

SYLLABUS

For

M.Sc (Interior Design)



YEAR-I
(SEMESTER-I)

Residential Interior Space Design

Unit 1

- Introduction of Design
- Elements of Design
- Principles of Design
- Introduction of Interior Design
- Standard Dimensions of Living Room Furniture

Unit-II

- Dining Area Furniture
- Bedroom Furniture
- Kitchen Furniture
- Bathroom / Toilet (Sanitary Wares)
- Measurement Plan

Unit-III

- Bubble Diagram and Furniture Layout
- Interior Elevations of Walls
- Planning of Living Room
- Planning of Dining Area
- Planning of Bedroom
- Planning of Kitchen

Unit-IV

- Planning of Bathroom
- Planning of the Circulation Space
- Flooring Layout
- False Ceiling
- Electrical Layout
- Room Orientation

Building Materials - I

Unit-I

Brick:

- Qualities of good brick,
- Field test,
- Terminology,
- Precautions to be taken in brick laying & size.

Stone:

- Classification,
- Qualities of good stone
- Laying
- Dressing
- Different textures and applications.

Unit-II

Sand:

- Types and application

Timber:

- Types,
- Cross sections of exogenous tree
- Defects in timber,
- Seasoning,
- Application in interior,
- Application of artificial timber e.g. veneers plywood.

Unit-III

Cement:

- Types,
- Field test for cement
- Application of cement

Mortar:

- Types
- Application

Clay Products:

- Types
- Application

Lime:

- Types

- Application

Unit-IV

Stone Ware and Porcelain:

- Application in Interior Design

Concrete:

- Types
- Application
- Precautions to be taken in handling and transportation.

Glass:

- Types
- Applications of glass in various interiors.

Paints:

- Varnishes: Types and applications in various interiors.

Hard ware:

- Types and application



MSCID103

Commercial Interior Space Design

Unit-I

- Introduction to design
- Standard dimensions of office furniture
- Waiting area furniture
- Office table computer work furniture

Unit-II

- Staff cabin furniture
- Office files storage and cabinets
- Common areas

Unit-III

- Main cabins
- Conference room
- Pantry area
- Canteen

Unit-IV

- WCs
- Store room
- Planning of the circulation space
- Planning of office



Residential Interior Space Design- Project -I

Unit 1

- Design brief
- Picture board - 3
- Principles of Design – 3 sheets
- Measurement Plan-1

Unit-II

- Civil Changes layout -1
- Bubble diagram – (5 sheets)
- Concept of Design (write-up)
- Furniture layout

Unit-III

- Elevation – (12 Sheets)
- Flooring layout
- Reflected False ceiling layout
- Electrical layout
- Plumbing layout

Unit-IV

- A/C layout
- Perspective – (10 Sheets)
- Perspective of external facade
- Material Chart
- Estimate
- Model



Commercial Interior Space Design- Project - II

Unit I

- Design brief
- Picture board - 3
- Principles of Design – 3 sheets
- Measurement Plan-1

Unit-II

- Civil Changes layout -1
- Bubble diagram – (5 sheets)
- Concept of Design (write-up)

Unit-III

- Furniture layout
- Elevation – (12 Sheets)
- Flooring layout
- Reflected False ceiling layout

Unit-III

- Electrical layout
- Perspective – (10 Sheets)
- Material Chart
- Estimate



The logo of RKDF University is a shield-shaped emblem. The top section is red with three white flame-like symbols. The middle section is blue with the text 'RKDF UNIVERSITY' in white. Below this is a red section containing a white book, a white lamp, and a white globe. The bottom section is red with the text 'Education Glorifies Nation' in white, and 'GENS' below it. The word 'RANCHI' is written in blue at the bottom of the shield.

YEAR-I
(SEMESTER-II)

Drawings and Graphics

Unit-I

Draftsmanship

1. Introduction to Draftsmanship
2. Need for training, duties determining needs and wishes of the client
3. Relationship between two-dimensional and three dimensional diagrams

Unit 2

Drafting Tools and techniques

1. Introduction of drawing table and boards, How to handle – handling paper and pencil.
2. Types of scales, Tools for curves and irregular forms – Drawing aids.
3. Drafting mediums – Tracing papers, tracing cloth, water colour paper, sketch paper, vellum and polyester film.

