

GUJARAT TECHNOLOGICAL UNIVERSITY, AHMEDABAD, GUJARAT**COURSE CURRICULUM****COURSE TITLE: HISTORY OF MODERN ARCHITECTURE****(Code: 3345003)**

Diploma Programme in which this course is offered	Semester in which offered
Architectural Assistantship	4 th Semester

1. RATIONALE

This course is necessary for students to realize and expand their knowledge regarding modern architecture, its origin and factors which lead towards the development of modern architecture. Modern architecture is generally characterized by simplification of form and an absence of applied decoration. At diploma level, students are expected to gain awareness of early modern architecture that began at the turn of the 20th century with efforts to reconcile the principles underlying architectural design with rapid technological advancement and the modernization of society.

2. COMPETENCY

The course content should be taught and implemented with the aim to develop different types of skills so that students are able to acquire following competencies:

- **Identify and explain the features of modern architecture around the world, of works of master architects and that of contemporary Indian architects.**

3. COURSE OUTCOMES (COs)

The theory should be taught and practical should be carried out in such a manner that students are able to acquire required learning outcomes in cognitive, psychomotor and affective domain to demonstrate following course outcomes.

- Discuss the important characters of modern architecture
- Describe the features of the Early Modern Architecture
- Enumerate Roots and Modernity in India
- Explain elements and characteristics of architecture of Anant Raje & Laurie Baker

4. TEACHING AND EXAMINATION SCHEME

Teaching Scheme (In Hours)			Total Credits (L+T+P)	Examination Scheme				Total Marks
				Theory Marks		Practical Marks		
L	S/T	P	C	ESE	PA	ESE	PA	100
2	0	0	2	70	30	0	0	

Legends: L-Lecture; S/T- Tutorial/Teacher guided theory Practice – Studio; P - Practical; C – Credit; ESE - End Semester Examination; PA - Progressive Assessment

5. COURSE DETAILS

Unit	Major Learning Outcomes (Outcomes in cognitive domain)	Topics and Sub-topics
Unit – I Formative Years of Modern Architecture	1a. Discuss the important characters of modern architecture 1b. Explain development of construction systems and materials 1c. Describe engineering traditions and Reinforced Concrete 1d. Illustrate with sketches the buildings by Louis Sullivan 1e. Comprehend the works of Frank Lloyd Wright	1.1 Idea of Modern Architecture in nineteenth century 1.2 Engineering traditions and Reinforced Concrete 1.3 Works of Louis Sullivan <ul style="list-style-type: none"> • Wainwright Building • National Farmers’ Bank 1.4 Works of Frank Lloyd Wright <ul style="list-style-type: none"> • Falling Water House • Johnson Wax Building • Guggenheim Museum
Unit– II Crystallization of Modern Architecture	2a. Describe the quest for Ideal Form in architecture 2a.1 Explain various styles of Early modern Architecture 2b. Describe the features of the Early Modern Architecture 2c. Illustrate important projects by Le Corbusier 2d. Explain with sketches works of Louis Kahn	2.1 Quest for Ideal Form 2.2 Cubism and new conception of space -Works of Le Corbusier <ul style="list-style-type: none"> • Villa Savoye • Chapel at Ronchamp 2.3 Architecture of Light - works of Louis I Kahn <ul style="list-style-type: none"> • Salk Institute • Kimbell Art Museum 2.4 Acropolis at Athens 2.5 Parthenon
Unit – III Roots and Modernity in India	3a. Describe with sketches projects by Le Corbusier at Chandigarh 3b. Explain the details about IIM Ahmedabad as designed by Louis Kahn	3.1 Works of Le Corbusier in India High Court, Chandigarh Legislative Assembly, Chandigarh 3.2 Louis Kahn in Ahmedabad - IIM, Ahmedabad
Unit – IV Search for Modern Indian Architecture	4a. Describe the works of B.V. Doshi 4b. Explain architectural elements in the works of Charles Correa with the help of neat sketches	4.1 Works of Balkrishna Doshi <ul style="list-style-type: none"> • School of Architecture • Institute of Indology • Architect’s office–Sangath • Amdavad ni Gufa 4.2 Works of Charles Correa <ul style="list-style-type: none"> • Gandhi Smarak Sangrahalay • Kanchenjunga Apartment • Cidade de Goa • Madhya Pradesh Assembly
Unit – V Architecture in Development	5a. Explain elements and characteristics of architecture of Anant Raje 5b. Describe with sketches- works of Laurie Baker	5.1 Works of Anant Raje <ul style="list-style-type: none"> • Indian Institute of Forest Management • Farmer’s Training Institute 5.2 Works of Laurie Baker <ul style="list-style-type: none"> • St John’s Cathedral • Centre for Development Studies

6. SUGGESTED SPECIFICATION TABLE WITH HOURS AND MARKS (THEORY)

Unit No.	Unit Title	Teaching Hours	Distribution of Theory Marks			
			R Level	U Level	A Level	Total Marks
I	Formative Years of Modern Architecture	06	02	06	06	14
II	Crystallization of Modern Architecture	06	02	06	06	14
III	Roots and Modernity in India	04	02	06	03	11
IV	Search for Modern Indian Architecture	08	04	08	08	20
V	Architecture in Development	04	02	06	03	11
	Total	28	12	32	26	70

Legends: R = Remember; U = Understand; A = Apply and above levels (Bloom's Revised taxonomy)

Note: This specification table shall be treated as only general guideline for students and teachers. The actual distribution of marks in the question paper may vary from above table.

