

BACHELOR OF ARCHITECTURE

PROGRAMME OUTCOMES (POs)

- PO1:** Understand the real-life situation in architectural practice and recognize the dialectic relationship between people and the built environment (especially with reference to the Indian sub-continent) with reference to their needs, values, behavioral norms, and social patterns.
- PO2:** Work collaboratively toward synthetic design resolution which integrates an understanding of the requirements, contextual and environmental connections, technological systems and historical meaning with responsible approach to environmental, historical and cultural conservation.
- PO3:** Apply visual and verbal communication skills at various stages of the design and delivery process.
- PO4:** Thrive in a rigorous intellectual climate which promotes inquiry through design research.
- PO5:** Produce professional quality graphic presentations and technical drawings/documents.
- PO6:** Critically analyze building designs and conduct post-occupancy evaluations.
- PO7:** Work in a manner that is consistent with the accepted professional standards and ethical responsibilities.
- PO8:** Work in collaboration with and as an integral member of multi-disciplinary/interdisciplinary design and execution teams in the building industry.
- PO9:** Conduct independent and directed research to gather information related to the problems in architecture and allied fields.
- PO10:** Students able to work effectively in a multi-disciplinary/inter-disciplinary team in the building industry, by providing 360o knowledge of architecture.

PROGRAM SPECIFIC OUTCOMES (PSOS)

- PSO1:** Demonstrate critical thinking through a self-reflective process of conceptualization and design thinking that is open to consideration of alternative perspectives by analyzing, evaluating, and synthesizing ideas and information gathered through applied research grounded in information literacy.
- PSO2:** Implement complex two and three-dimensional graphic representation techniques using a wide variety of traditional and digital media, to reflect on and explain the architectural design process to a wide range of stakeholders.
- PSO3:** The knowledge and ability to apply a design decision-making process through appropriate technical documentation in a manner that is client-centered, sustainable, aesthetic, cost effective, and socially responsible.
- PSO4:** Incorporate a wide range of technical skills and professional architectural knowledge during schematic design to demonstrate a comprehensive application of life safety,

accessibility, and sustainability issues in making sound design decisions across varying scales and levels of complexity.

- PSO5:** Demonstrate the ability to synthesize a wide range of variables into an integrated design solution by employing appropriate building materials, building systems, and construction practices grounded in environmental stewardship and based on sound research and design decisions across varying scales of systems and levels of complexity.
- PSO6:** Understanding how to collaboratively lead teams of stakeholders in the process of conceiving, developing and implementing solutions to problems in the built and natural environments, utilizing knowledge of the diverse forms and the dimensions of professional practice along with associated ethical, legal, financial and social responsibilities.
- PSO7:** Apply math, physics, logic as reasoning skills to investigate problems related to force resolution in structural systems, thermal heat gain and loss in buildings, material quantity estimates, budget management, and life-cycle cost analysis.
- PSO8:** Demonstrate information literacy through applied research by raising clear and precise questions, using abstract ideas to clarify and express information, and considering diverse points of view, to reach well-reasoned conclusions and evaluate options against relevant design criteria, building standards, and program requirements.

COURSE OUTCOMES

ARCHITECTURAL DESIGN–

CO1: Enhanced ability to integrate aspects such as climate, building material & construction, and principles of visual arts into architectural design.

CO2: Understanding of small structure measure drawings.
CO3: Understanding of aesthetical terms.

CO4: Enhanced ability to integrate aspects such as climate, building material & construction, and principles of visual arts into architectural design.

CO5: Learnt how to work with existing building with new technologies.
CO6: Understanding of space arrangement according to function.

CO7: Design climate, site and topography responsive buildings.
CO8: Design according to the context of vernacular architecture

CO9: Come up with a design process and solution for simple public buildings

CO10: Design for multiple groups of users with due consideration to site, climate, services, bye-laws.
CO11: Understand the relationship between design and urban setting.

CO12: Derive a design process and design solution for a public building.

CO13: Ability to Design, analyse and generate creative alternatives for moderately complex Architectural Design issues.

CO14: Design a large campus for a specific purpose for a large population of multiple groups of users. CO15: Produce a design process and a design solution to an urban design problem.

BUILDING CONSTRUCTION-

CO1: Construction details of

foundations CO2: Details of

footings

CO3: Knowledge of steel structure

CO4: Understanding of different structural member and their

application. CO5: Use of different material according to their

location and space.

CO6: Knowledge of pre cast construction and its use.

CO7: Development of construction technology and innovative techniques as tools to address demand to mass construction.

CO8: Knowledge of disaster resistant

construction.

CO9: Knowledge of long span steel structure

techniques.

WORKING DRAWINGS -

CO1: Imparts enough skill to prepare working drawings for the ease of construction with proper workmanship assurance in accordance with the specifications and the contract document and to the satisfaction of the Architect.

CO2: Implementation of drawings on site.

CO3: Working process and time management of work on site.

HISTORY OF ARCHITECTURE –

CO1: A sound knowledge base of the processes and events that shaped the architecture of the present. Development of critical analysis of the contributing factors and an overview of the issues facing the contemporary world.

CO2: Understanding of different type of civilization and their

architecture style CO3: Understanding of architectural elements and

principles.

CO4: Understand the difference between history through time period.

CO5: Knowledge about different architectural elements of different time period's construction

style and construction techniques.