Unit 3:

Basics of Drawing

1. Measurements
2. Lines – Types of lines and lines thickness
3. Lettering – Single stroke letter, Gothic letters.
4. Dimensioning – Types of dimensioning, different types of dimensioning lines
5. Drawing and drawing methods
6. Geometrical figures

Unit-IV

Architectural Symbols

1. Structural symbols, window and door symbols.
 2. Plumbing symbols and electrical symbols.
- #### **Architectural Drawing**
1. Orthographic and isometric Projection
 2. Perspective Projection – one point and two point Free Hand
 3. Sciography – Shades and Shadow of objects, Presentation Techniques
 4. Rendering and Coloring
 5. Presentation Drawing, Perspective Projection

Building Services - I

Unit-I

- Fire Protection System
- Acoustics

Unit-II

- Lighting
- Sanitary Fixtures and Fittings

Unit-III

- Air conditioning
- Building Drainage System

Unit-IV

- Termite proofing, waterproofing



Professional Practice - I

Unit-I

- Estimates

Unit-II

- Office letter writing Unit

Unit-III

- Role of Designer

Unit-IV

- Role of Indian Institute of Interior Designers



Drawing and Graphics – Practical -I

Unit-I

Draftsmanship

1. Introduction to Draftsmanship
2. Need for training, duties determining needs and wishes of the client
3. Relationship between two-dimensional and three dimensional diagrams

Unit 2

Drafting Tools and techniques

1. Introduction of drawing table and boards, How to handle – handling paper and pencil
2. Types of scales, Tools for curves and irregular forms – Drawing aids.
3. Drafting mediums – Tracing papers, tracing cloth, water colour paper, sketch paper, vellum and polyester film.

Unit 3

Basics of Drawing

1. Measurements
2. Lines – Types of lines and lines thickness
3. Lettering – Single stroke letter, Gothic letters.
4. Dimensioning – Types of dimensioning, different types of dimensioning lines
5. Drawing and drawing methods
6. Geometrical figures

Unit 4

Architectural Symbols

1. Structural symbols, window and door symbols.
2. Plumbing symbols and electrical symbols

Architectural Drawing

1. Orthographic and isometric Projection
2. Perspective Projection – one point and two point Free Hand
3. Sciography – Shades and Shadow of objects, Presentation Techniques
4. Rendering and Coloring
5. Presentation Drawing, Perspective Projection

Building Materials - Practical - II

Unit-I

Brick:

- Qualities of good brick,
- Field test,
- Terminology,
- Precautions to be taken in brick laying & size. Unit No. 2: **Stone:**
- Classification,
- Qualities of good stone
- Laying
- Dressing
- Different textures and applications. Unit No. 3: **Sand:**
- Types and application

Unit-II

Timber:

- Types,
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- Seasoning,
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Cement:

- Types,
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Unit-III

• **Mortar:**

- Types
- Application

Clay Products:

- Types
- Application

Lime:

- Types
- Application

Stone Ware and Porcelain:

- Application in Interior Design

Unit-IV

Concrete:

- Types
- Application
- Precautions to be taken in handling and transportation.

Glass:

- Types
- Applications of glass in various interiors. **Paints:**
- Varnishes: Types and applications in various interiors. **Hard ware:**
- Types and application



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YEAR-II
(SEMESTER-III)

MSCID301

Design with Thesis

Objectives: Implement the theoretical and practical knowledge gained through the curriculum into an application suitable for a real practical working environment preferably in an industrial environment.

Get exposure on industrial environment and its work ethics. Acquire the practical knowledge regarding the working procedure.

To get acquainted with the basic interior design concepts related to the Interior Business.

Learn and understand the gap between the technological knowledge acquired through curriculum and the actual industrial need and to compensate it by acquiring additional knowledge as required.

Procedure:

Students have to select any one topic of their own interest under the guidance of the department faculty in their area of specialization, emphasizing the principles studied in the theory and practical subjects.

Each student shall finally produce a comprehensive report covering the Project Work details such as Architectural Design, Working Drawing, Model and Approximate estimate of the Project and Conclusion.

