nos./Week
Studios-1 nos./Week

Examination scheme
Paper : 100
Sessional (Internal) : 50

Note: while teaching the subject of Theory of Structures Limit State Method shall be adopted instead of Working Stress Method.(Also for first year and second Year)

Course Outline:

UNIT I :

1. Soil Mechanics; Introduction to soil Mechanics , trial pits bearing capacities of common soils, various limits, Foundation problems at site, Bulb of pressure etc.
2. Retaining Walls.
 - i) Active & passive pressures of soil. Rankin's theory of Earth pressure.
 - ii) Masonry retaining walls.
 - iii) R.C.C. cantilever retaining wall
 - iv) Counterfort type retaining wall - concept and general detailing of counterforts

UNIT II :

1. COLUMNS:
 - R.C.C. columns with Eccentric loading - introduction only. No calculations.
 - Steel Columns
2. Staircases: Types, loading and design. Detailed design of simply supported staircases.

UNIT III :

1. Introduction to:
 - Trapezoidal footing
 - Raft footing
 - Pile foundation
 - Pile cap
2. R.C.C. Foundations: detailed design of isolated footing.

UNIT IV :

1. Combined footing - Detailed design of rectangular combined footing
2. Introduction to following

- a. Masonry and R.C.C. underground water storage tanks,
- b. Elevated water towers.
- c. R.C.C. and steel portal frame
- d. Steel columns
- e. Steel plate girders and Crane girder
- f. Steel castellated girder

(Introduction not to include calculation of any of the elements but the selection criteria, placement of main reinforcement, fabrication procedure etc.)

UNIT V :

1. Pre-stressed concrete

- Definition, difference between R.C.C, and pre stressed concrete advantages and disadvantages, types and methods of pre stressing, simple problem on calculation of resultant stresses of external forces etc,

2. Ultimate load theory:

- Definition and explanation why this theory was developed, difference between working stress block, calculation of balanced rectangular simply reinforced section, area of steel required for this Mud to develop working load factor (simple problems on beams only)

3. Working Stress Method : Introduction to concept only and I.S. requirements

4. Design of purlins

UNIT VI :

1. Compound Stanchions:

- Simple problems
- Lacing: Finding spacing and size of lacing
- » Battens: Finding spacing and size of battens
- No detail design

Design and detailing of a factory building including detailed design and drawings of purlins, trusses and N girders.

(Drawing on A2 size sheets)

2. Earthquake Resistant Structural Detailing:

Seismic Design and detailing of R.C and Steel Buildings:

- IS:1893-2002. IS :13920-1993, IS:156-2000, IS:800-

Recommended readings :

1. Structure in Architecture Salvadori and Heller
2. Design of steel structures- Vazirani and Rathv
- 3 Elements of Structures – Moroon

313484 – ESTIMATION AND COSTING

Lectures-2 nos./Week
Studios-1 nos./Week

Examination scheme
Paper : 100
Sessional (Internal) : 50

Examination Scheme:

Paper: 100 Marks

(Quantity Surveying-60 Marks + Specification Writing =40Marks)

Sessional Internal: 50 Marks. (QS-30Marks +S.W. 20: Marks.)

Sessional External –Nil

OBJECTIVES:

- To train students in computing quantities of various building items for simple load bearing structures and acquaint them with various types of estimates including mode of measurements as adopted by IS 1200.
- To train students in computing quantities of various building items of r.c.c. framed structures, steel structures, furniture items ,building services such as water supply, sanitation and drainage, electrical installations and acquainting them with rates of various building items.
- To acquaint students with methodology of writing specifications with reference to building trades, materials, workmanship and performance of different items of work and introducing the students to specifications as an integral part of contract document for building projects.

COURSE OUTLINE

QUANTITY SURVEYING:

UNIT – I :

1. Introduction to the definition, aim and scope of "Quantity Computation"
2. Study of different types of estimates.
3. Study of mode of measurements as stipulated in IS 1200.
4. Methods of computing quantities for load bearing type of structure and preparing abstract and bills of quantities including units of measurements.

UNIT – II :

Computing quantities of various building items for R.C.C. framed Structure and building services such as plumbing and drainage, electrification etc. Preparing bills of quantities for estimation and tendering purposes.

UNIT – III :

1. Study of composition of rates of various building items and furniture items, percentage distribution in the rates of materials, labour, tools and plant, contractor's profits and overheads etc.
2. Analysis of rates of main items of building work and furniture work with reference to prevalent market rates of materials and labour wages.
3. Preparation of indent of various building materials for r.c.c. framed structure.
4. Measurements of completed items for payment to contractor's interim and final certificate.

