BACHELOR IN ARCHITECTURE (B. Arch.) - 1ST SEMESTER

1. ENGLISH LANGUAGE & COMMUNICATION (ARCH 101)

OUTCOME:

Enhancing the communication and presentation expertise of the students in English by developing their listening, speaking, reading and writing skills

2. MATHEMATICS – I (ARCH 102)

OUTCOME:

Development of basic skill needed for studying related and analytical advanced subjects.

3. ENGINEERING MECHANICS (ARCH 103)

OUTCOME:

The students will be able to apply the basic principles of mechanics and structural behavior to design and analyze structural elements in future projects.

4. HISTORY OF ARCHITECTURE-I (ARCH 104)

OUTCOME:

The students will be able to gain knowledge about the chronological development of Architecture, the basic design elements, forms, materials, construction techniques and design principles developed under the socio-economic cultural and political influence during various time periods.

5. MATERIALS AND CONSTRUCTION-I (ARCH 105)

OUTCOME:

Students will learn the uses, properties and applications of various constructional materials.

6. ARCHITECTURAL GRAPHICS -- I (ARCH 106)

OUTCOME:

Application of various drawing tools and accessories used in drafting and lettering techniques and imparting knowledge of representation of three-dimensional forms in design projects using graphical presentation skills.

7. ARCHITECTURAL DESIGN I (ARCH 181)

OUTCOME:

The students will have a basic idea of generating a basic design concept and represent the same in Architectural drawings using composition of different design elements, forms and basic design principles.

8. CREATIVE EXPRESSIONS (ARCH 182)

OUTCOME:

Students will develop the ability to understand and represent space by three-dimensional geometric/ abstract forms in scale. They will also understand the qualities of different elements as well as their composite fusions and develop the required skills like observation, analysis, interpretation and representations through models and drawings.

9. **NSS/ ECA/NCC/ SPORTS (ARCH 183)**

OUTCOME:

The students should emerge as healthy and socially conscious citizens capable of doing hard work under pressure and respond to the requirements of the society. This will develop a sense of responsibility and team work.

BACHELOR IN ARCHITECTURE (B. Arch.) - 2nd SEMESTER

1. **MATHEMATICS – II (ARCH 201)**

OUTCOME:

Students will be capable to understand advanced analytic subjects in the curriculum.

2. **STRENGTH OF MATERIALS (ARCH 202)**

OUTCOME:

Students will understand the the structural behavior of beams under different conditions.

3. **HISTORY OF ARCHITECTURE-II (ARCH 203)**

OUTCOME:

Students will understand the diversity of architecture in India and will gain knowledge about the design variables, construction techniques, materials and craftsmanship used in the Temple Architecture of India and Architecture in India under the Islamic influence.

4. **MATERIALS AND CONSTRUCTION-II (ARCH 204)**

OUTCOME:

Students will learn the uses, properties and applications of various constructional materials.

5. **ARCHITECTURAL GRAPHICS –II (ARCH 205)**

OUTCOME:

Students will be able to develop Architectural Design through spatial ordering mechanisms and programmatic interpretation.

6. **ARCHITECTURAL DESIGN II (ARCH 281)**

OUTCOME:

Students will gain basic skills for designing basic spaces and forms.

7. METHODS OF CONSTRUCTION I (ARCH 282)

OUTCOME:

Students will gain knowledge of constructional details of different building components which can be applied in future projects.

8. WORKSHOP PRACTICE – I (ARCH 283)

OUTCOME:

Gain hands on experience about properties of basic building materials.

9. EDUCATIONAL TOUR (ARCH 284)

OUTCOME:

Students will get exposure to various types of historical as well as modern structures.

BACHELOR IN ARCHITECTURE (B. Arch.) - 3rd SEMESTER

1. COMPUTER EDUCATION – I (ARCH 301)

OUTCOME:

Getting idea about the history and basics of computer, its programming and architecture.

2. STRUCTURE – I (ARCH 302)

OUTCOME:

Will equip the students with knowledge of basic principles of structure required to design simple building components.

3. CLIMATOLOGY (ARCH 303)

OUTCOME:

Will be able to design climate responsive buildings considering the impact of climatic factors, comfort conditions, natural ventilation and day lighting.

4. HISTORY OF ARCHITECTURE --- III (ARCH 304)

OUTCOME:

Students will gain knowledge about the spatial and stylistic qualities, use of materials & technology and principles of composition associated with architecture in various parts of the world and understand architecture as an outcome of various social, political and economic upheavals.

5. **MATERIALS AND CONSTRUCTION --- III (ARCH 305)**

OUTCOME:

The students will gain knowledge of types and constructional details of building components like doors, windows and foundations for application in practical field.