CO6: Knowledge of different design pattern and philosophy of architect in these periods.

GRAPHICS (COMPUTER APPLICATION)-

CO1: The implementation of 3d software's for architectural design. CO2: Uses and application of different building material.

CO3: Learnt and improvement of visualization of colours and space.

CONSTRUCTION MATERIALS-

CO1: How to apply the different materials to make a building comfortable and aesthetically appearing. CO2: To apply the fire safety techniques in their designs.

CO3: To understand what are the different stages of applications of DPC and various materials to protect building from external environment.

CO4: Knowledge of various building materials. CO5: Application of new technology

CO6: Learnt how to celebrate new technology with old construction and techniques.

EDUCATIONAL TOUR -

CO1: Effective learning CO2:

Personal

Development

CO3: Deepen social and architectural knowledge CO4: Enhances Perspective

BUILDING SERVICES-

CO1: Conceptual understanding about the process & systems with installation of equipment's related to the services identified.

CO2: Learnt Sanitary system of buildings.

CO3: Learnt Planning and design for disposal of urban/rural effluent

CO4: Interact technically with electrical and illumination experts CO5: Design efficient electrical layouts with their circuit diagrams

CO6: Design efficient illumination levels for various activities and spaces.

CO7: A fair understanding of space requirements and distribution of electrical service

provisions.CO8: The understanding of lighting principles and different electric light sources available.

CO9: To inculcate a fair understanding of integration of various mechanical systems and services.CO10: Implication on architectural space design and facilitation.

CO11: Application and importance of psychometric chart in planning.

STRUCTURES –

CO1: Knowledge of different types of loads, moments, stress and

calculationsCO2: Knowledge of different types of column and beam design

CO3: Knowledge of section modules.

CO4: Design RCC structural members likes beams, slabs etc.CO5: Design RCC combined and eccentric footings.

CO6: Design RCC structures...

CO7: To learn structural system and its use in buildings.

CO8: Understanding of advance Frame structures applications in buildings.

CO9: Learnt how to calculate the load for different type of structures for designing.

CO10: To learn structural system and its use in buildings.

CO11: Understanding of STEEL structures applications in buildings.CO12: Understanding of designing of structural members.

SURVEYING-

CO1: Interact technically with surveyors

CO2: Be able to prepare and interpret survey drawingsCO3: Gain a broad understanding of Land Survey

CO4: Get accustoms with the angular and linear measurements

CO5: Trained with recording the field information and

necessary plotCO6: Contemporary issues and developments.

SPECIFICATION/ ESTIMATING & COSTING -

CO1: Write specifications for building construction. CO2:

Prepare approximate estimates of building projectsCO3:

Prepare detailed estimates for a building project.

TOWN PLANNING -

CO1: Distinct understanding of regulated urban development in cities.

CO2: The course shall develop understanding about the emergence of human settlements on the basis of complex interaction of determinants, elements and principles over time.

CO3: Knowledge and use of resources of space utilization according to population generation.

DISSERTATION-

CO1: Systematically abstract, analyse, synthesize and interpret existing literature.

CO2: Develops a specialized knowledge in a subject area which maybe an extension to the prescribed coursework.

CO3: Builds his his/her capacity to work independently and methodically in a variety of intellectually demanding contexts.

ENERGY EFFICIENT BUILDINGS -

CO1: Development of energy conscious architectural design, strategies and built forms. CO2: Futuristic vision of urban habitat.

CO3: Understanding of the concept of green building design.

PROFESSIONAL PRACTICE -

CO1: To acquaint students with their roles and responsibilities of dealing with various related agencies and the freedom/ limitations as a professional as well as their real status in the society.

CO2: Learns how to setup and run office

CO3: Learnt the payment schedule, architectural services schedule, different MEP services consultants work.

CO4: Need and Role of Arbitrator.

URBAN DESIGN -

CO1: To understand the general morphology of urban space. CO2: Be able to interpret the urban forms of the past and present.

CO3: Demonstrate an understanding of the various bio-physical, historical, political-economic, and social-cultural layers of the city, and work with these to form a consciously designed intervention.

CO4: Synthesise general theoretical models, analytical approaches to urban issues and contexts, technical knowledges, stakeholder interests and ethical frameworks, and individual vision into an integrated urban design proposition

CO5: Articulate their stance and position as a designer within discourses of urbanism.

- CO6: Research and analyse information relevant to developing urban design interventions and propositions.
- CO7: Demonstrate high quality communication, representation and visual skills appropriate to urban design projects, including written, verbal, graphical and model-based presentation
- CO8: Demonstrate abilities in teamwork and time management for group and individual work.

LANDSCAPE DESIGN-

- CO1: Landscape design process and information needed to make space visually and psychologically.
- CO2: Understanding the design philosophy behind of history of landscape architecture,
- CO3: To learn about the variety of trees and plants. The benefits we get from planning them in different conditions.

THESIS PROJECT -

- CO1: To use all the skills acquired in the duration of preceding academic courses.
- CO2: Methodically self-direct effort by choosing the project of choice, builds capacity to work independently and methodically in a variety of intellectually and professionally demanding contexts.
- CO3: Learn to make an original and individual, creative contribution to the academic discipline and/or the professional field in some cases.

PRACTICAL TRAINING-

- CO1: Implementation of College Learning on site.
- CO2: Learning Professional Skills.
- CO3: Market Research.
- CO4: Office Management.