UNIT – IV:

Introduction to use of computer for computation of quantities of various building items .

SESSIONAL ASSIGNMENTS

- Hand written Computation and Bills of Quantities shall be prepared of following

Load bearing structure of total plinth area between 15 to 25 sq.mts.

R.C.C. framed structure comprising of Ground and First Floor having total built-up area between 100 to 150 sq.mts, including staircase and toilet block.

- Computing quantities of single storied steel framed factory building or workshop having total built-up area between 100 to 150 sq.mts including m.s. trusses, purlins and sheet roofing.
- Working out rate analysis of routine civil items and furniture items.

SPECIFICATION WRITING:

UNIT – V :

1. Specifications as part of contract document, definition, need and importance, its relationship with working drawings, bill of quantities and schedule of rates.
2. Types of specifications, open, closed, restricted, prescriptive, performance based, or combination of above types. Use of manufacturers guide etc

UNIT – VI:

1. Specification writing method to include master list, sectional formats, page formats, general material items, tests, performance, mode of measurements etc.
2. Methodology of writing detailed specifications including methods and forms of writing descriptive notes on materials and workmanship based on working drawings.

UNIT – VII:

1. Collection of catalogues and technical information on various materials, products and specialized items.
2. Preparation of checklist for writing detailed specifications.
3. Study of different building trades, their scope and contents.

UNIT – VIII:

1. Introduction to writing specifications for building services and checklist for services such as Water Supply, Drainage, Electrical and HVAC installations.

SESSIONAL ASSIGNMENTS :

1. A journal shall be prepared which will cover notes on the portion mentioned above.
2. Specification writing shall be studied in conjunction with working drawings and the first assignment of Load bearing structure of 15 to 25 sq.mts plinth area will be covered by preparing specifications for common building materials and trades.
3. Technical literature on various specialized items and manufacturer's catalogues shall be collected,

Recommended Reading :

1. Indian Standard Specifications.
2. C.P.W.D. Specifications and schedule of rate analysis.
3. Specification Writing for Architects and Engineers. By Donald A.Watson.
4. Specification Writing for Architects and Surveyors by Arthur J Wilils.
5. Professional Practice by R.H.Namavati.
6. Estimating and Costing by Rangawala and B.N.Sutta.
7. Civil Engineering Contracts and Estimates by B.S.PatII.
8. I .S.I.Handbook of measurements of building Works

313485 – ENVIRONMENTAL STUDIES

Lectures-1nos./Week
Studios-2 nos./Week

Examination scheme
Paper : NIL
Sessional : 100

PREAMBLE:

The scope of landscape architecture ranges from micro level landscapes to complex site planning issues, to macro level issues such as regional landscape planning and ecological conservation. However the scope of the subject at the architectural curriculum would be restricted to micro level and site planning level and to landscape issues closely related to architectural design, thereby extending the scope of design at schools of architecture beyond the building envelope to outdoor spaces and site ecology.

OBJECTIVES:

- a. Evolving understanding of the site and its context while designing siting of buildings.
- b. Creation and design of open space structure on the site, and further achieving aesthetical, functional and environmental goals.
- c. To know and use landscape elements both to create and enhance exterior spaces and to achieve passive climatic control at the building site level.
To introduce the concepts of environment friendly architecture conservation of natural resources and energy and incorporate them in the site and building design.
- d. Introduction to Interior and landscape elements, eco-materials etc.

THE COURSE OUTLINE:

UNIT I :

- 1.0 Introduction to Landscape Architecture.
- 1.1 Scope of landscape architecture.
- 1.2 Role of a landscape architect.
- 1.3 Comparing landscape design with architecture

UNIT II :

1. Introduction to the landscape elements (landform, water, vegetation, architectural elements). Understanding the visual (color, form, texture) / non-visual (smell, touch, sound) attributes of these elements and their usage and application in design.
2. Integration of indoor and Outdoor spaces.
3. History of Landscape Architecture: To study of various principles and philosophies of landscape design through out the world from ancient to contemporary times.

UNIT III :

1. Plant selection criteria in landscape based upon visual, functional, micro-climatic and ecological aspects. Also understanding effect of time on planting design.
2. Site analysis and Site planning.
3. Introduction to landscape services such as outdoors lighting, surface water drainage, irrigation.
4. Landscape constructional details of the following- pavings, curbs, steps, roof garden, retaining walls.

