

GUJARAT TECHNOLOGICAL UNIVERSITY

DIPLOMA IN ARCHITECTURAL ASSISTANTSHIP

TEACHING SCHEME (w. e. f. 10th Jan,' 11)

SEMESTER- VI

SR. NO.	SUB. CODE	SUBJECT	TEACHING SCHEME (HOURS)			CREDITS
			THEORY	TUTORIAL	PRACTICAL	
1	365001	ARCHITECTURAL DESIGN-V	0	0	14	14
2	365002	ADVANCED INTERIOR DETAILING –II	0	0	8	8
3	365003	LANDSCAPE DESIGN	0	0	4	4
4	365004	ESTIMATING & COSTING	2	0	4	6
5	365005	ARCHITECTURAL PRACTICE & MANAGEMENT	3	0	0	3
		TOTAL	5	0	30	35

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DIPLOMA IN ARCHITECTURAL ASSISTANTSHIP

Semester: VI

Subject Code : 365001

Subject Name: **Architectural Design –V**

Sr. No.	Subject content	Hrs.
1.	1.0 Data Collection – Case study for “ Housing Project “ 1.1 Existing housing projects 1.2 Various types of group housing 1.3 General Development Control Regulations (Building By Laws)	28
2.	2.0 Development of concept	14
3.	3.0 Sketch Design	14
4.	4.0 Site Layout & Block model	14
5.	5.0 MID SEMESTER REVIEW	14
6.	6.0 Preparation of Plans 6.1 Unit 6.2 Site	35
7.	7.0 Elevations & Sections	28
8.	8.0 Detail of a cluster / an apartment	21
9.	9.0 Presentation drawings & Model (any one unit)	28
	Total	196

Term Work:

Students will prepare a complete set of presentation drawings for the designed “Housing “project including models of site & any one individual unit at appropriate scale.

List of drawings	
<ul style="list-style-type: none"> • Ground floor plan • Other Floor Plans • Sections • Elevations 	<ul style="list-style-type: none"> • Site plan • Site sections • Site elevations • Cluster Plans

Note:

Necessary case study visits to be conducted by concerned faculty for students related to the topics.

Reference Books:

1. Architecture – Form, Space & Order – Francis D. K .Ching
2. Pattern Language – Christopher Alexander
3. Timeless way of building – Christopher Alexander
4. HUDCO Publication

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DIPLOMA IN ARCHITECTURAL ASSISTANTSHIP

Semester: VI

Subject Code : 365002

Subject Name: **Advanced Interior Detailing - II**

Sr. No.	Subject content	Hrs.
1	1.0 Information about Materials: 1.1 Characteristics and types of interior materials for commercial purpose 1.2 Basic materials used for Flooring, Partitions & Panelling, Modular furniture, Office furniture, Commercial Interiors, Furnishings and Finishes	16
2	2.0 Preparing Interior Layout : 2.1 Describe the various design principles of preparing interior layout for the commercial or corporate offices 2.2 Prepare furniture layout for commercial 2.3 Prepare detailed furniture layout for a. Reception & Waiting b. Staff area c. Conference room d. Meeting room e. Director's/Manager's Cabins f. Officer's Cubicles g. Storage / Filing cabinets h. Glass Partitions i. Office Cafeteria j. Utilities & services	56
3	3.0 Preparation of detailed interior drawings: 3.1 Partitions 3.2 Panelling 3.3 Furniture 3.4 Lighting 3.5 Flooring	24
4	4.0 Presentation drawings: 4.1 Interior Layout Plan 4.2 Reflected Ceiling Plan	16

	4.3 Interior Sections 4.4 Enlarged details	
	Total	112

Term Work:

Students will prepare interior drawings for the any one of the following topics;

1. Architect's Office
2. Corporate Office
3. Tours & Travel Office
4. Business Process Outsourcing Office
5. Specialized Coaching Institute Premises

Text Book :-

- 1) Time-saver standards for interior design

Reference Books:

- 1) Modern Furniture - John Pile
- 2) Furniture designed by Architects - Marian Page

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DIPLOMA IN ARCHITECTURAL ASSISTANTSHIP

Semester: VI

Subject Code : 365003
Subject Name: **Landscape Design**

Sr. No.	Subject content	Hrs.
1	1.0 Introduction: 1.1 Basic knowledge of landscaping and brief introduction of species 1.2 Basic components of natural landscape 1.2.1 Landforms 1.2.2 Water 1.2.3 Vegetation 1.3 Introduction to Historical landscape	8
2	2.0 Elements of Landscape: 2.1 Water bodies 2.2 Follies 2.3 Hedges 2.4 Free standing walls 2.5 Bird feeders 2.6 Sculptures 2.7 Walkways 2.8 Garden Furniture 2.9 Pause points	8
3	3.0 Design of Landscape for a Luxurious bungalow: 3.1 Sketch design defining areas for various outside activities 3.2 Design hard and soft landscape features as per requirements 3.3 Detail the areas to enrich the character	28
4	4.0 Presentation Drawings: 4.1 Prepare all necessary Plans -- fully rendered with colour scheme, material, and description of species used. 4.2 Prepare necessary Sections and elevation with required description 4.3 Prepare 3D views/ sketches to explain the elements & designs	12
	Total	56

Term Work

Students will prepare a complete set of landscape drawings for the design project of luxurious bungalow (A.Des II) at appropriate scale with all basic components of landscape.