The Project shall be Planning and designing of any one of the following: 1. Residential Building, 2. College Building, 3. Hostel Building, 4. Hotel Building, 5. Nursing Home, 6. School Building, 7. Guest House, 8. Bank Building, 9. Shopping Complex, 10. Community Hall, 11. Theatre 12. Apartment 13. Staff Quarters 14. Restaurant (The building selected should have a minimum of TWO floors.)

The report/ thesis should consist of:

Unit-I

- Objective of the report
- Acknowledgements

Unit-II

- Introduction of the report
- Detailed description of the traditional aspects

Unit-III

- Illustrations of the garments designed
- Specification sheet of the final garment
- Sketch/ Picture of the final garment

Unit-IV

- Summary of the report
- Bibliography

MSCID302
Theory of Architecture

Unit 1
Introduction to Architecture

Unit 2
Ancient and Classical Architecture

Unit-3
Indian Architecture

Unit-4
Architectural Masterpieces of Asia & Europe



MSCID303

Professional Practice-II

Unit 1
Architect and his Services

Unit 2
Rules and Regulations of the Profession

Unit 3
Tender

Unit 4
Contract



Working Drawing

Unit 1

- Acoustic Door
- Window Seating

Unit-II

- Unit No. 6: Bar Counter Suspended ceiling (illuminated)
- Partly Glazed Partition T.W.
- Partition – Aluminum

Unit-III

- Telephone Booth
- Screen for Stage (Wings)

Unit-IV

- Display Board
- Spiral Staircase



Working Drawing- (Practical –I)

Unit 1

- Acoustic Door
- Window Seating

Unit-II

- Suspended ceiling (illuminated)
- Partly Glazed Partition T.W.
- Partition – Aluminum