UNIT IV :

Execution of landscape proposal,

UNIT V :

1. Introduction to Environment and its components with reference to concepts of environmental assessment of materials used in interiors and landscape.
2. Application of landscape design to conserve the environment.
3. Microclimatic control using landscape elements.

UNIT VI :

Introduction to the concepts of design for energy conservation including daylighting and climate response , non-conventional energy sources, conservation of natural resources (land, water, vegetation), alternative building materials, water harvesting (roof water harvesting, recharging ground water, etc.), solid waste management (vermiculture pits, compost pits, degradable, non degradable waste).

SESSIONAL WORK:

Part A) Studio exercises: (weightage 65% of total marks) this would be submitted in the form of drawings for the final assessment.

A.I : One site and campus planning project of a magnitude similar to third year architectural design, involving complex issues such as contour analysis, multiple functions etc. To cover following aspects:

1. Site analysis , zoning and site planning .
2. Building program analysis
3. Preparation of landscape masterplan showing hard and soft areas , levels , landform modifications etc.
4. Site sections
5. Planting structure and concept.

A.II : Detail landscape design projects min. of 2 in which students should evolve a rationale behind the treatment of open spaces based upon functional aspects , micro climatic analysis , including building shadow analysis , visual and spatial character desired etc. and then develop a design for which they should give details of various civil work items like paving , walls , planters , lighting , planting etc.

Part B) Various theory topics included in the above should be presented by students in the form of notes , sketches, case studies, seminars , reports etc. based on individual research and submitted as a hard copy.

Weightage of marks – 35%

RECOMMENDED READINGS :

1. Geoffrey and Susan Jellicoe – “The landscape of Man”, Thames and Hudson
2. John . L. Motloch “ Introduction to Landscape Architecture “, Van Nostrand Reinhold , New York.
3. Geoffrey and Susan Jellicoe , Patrick Goode , Michael Lancaster , “The Oxford companion to Gardens.”
4. Garrett Eckbo “ The Urban Landscape design “
5. Simonds , “ Landscape Architecture” .
6. Ian Mcharg , “ Design with nature “ , John Wiley Pub.
7. Botkin and Keller , “ Environmental Sciences : Earth as a living planet “.
8. M.S.Randhawa , “ Flowering trees “ , National Book Trust , New Delhi .
9. Gopalswamieingar , “ Complete Gardening in India “.
10. Pratibha Trivedi , “ Beautiful shrubs “ .
11. P.S. Ramakrishnan , “ Ecology and sustainable development “, National Book Trust of India , 2001.
12. Sutherland Lyall , “ Designing the New Landscape “.

313486 – FURNITURE DESIGN - I

Lectures-2 nos./Week
Studios-3 nos./Week

Examination scheme
Paper : NIL
Sessional (Internal) : 100

OBJECTIVE

To help students to understand way of analyzing furniture forms and designing furniture forms scientifically based on Ergonomics, materials design and working parameters . .

COURSE OUTLINE

- **UNIT I :**

Introduction to anthropometry and ergonomics with reference to functionality.

- **UNIT II :**

Design process for furniture design with reference to architectural space, form, context , climate , construction and materials.

- **UNIT III :**

Analysis of existing piece of furniture in its functional aspects , technical aspects and aesthetic aspects

- **UNIT IV:**

Introduction to Skills required, materials properties, Bio-mechanical factors and ergonomical considerations and aesthetic considerations. and packing, transportation& economical factors considerations.

- **UNIT V :**

Introduction to various systems and approaches to design – use of grid, modules etc.

- **UNIT VI :**

Understanding of considerations like packing, mass production, transportation and economic factors and their influence on design.

SESSIONAL WORK:

Sufficient no. of projects to cover the topics including

- Analysis of furniture pieces like chairs, tables etc. along with a measure drawing including plan elevations, sections and details of the same.
- Designing a simple object having some moving components ,e.g. a folding stool , chairs and tables etc.
Making detailed measure drawings and full size prototype of the same.

313483 – HISTORY OF ARCHITECTURE , ART, CULTURE & INTERIORS -III

Lectures-2 nos./Week
Studios-0 nos./Week

Examination scheme
Paper : 100
Sessional : 50

OBJECTIVES:

The essence of learning history of Interior Design should be to appreciate and understand, Interior Design & furniture as a process rather than simply as product. Interior Design& furniture is to be seen as reflection of cultures and environment of various societies, economic systems, values and aesthetical perceptions and last but not the least scientific and technological advances of the society.