6. **ART APPRECIATION (ARCH 306)**

OUTCOME:

An understanding and appreciation of art as basic and varied human creation related to cognition and experience.

7. **ARCHITECTURAL DESIGN III(ARCH 381)**

OUTCOME:

Students will understand the relation of space, form and site considerations to develop building designs.

8. **METHODS OF CONSTRUCTION II(ARCH 382)**

OUTCOME:

The students will learn to do detail drawings of different types of doors and windows.

9. **RENDERING TECHNIQUES (ARCH 383)**

OUTCOME:

To enable the students to learn manual rendering techniques of building drawings so as to create a photo realistic image.

BACHELOR IN ARCHITECTURE (B. Arch.) - 4th SEMESTER

1. **STRUCTURE – II (ARCH 401)**

OUTCOME:

Will equip students with knowledge of different theories for analysis of behaviour of structures.

2. **ACOUSTICS (ARCH 402)**

OUTCOME:

Students will gain knowledge of basics architectural acoustic systems in buildings, acoustic principles and treatments and will be equipped to design acoustic environments.

3. HISTORY OF ARCHITECTURE-IV (ARCH 403)

OUTCOME:

Students will gain knowledge about the spatial and stylistic qualities, use of materials & technology and principles of composition associated with Western Architecture during Medieval, Renaissance, Baroque, Neo Classical and Modern Periods upto the Nineteenth century.

4. MATERIALS AND CONSTRUCTION -- IV (ARCH 404)

OUTCOME:

The students will understand the basic components of a building with its construction details and develop the ability to integrate knowledge of properties and construction methods of these components in the design of simple projects.
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5. ARCHITECTURAL DESIGN IV (ARCH 481)

OUTCOME:

Students will learn to analyze different parameters and design Institutional buildings.

6. METHODS OF CONSTRUCTION III (ARCH 482)

OUTCOME:

Students will gain knowledge of constructional details of different building components which can be applied in future projects.

7. COMPUTER GRAPHICS – I (ARCH 483)

OUTCOME:

The students will learn to express the representation of visual composition in 2D using digital tools, drafting, 3D visualisation and rendering.

8. WORKSHOP PRACTICE – II (ARCH 484)

OUTCOME:

The students will gain hands on knowledge about the basic skills in cutting, finishing and joinery using Metals with different instruments.

9. EDUCATIONAL TOUR (ARCH 485)

OUTCOME:

Students will learn and experience the architectural characteristics of various historical as well as contemporary buildings.

BACHELOR IN ARCHITECTURE (B. Arch.) - 5th SEMESTER

1. SOCIOLOGY IN ARCHITECTURE (ARCH 501)

OUTCOME:

The students will gain knowledge about the social structure, socio economic problems, the environmental aspects and the relevance to architecture.

2. STRUCTURES III (ARCH 502)

OUTCOME:

Students will gain knowledge about design and detailing of concrete structural components.

3. BUILDING SERVICES I(ARCH 503)

OUTCOME:

Students will gain knowledge about water supply, sewerage, and waste disposal systems in buildings and develop the ability to conceptually plan and design.

4. HISTORY OF ARCHITECTURE – V (ARCH 504)

OUTCOME:

The students will have an insight into the development of Modern architecture and Arts & Crafts movement in Europe and America.

5. MATERIALS AND CONSTRUCTION -- V (ARCH 505)

OUTCOME:

The students will acquire knowledge of roofing, partitions and panelling in building construction and become familiar with advanced materials and construction techniques.

6. SURVEYING (ARCH 506)

OUTCOME:

Students will learn the various methods of Surveying and Leveling to represent all the physical parameters of a site.

7. ARCHITECTURAL DESIGN V (ARCH 581)

OUTCOME:

The students will develop sensitivity in design approach in community oriented projects analyzing context, collective values and needs.

8. METHODS OF CONSTRUCTION IV (ARCH 582)

OUTCOME:

The students will learn detail drawings of various types of partitions, roofs and suspended ceilings for future practical applications.

9. COMPUTER GRAPHICS II (ARCH 583)

OUTCOME:

Exposure to softwares like 3D Max, Sketch-up and Photoshop will help students to prepare presentation drawings in 2D and 3D.

10. MATERIAL TESTING WORK SHOP(ARCH 584)

OUTCOME:

Gain hands on experience about properties of basic building materials.

BACHELOR IN ARCHITECTURE (B. Arch.) - 6th SEMESTER

1. STRUCTURES IV (ARCH 601)

OUTCOME:

Students will gain knowledge of analyzing and designing steel structures.

2. BUILDING SERVICES II (ARCH 602)

OUTCOME:

The student will understand the importance and working of lighting installation in buildings, and gain the ability to design basic electrical lighting and firefighting systems.