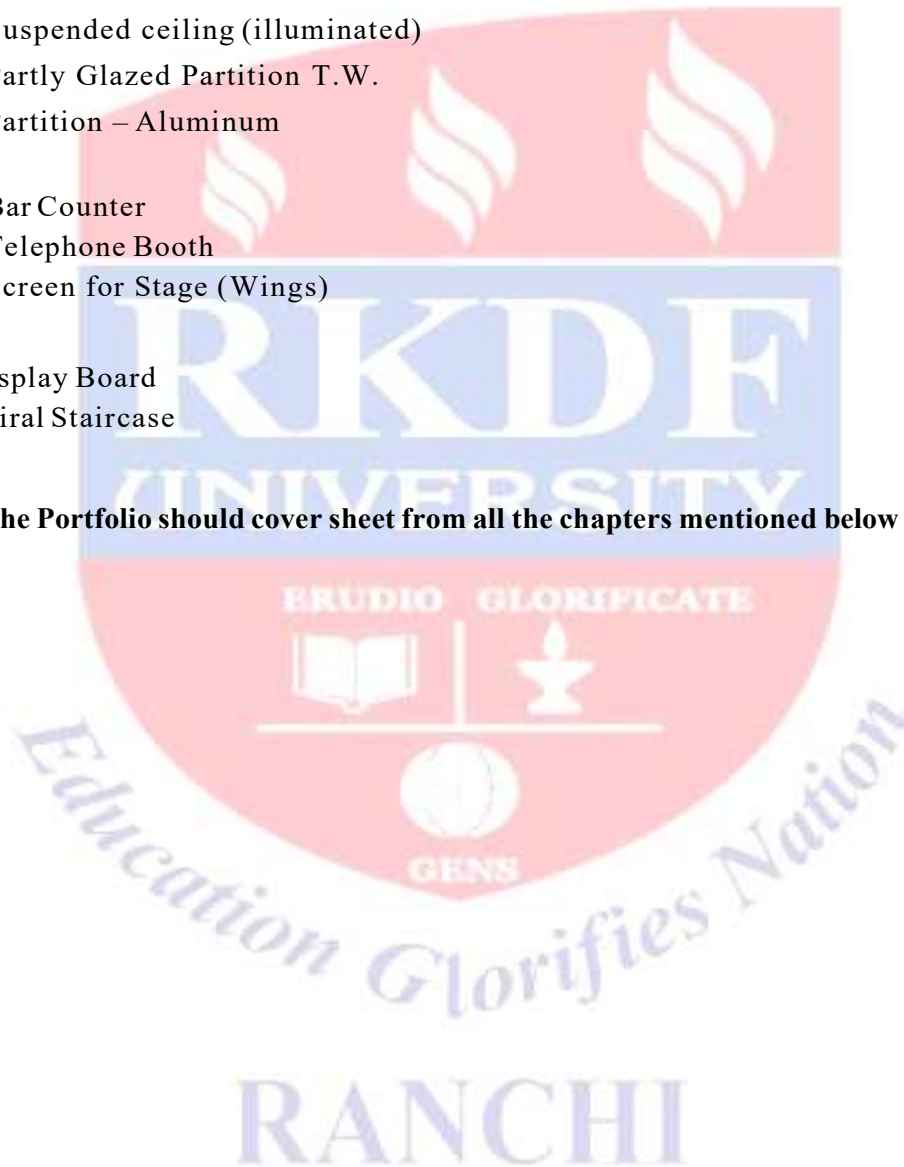
Unit-III

- Bar Counter
- Telephone Booth
- Screen for Stage (Wings)

Unit-IV

- Display Board
- Spiral Staircase

Note: The Portfolio should cover sheet from all the chapters mentioned below



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**YEAR-II
(SEMESTER-IV)**

MSCID401

Building Services - II

Unit 1

Introduction to mechanical ventilation in buildings Air-conditioning; Types of Air- conditioning; Systems in air-conditioning; Exhaust system, combines system movements

Unit 2

Fire hazards in buildings - i) Cause and spread of fire ii) Firefighting equipment and different methods of fighting fire; Code of safety prescribed by I.S.I.

Unit 3

Principles of heat and sound propagation; Methods of achieving good acoustic condition in auditoriums, classrooms, etc. Construction details for acoustic treatment of rooms

Unit 4

Introduction to different type of artificial lighting systems, light sources and luminaries, Application of lighting system, Design for lighting in - Shops and show windows, Offices, Classroom and lecture halls, Stage, Auditorium, etc.



MSCID402

<https://rkdfuniversity.org/>

Building Materials - II

Unit 1

Concrete: Types, application, precautions to be taken in handling and transportation.

furnishing and cladding materials

Glass: Types, applications of glass to various interiors.

Unit-II

Paints, varnishes, Types, and applications in various interiors.

Distempers Types, applications in various interiors.

Iron: Pig iron, Wrought iron, Cast iron , applications Unit

Unit-III

Non-Ferrous Metals

Steel and its uses

Unit-IV

Plastics: Classification, application etc.

Hard ware: Types and application

Furnishing Materials



CAD

Unit. 1

- Introduction
- An Overview of CAD
- Advantages of Auto CAD

Unit-II

- AutoCAD system requirements
- Accessing Commands

Unit-III

- Editing Command or Text Window text
- Correcting Mistakes

Unit-IV

- Refreshing the screen display
- Opening a Drawing and Saving an Existing File



Environmental Studies

Unit 1

Landscape Architecture

- Introduction to Landscape Architecture
- Scope of landscape architecture
- Role of a landscape architect
- Comparing landscape design with architecture

Unit 2

Landscape Elements

- 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
- Integration of indoor and outdoor spaces
- History of Landscape Architecture: To study of various principles and philosophies of landscape design throughout the world from ancient to contemporary times

Unit 3

Landscape Services

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

Unit 4

Environments and Landscape

Introduction to environment and its components with reference to concepts of :

- Environmental assessment of materials used in interiors and landscape
- Application of landscape design to conserve the environment.
- Microclimatic control using landscape elements

Energy Conservation

- Introduction to the concepts of design for energy conservation including day lighting and

climateresponse

- 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).



CAD – Practical – II

Unit-I

- Introduction
- An Overview of CAD
- Advantages of Auto CAD

Unit-II

- AutoCAD system requirements
- Accessing Commands

Unit-III

- Editing Command or Text Window text
- Correcting Mistakes

Unit-IV

- Refreshing the screen display
- Opening a Drawing and Saving an Existing File

Note: Any one design portfolio should be prepared in CAD