7. SUGGESTED LIST OF EXERCISES/PRACTICAL

The practical/exercises should be properly designed and implemented with an attempt to develop different types of skills (**outcomes in psychomotor and affective domain**) so that students are able to acquire the competencies/programme outcomes. Following is the list of practical exercises for guidance.

Note: Here only outcomes in psychomotor domain are listed as practical/exercises. However, if these practical/exercises are completed appropriately, they would also lead to development of certain outcomes in affective domain which would in turn lead to development of **Course Outcomes** related to affective domain. Thus over all development of **Programme Outcomes** (as given in a common list at the beginning of curriculum document for this programme) would be assured.

Faculty should refer to that common list and should ensure that students also acquire outcomes in affective domain which are required for overall achievement of Programme Outcomes/Course Outcomes.

Sr. No.	Unit No.	Practical/ Exercises (Outcomes in Psychomotor Domain)
1	01	Prepare two sketches each of Works of Louis Sullivan, Frank Lloyd Wright
2	02	Prepare two sketches each of Works of Le Corbusier, Louis Kahn
3	03	Prepare two sketches of buildings at Chandigarh and IIM Ahmedabad
4	04	Prepare four sketches each of Works of B.V.Doshi, Charles Correa
5	05	Prepare four 2 sketches of Works of Anant Raje, Laurie Baker

Note:

- Exclusive time for these exercises is not allotted in time table. Students have to take out time for sketching at home during weekends, holidays or during study tours
- This activity should be conducted as internal assessment during the semester by the concerned faculty member and internal marks should be allocated for it

8. SUGGESTED LIST OF STUDENT ACTIVITIES

Following is the list of proposed student activities:

- i. Students will carry out classroom presentations on the works of master architects and contemporary architects in India by way of library based/internet based mini projects, etc. These could be individual or in a group.
- ii. The above should include analysis and sketched/graphical presentations of modern architectural principles.
- iii. This activity should be conducted as internal assessment at least twice during the semester by the concerned faculty member and internal marks should be allocated for it

9. SPECIAL INSTRUCTIONAL STRATEGIES (If Any)

The faculty member should take the students for a study tour of the buildings designed by at least two of the above mentioned architects

10. SUGGESTED LEARNING RESOURCES

A. List of Books

Sr. No.	Title of Book/Journals	Author	Publication
1.	Modern Architecture since 1900	William Curtis	Phaidon Press
2.	History Of Architecture	Sir Banister Fletcher	CBS Publications, Delhi
3.	Meaning in Western Architecture	Christian Norberg Schulz	Rizzoli
4.	Corbusier	Willy Boesiger	Felix books
5.	The Complete Architecture Of Balkrishna Doshi: Rethinking Modernism For The Developing World	James Steele	Super Book House
6.	Balkrishna Doshi – An architecture for India	William Curtis	Mapin Publications
7.	Louis I Kahn	Robert McCarter	Phaidon Press
8.	Charles Correa	Hassan Udin Khan	Perennial Press Publication
9.	Laurie Baker	Gautam Bhatia	Penguin Publications
10.	Contemporary Indian Architecture – After The Masters	Vikram Bhatt, Peter Scriver	Mapin Publications
11.	Modern Architecture in India, Footprints on The Sands of Indian Architecture	Bagha Sarbajit, Bagha Sukhvinder	Galgotia Publications
12.	Anant Raje – Selected Works 1971- 2009	Ed. Shubra Raje	Tulika Books
13.	Contemporary Architecture & Digital Design	Szalapaj	Architectural Press
14.	LE CORBUSIER OEUVRE COMPLETE VOL.8 1965-69	Boesiger	Les Edition
15.	Frank Lloyd Wright	Triber	Birkhauser
16.	FORM FOLLOWS FUN MODERNISM & MODERNITY IN BR	Peter	Routledge

B. List of Major Equipment/ Instrument -

- i. Digital Camera/
- ii. Handycam

C. Learning Websites

- i. www.greatbuildings.com

11. COURSE CURRICULUM DEVELOPMENT COMMITTEE**Faculty Members from Polytechnics**

- **Prof. Bhaskar J. Iyer**, HOD in Architecture, Govt. Polytechnic, Vadnagar
- **Prof. Vishal K. Mashruwala**, Lecturer in Architecture, Govt. Polytechnic for Girls, Surat
- **Prof. N.M. Chhatwani**, Lecturer in Architecture, Govt. Girls Polytechnic, Ahmedabad

Co-ordinator and Faculty Members from NITTTR Bhopal

- **Dr. Subrat Roy**, Professor, Department of Civil & Environment Engineering
- **Dr J. P. Tegar**, Professor and Head, Department of Civil & Environment Engineering