

BACHELOR OF ARCHITECTURE - PROGRAMME OUTCOMES

1. **Knowledge** -Understanding about role of various knowledge domains such as humanities, technology, and environment in design of built environment.
2. **Principles & Theory**- Knowledge of principles of architecture & theoretical knowledge and its application in design.
3. **Creativity** - Creative and design thinking ability.
4. **Practice** - Ability to understand real life situation of Architectural Practice and to work with ethical and professional responsibilities.
5. **Collaborative Working** -Ability to communicate effectively and work in interdisciplinary groups.
6. **Inclusivity** -Sensitivity in design for inclusivity, equity, environment, diverse cultures, and heritage.
7. **Technological Knowhow**-Ability to review, comprehend and report technological developments in the profession of architecture and construction.
8. **Ability to choose Area of Specialisation or Practise**- Able to judge one's area of interest and accordingly choose the field of practice.

BACHELOR OF ARCHITECTURE - COURSE OUTCOMES

First year, Semester 1

- 1. Basic design**
 - a. Creation using elements and principles of design.
 - b. Synthesis of multi-sensory aspects of space.
 - c. Space making.
- 2. Building construction and materials I**
 - a. Students will develop a basic understanding of the relationship of materials to construction systems, techniques and methodology with specific reference to load bearing construction
- 3. Theory of structures I - At the end of semester student develops**
 - a. The understanding of building/structure as a system of forces and transfer of forces/load from roof to foundation and soil.
 - b. The understanding of various loads acting on a structure
 - c. The understanding of behaviour of elements like walls, beams and columns subjected to tension, compression, shear and bending.
- 4. Architectural graphics and drawing I**
 - a. Students at the end of the semester should be able to comprehend and express nuances of graphic language through various methods learnt.
 - b. Students should be able to communicate various ideas through architectural graphic representations including building plans and sections (drafting and sketching).
- 5. History of architecture and culture I**
 - a. An understanding of architecture, including settlements, landscapes and buildings as a cultural product shaped by various factors.
 - b. An understanding of the formal, structural, and stylistic aspects of architectural development.
- 6. Communication skills**
 - a. At the end of the course the student should be able to communicate fluently in english language and also use tools of communication such as written and graphical for effective communication
- 7. Workshop I**
 - a. Students at the end of semester should be able to understand relevance of model making both in the process of design and as a product

First year, Semester 2

1. Architectural design I

- a. The student would be able to analyze simple spaces, identify factors affecting their design and be able to design a simple space for human use.

2. Building construction and materials II

- a. Students will expand a basic knowledge about earthquake, understanding of properties, construction techniques of timber with specific reference to use of timber in superstructure (spanning, framing techniques).

3. Theory of structures II - At the end of semester student develops

- a. the understanding of effect of various forces in terms of various stresses and deflection for various structural members like beams and columns.
- b. the understanding of truss as lattice construction and structural actions in it's members

4. Architectural graphics and drawing II

- a. Students at the end of the semester should be able to comprehend and express composite solid geometry through sketches and drawings leading to comprehension of building components.
- b. Students should be able to communicate various ideas through architectural graphic representations including building plans and sections (drafting and sketching).

5. History of architecture and culture II

- a. An understanding of architecture as a cultural product shaped by various factors.
- b. An understanding of the formal, structural, and stylistic aspects of architectural development.
- c. An understanding of indian architecture of the twentieth century in the context of its historical precedents.

6. Fundamentals of architecture

7. Workshop II

- a. Students at the end of semester should be able demonstrate sufficient skills in making architectural models.

Second year, Semester 3

1. Architectural Design II

- a. At the end of the course the student is equipped to take design decisions by considering various aspects and methodically evolve a design and communicate it in form of 2D and 3D representations.

2. Building Construction and Materials III

Students will develop a basic understanding of the relationship of materials to construction systems, techniques and methodology with specific reference to reinforce cement concrete construction; an understanding of the concepts of concrete as a building construction material.

3. Theory of Structures IV

At the end of semester student develops

- i. The understanding of the concepts of Fixity, Continuity and Torque
- ii. The Skills to Design small spanned Wooden Beams
- iii. The Skills to Design Small Spanned R.C.C Structure w.r.t Slabs, Beams and Columns and use it for his B.C.M and W.D. subjects

4. Computer Aided Drawing and Graphics

- a. Students should be able to comprehend and express nuances of graphic language through various presentation techniques and methods learnt.
- b. Students should be able to communicate various ideas through architectural graphic representations (drafting and sketching).