References Books:

1. The small garden, Tiger Books International, PLC London
2. Practical guide to home landscaping, Reader's Digest Services Pty Ltd, Sydney

GUJARAT TECHNOLOGICAL UNIVERSITY

DIPLOMA IN ARCHITECTURAL ASSISTANTSHIP

Semester: VI

Subject Code : 365004
Subject Name: **Estimating & Costing**

Sr. No.	Subject content	Hrs. Theory	Hrs. Pr.
1.	1.0 Introduction: 1.1 Meaning of term estimating and costing 1.2 Necessity of Estimating 1.3 Units of measurements of different items of architectural construction works, drainage work, water supply and electrification	2	—
2	2.0 Types of Estimates: 2.1 Different types of Estimating. 2.2 Approximate methods: 2.2.1 Plinth - Area method. 2.2.2 Carpet - Area method. 2.2.3 Cubical - Content method. 2.2.4 Service - Unit method. 2.2.5 Typical - bay method.	4	—
3	3.0 Detailed Estimate: 3.1 Data required for detailed estimate. 3.2 Methods of Detailed Estimating. (a) Centre - line method. (b) P.W.D. or Long wall - Short wall method. 3.3 Detailed Estimate of a bungalow 3.4 Billing - Abstract Sheet - Measurement Sheet - Face Sheet.	12	38
4	4.0 Rate Analysis: 4.1 Necessity of preparing Rate Analysis. 4.2 Data required for preparing Rate-Analysis. 4.3 Factors affecting the Rate Analysis. 4.4 Explain Task work or Out turn. 4.5 Schedule of Rates - Importance of S.O.R.	10	18

	<p>4.6 Prepare the rate analysis of different important items of building work:</p> <p>4.6.1 Excavation Work.</p> <p>4.6.2 Foundation Concrete.</p> <p>4.6.3 Brick Work in foundation.</p> <p>4.6.4 Brick work in Super Structure.</p> <p>4.6.5 Plastering.</p> <p>4.6.6 Pointing.</p> <p>4.6.7 Doors and Windows – wooden / aluminum / UPVC</p> <p>4.6.8 R.C.C. slab and beam.</p> <p>4.6.9 I.P.S. Flooring.</p> <p>4.6.10 Vitrified Tiles/ Marble / Wooden Flooring</p>		
	Total	28	56

Term Work:

- (1) Estimate of a bungalow
- (2) Preparing Rate Analysis of 10 items.
- (3) Specification of Any Six items.
- (4) R.C.C. slab beam, column with footing.
- (5) Small drainage work such as septic-tank and soak pit.

TEXT BOOK :

1. Estimating & Costing - B.N.Datta

References Books:

- 1) Quantity Surveying & costing - Birdi
- 2) Estimating & Costing - Rangwala
- 3) Quantity surveying & costing - c-503, D.L.Mode (Material Book)

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DIPLOMA IN ARCHITECTURAL ASSISTANTSHIP

Semester: VI

Subject Code : 365005

Subject Name: **Architectural Practice & Management**

Sr. No.	Subject content	Hrs. Theory
1.	1.0 Specifications: 1.1 Definition 1.2 Object of Specification 1.3 Importance of Specification 1.4 Use of Specification 1.5 Types of specification 1.6 Principles of specification writing	6
2.	2.0 Contract & Conditions of Contract: 2.1 Definition 2.2 Object and importance of condition of contracts 2.3 Elements of valid contracts (A) Lawful subject matter. (B) Legally competent parties (C) Valid consideration (D) Free consent (E) Provisions of law with regard to form 2.4 Types of contract (A) Lump-sum contracts (B) Unit-price or item-rate contracts (C) Cost plus or percentage contracts 2.5 Termination of contracts 2.6 Articles of agreement 2.7 Responsibilities of the Architect-Engineer 2.8 Responsibilities of the Contractor 2.9 Responsibilities of the Owner	9

3.	3.0 Tender: 3.1 Tender Notice 3.2 Invitation of tender 3.3 Opening of tender 3.4 Tender documents 3.5 Types of tender 3.6 Security Deposits 3.7 Earnest Money 3.8 Retention amount 3.9 Liquidated damages	9
4.	4.0 Arbitration : 4.1 Definition 4.2 Arbitrator & Referee 4.3 Sole arbitrator, Joint arbitrator and umpires 4.4 Powers of arbitrators 4.5 Advantages of arbitration	6
5.	5.0 Valuation : 5.1 Purposes of valuation 5.2 Cost, Price and value 5.3 Nature of value 5.4 Different forms of value 5.5 Classification of property 5.6 Freehold and leasehold property	6
6.	6.0 Architect's Office Management: 6.1 Characteristics of an Architect's office 6.2 Office and its management 6.3 Structure of an Architect's office 6.4 Office Correspondence with 6.4.1 Client 6.4.2 Competent Authority 6.4.3 Materials suppliers 6.4.4 Contractors 6.4.5 Expert services agencies 6.5 General Accounting	6

	6.6 Code of Professional conduct -- important Codes and Architect's Act, 1972 6.7 Architectural Competitions 6.7.1 Types of Competitions 6.7.2 Regulations for competitions 6.7.3 Requirements of competitions 6.7.4 Architectural copyrights	
	Total	42

TEXT BOOK :

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|---|----|--------------------|
| 1. Elements of Estimating and Costing | -- | by S.C. Rangwala |
| 2. Professional Practice | -- | by Roshan Namavati |
| 3. Codes of Conduct | -- | by I.I.A. |
| 4. Rules and Regulations for Competitions | -- | by I.I.A. |

References Books:

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| 1. Estimating and Costing | -- | by B.N. Dutta |
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