It is also essential to understand concurrent happenings in various parts of the world at a given time thereby appreciating inter cultural exchange and comparative study of growth of various civilizations.

To teach the students to respect interior Design from value point of view than function alone.

Along with interior Design, students should study and understand different aspects of a civilization such as environment, social history, philosophy, art, landscape design, and town planning, and also their influences on one another.

COURSE OUTLINE:

The third year course shall focus upon the time span from 17th century onwards till today
The geographical locations under study shall be referring to the following salient events/important milestones:

UNIT A :The Indian sub- continent

The study of Indian history pertaining to the regional influences ,environment, sociopolitical history, philosophy, art, landscape design & colonial Architecture , Modern Architecture with milestone buildings and interior design elements like Paintings, regional arts & Sculptures , stambhas , relief & inlay works, Patterns etc.

- 1.Regional influences and approaches for architecture and interiors(Any one of North or South Indian regions to be covered along with Maratha/Peshwa)
- 2.Colonial (Architecture and interiors)
- 3.Pre Independence architectural developments and study of interiors.
- 4.Ideologies of Gandhi and Nehru with influence on development.
- 5.Post independence and new concepts.

UNIT B :Europe and America

1. Rococo style
2. Neo classical
3. Revivalism
4. Industrial Revolution
5. 19TH century development in Europe and America
6. 20 th century pre war,contemporary,art Nouveau,Art deco,Pierie style.
7. Expressionism
8. Werkbund, De stijil, constructivism, Bauhaus, post war contemporary movements,International style,post modern and deconstruction.
9. Major town planning trends upto 20 th century

UNIT C: History of the 20TH Century Interior Design And Furniture.

Furniture Development in Germany & the Bauhaus, Furniture Development in the Netherlands, France, England , Italy, Scandinavia & USA. Designs by eminent designers like Van der Rohe, Le Corbusier etc.

UNIT D :West Asia

1. Turkish empire breaks
2. Post war..Israel

UNIT E :East Asia

1. Opium war in China
2. Colonization of Japan
3. Post war.Japan
4. Emergence of South East Asian countries in the global context.

UNIT F :Africa

1. Colonial and contemporary architecture
2. Architecture of Hasan Fathy.

SESSIONAL WORK

Sufficient number of projects to cover the topics mentioned above should be worked. Stress should be given on self-study, research through library and field visits. Journal, sketches/drawings together with reports shall form sessional work.

RECOMMENDED READINGS.

1. H G Wells 'A short History of the world'
2. Arnold Toynbee, 'A study of history'
3. The Encyclopedia of Furniture –Grange Books
4. Classical Victorian Furniture.
5. Pt. Jawaharlal Nehru, 'Glimpses of World History'
6. Interior Design – Ahmed Kasu

313487- COMPUTER APPLICATIONS-III

Teaching scheme
Lectures-0 nos./Week
Studios -2 nos./Week

Examination scheme
Paper : Nil
Sessional (Internal) : 50
Sessional (External) : Nil
Viva-voce : Nil

OBJECTIVES:

To acquaint the students in operation of various softwares and office automation tools used in general administrative work of any professional office.

PART A

UNIT I

1. All the commands in latest version of any popular CAD package in 3-D and their application to make presentation drawings.
2. Learning different popular presentation softwares and their application to make presentation drawings.

PART B

UNIT II

Preparation of text or documents by using word processor softwares

UNIT III

1. Analysis of collected data in the form of spreadsheets and its presentation through graphs, piecharts etc.
2. Preparing advanced presentations by making slideshow using presentation softwares.

UNIT IV

Creating and using database in computers using database management softwares.

UNIT V

Introduction to concepts of LAN, WAN, Internet and Intranet and the applications like internet Browser, mail client etc.

UNIT VI

Introduction to Project management softwares.

SESSIONAL WORK:

1. Journal (A-4) incorporating all the relevant theories of softwares, as mentioned in course outline.
2. Presentation drawings of one of the Design Projects using presentation softwares including 3-D views.

3. Tutorials based upon all the topics mentioned in Part B.

RECOMMENDED READINGS:

1. Manuals of CAD software
2. Hunt and Shelly - "Computer and Common Sense"
3. Textbook recommended for MS-CIT examination of Govt. of Maharashtra (published by MKCL) - "Computer Essentials."