5. History of Architecture and Culture III

- a. An understanding of architecture as a product shaped by various factors like religion and society.
- b. An understanding of the formal, structural, and stylistic aspects of architectural development.
- c. An understanding of the factors that bring about the processes of change in architectural manifestations and its meanings.

6. Building Services I

7. Climatology

Second year, Semester 4

1. Architectural Design III

At the end of the course the student is equipped to take design decisions by considering various aspects and methodically evolve a design where two or more buildings are to be planned on a site and communicate it in form of 2D and 3D representations.

2. Building Construction and Materials IV

Students will develop an understanding about concrete and its variants and artificial materials such as glass and plastic and their application in construction. Students will be developing knowledge about the vertical transportation systems and their design and construction requirement.

3. Theory of Structures IV

At the end of course student develops

- a. The understanding of supporting Balconies and Staircases
- b. The Understanding of Dividing Larger Rooms in Smaller One Way or Two Way Slab Units
- c. The Understanding of Steel as a Material and Various Steel Sections and their use.
- d. The understanding of using Steel Girders and Stanchions

4. Environmental Science

Students should be able to grasp the interdisciplinary nature of environment science and its interdependence on development and society. They should be able to think holistically about environment when taking architectural design decisions

5. History of Architecture and Culture IV

- a. An understanding of architecture as a product shaped by various factors like technological developments, colonization, globalization, economy, and urbanization.
- b. An understanding of the formal, structural, and stylistic aspects of architectural development.
- c. An understanding of contemporary architecture of the world with reference to historical precedents and responses to the same.
- d. An understanding of the architecture of colonial and post-independence India.

6. Building Services II

Students should be able to understand basic principles of daylight and artificial lighting and should be able to design a lighting plan for a space. They should be able to calculate the energy requirement of building electrical systems. Students should be able to identify space requirements and integration of these systems in architectural design.

7. Site Survey and Analysis

At the end of the course students would be able to comprehend the site characteristics, reading and interpreting survey drawings, understanding equipment and methods of surveying leveling

Third year, Semester 5

1. Architectural Design IV

- a. Build competency and ability to make communicative architectural drawings that are of readable scales, preferably in:
 - i. 1:200 (Site level drawings & Model)
 - ii. 1:100 (Cluster level drawings)
 - iii. Appropriate details to be explored at 1:50/20/10 etc.
- b. Be able to negotiate various scales in drawings and models.
- c. Be equipped to resolve structural systems of various construction techniques and services

2. Building Construction and Materials V

Students will understand of the principle, methods, advantages and disadvantages of concrete floor construction systems and single basement construction. Students will get to know the proprietary construction techniques for partition ceilings with latest available materials

3. Theory of Structures V

At the end of semester student develops

- i. The understanding of larger space spanning both in R.C.C and Steel
- ii. The understanding of carrying of vertical loads by R.C.C. Columns and Stanchions
- iii. The understanding Lateral pressure and structural principles for overcoming it.

4. Landscape Architecture

5. Elective I [Contemporary Architecture]

- a. Application of the knowledge gained through the study of history of architecture to analyse contemporary architecture.
- b. Development of individual view point and construction of an argument to put it across.
- c. Skill of orally presenting a topic of choice, and generating a discussion.

6. Building Services III

7. Working Drawing I

Third year, Semester 6

1. Architectural Design V

- a. Build competency and ability to make communicative architectural drawings that are of readable scales, preferably in:
 - i. 1:200 (Site level drawings & Model)
 - ii. 1:100 (Cluster level drawings)
 - iii. Appropriate details to be explored at 1:50/20/10 etc.
- b. Be able to negotiate various scales in drawings and models.
- c. Be equipped to resolve structural systems of various construction techniques and services.

2. Building Construction and Materials VI

Students will develop an understanding of possibilities of steel as an important building construction material. Understanding of properties of ferrous and non ferrous metals as materials for buildings will enable students to use Steel innovatively in building projects.

3. Theory of Structures VI

At the end of semester student develops

- i. The understanding Effects of Lateral Pressure of Soil and Water
- ii. The sense to frame R.C.C and Steel Buildings
- iii. The Understanding of different Structural Systems for Larger Spans and Tall Buildings with an understanding of Wind Load

4. Research in Architecture I

5. Elective II

6. Working Drawing II

