Fundamentals of Architecture and Building Construction

Course Title	:	Fundamentals of Architecture and Building Construction
Course Code	:	
Credit Units	:	5

L	T	P	SW	FW	Total Credits
2	**2**	**0**	**2**	**0**	**5**

Course Objective	:	By the end of the course students will gain a fundamental knowledge of architecture, its scope and its significance in real estate development

Pre-requisites	:	NA

Student Learning Outcomes (SLO)	:	1. To develop a vocabulary and understanding of the basic elements and terminologies used in the designing and construction of a building
		2. To develop the skills of reading basic architectural drawings
		3. To learn area calculations for building design
		4. To understand the scope of work of an architect and various consultants involved in the development of a project.
		5. To remain aware of international practices in the field of architecture

Course Content / Syllabus:

Modules	Weightage (%)
1. Introduction to the basics	
The concept of scale and proportion; elements of a building; basics of building construction and materials; fundamental construction techniques; scope of work and coordination of various consultants	**20%**
2. Reading architectural drawings	

Reading architectural plans, elevations, sections, 3d views, walkthroughs; use of latest technology in architectural rendering; appreciation of various drawings prepared at different stages of project design and construction; building byelaws, area briefs and area calculations	**20%**
3. Architectural landmarks – India and the international markets	
Appreciation of architectural marvels across the globe; appreciation of latest construction materials used in the international construction industry; latest brands/companies providing various building materials/fittings/furniture across budget to high, luxury segment	**20%**
4. Professional practice	
Professional practice for architects – role of COA and scope of work of an architectural consultant; co-ordination and contribution of various consultants at different stages of design and construction, their scope of work;	**20%**
5. Sustainability in architecture	
The concept of climatology; understanding green buildings and energy efficient buildings – by design and technology, green building certifications;	**20%**

Pedagogy for Course Delivery	:	1. Student Lecture: To support the development of concepts and methods 2. Problem Solving Exercises: More interactive learning including students on a specific problem and solutions to it 3. Data analysis using case studies: To expose students to variety of situation and making them understand in comprehensive manner 4. Presentations and Group Discusses ions for mutual peer learning. 5. Attending conferences and seminar for industry exposure on subject matter.

Assessment / Examination Scheme:

Theory Lecture / Tutorial (%)	Lab / Practical / Studio (%)
100%	**0%**

Theory Assessment (Lecture & Tutorial):

Continuous Assessment / Internal Assessment				End Term Examination
Components	**Project / Home Assignment/ Presentation**	**Class Test**	**Attendance**	50%
Weightage (%)	30%	15%	5%	

Notional Hours:

Lecture Contact	30
Tutorial Contact	30
Self-Work	30
Field Work	00
Assessment	20
Total Session	110

Text & References:

- Rasmussen, S. E. "Scale and Proportion." Chapter 5 in Experiencing Architecture. MIT Press, 1964, pp. 104–26.
- Book - Ellis A Davidson, “The Elements of Building Construction and Architectural Drawing” 2015
- Book - Janson A., Tigges F. “Fundamental Concepts of Architecture: The Vocabulary of Spatial Situations”.

Any Other Study Material:

- Class lecture notes/ presentations.
- Industry magazines
- Industry Journals and Periodicals as available at school database.
- Regular reading of business newspapers for update.