3. HISTORY OF ARCHITECTURE – VI (ARCH 603)

OUTCOME:

The students will gain knowledge of neo-vernacular and contemporary architecture.

4. ADVANCED MATERIALS (ARCH 604)

OUTCOME:

The students will acquire knowledge of cost and become familiar with advanced materials and construction techniques.

5. LANDSCAPE DESIGN (ARCH 605)

OUTCOME:

The student will understand the scope of landscape architecture, the elements used in landscape design and the impact of human activities on the environment and also the role of architect in mitigating it.

6. ARCHITECTURAL DESIGN VI (ARCH 681)

OUTCOME:

The students will learn design methods for site planning and give appropriate/ innovative design solutions for community buildings in urban environment.

7. WORKING DRAWING (ARCH 682)

OUTCOME:

The students will learn to use architectural terms and symbols; apply construction materials and methods; identify the relationship between specifications and drawings; identify governing codes; and produce a set of sanction drawings and commercial construction drawings.

8. SURVEY FIELD WORK (ARCH 683)

OUTCOME:

Students will develop the ability to measure, draw, and represent all the physical parameters of a site.

9. EDUCATIONAL TOUR (ARCH 684)

OUTCOME:

Students will learn and experience the architectural characteristics of various historical as well as contemporary buildings.

BACHELOR IN ARCHITECTURE (B. Arch.) - 7th SEMESTER

1. STRUCTURE IN ARCHITECTURE(ARCH 701)

OUTCOME:

Students will learn the behavioral pattern of different structural systems so as to incorporate those in their design.

2. BUILDING SERVICES III (ARCH 702)

OUTCOME:

Students will become familiar with different air conditioning systems, their context of use and basics of planning; understand mechanical transportation systems in a building and develop ability to integrate services in buildings.

3. THEORY OF ARCHITECTURE (ARCH 703)

OUTCOME:

The students will have a thorough understanding of space, forms and elements, massing and circulation in architectural design and get an exposure to the design process through case studies.

4. SPECIFICATION, ESTIMATION &VALUATION (ARCH 704)

OUTCOME:

The students will be able to forecast the estimated value of a project and determine basic specifications of material and workmanship.

5. ARCHITECTURAL ILLUMINATION (ARCH 705)

OUTCOME:

The students will understand the principles, laws, and recommended values of illumination in buildings and types and effects of interior lighting for future applications.

6. URBAN PLANNING & HUMAN SETTLEMENTS (ARCH 706)

OUTCOME:

The student will gain knowledge about the nature, characteristics and evolution of human settlements and also the planning concepts of historical and contemporary towns. They will be aware of the current issues in urban planning and will be acquainted with land-use, zoning, types of development plan, etc.

7. ARCHITECTURAL DESIGN VII (ARCH 781)

OUTCOME:

The students will learn innovative design solutions for Institutional buildings/Housing in urban environment applying relevant bye-laws and codes.

8. INTERIOR DESIGN (ARCH 782)

OUTCOME:

The students will gain knowledge about Ergonomics and furniture design and get an overall exposure to the ways in which interior spaces can be enriched through the design of specific components.

BACHELOR IN ARCHITECTURE (B. Arch.) - 8th SEMESTER

1. ENERGY EFFICIENT ARCHITECTURE(ARCH 801)

OUTCOME:

Students will gain knowledge of alternative sources of energy and passive design considerations, day lighting and natural ventilation in design. They will also understand future trends in creating sustainable built environment.

2. PROFESSIONAL PRACTICE (ARCH 802)

OUTCOME:

Student will gain knowledge of the role of professional and statutory bodies and understand the role of an architect and professional ethics.

3. BLDG. ECONOMICS & CONST. MANAGEMENT (ARCH 803)

OUTCOME:

Students will learn to manage the economic aspect of construction.

4. HOUSING & COMMUNITY PLANNING (ARCH 804)

OUTCOME:

Students will have an overall view of the housing policies within India and third world countries.

5. URBAN DESIGN (ARCH 805)

OUTCOME:

Students will be aware of the evolution and characteristics of urban forms, their components and interdependencies. and understand elements, principles, concepts & components of urban design.

6. DISASTER RESISTANT ARCHITECTURE(ARCH 806)

OUTCOME:

The students will be aware about disasters and the strategies for disaster management and mitigation.
They will also understand the design guidelines in disaster resistant construction.

7. ARCH. DESIGN VIII (ARCH 881)

OUTCOME:

The students will develop design approach in Institutional projects and also learn the details.

8. THESIS PROGRAMMING (ARCH 882)

OUTCOME:

Students will equip themselves with the all round knowledge about any an area of interest or specific types of buildings to be taken up for their thesis project in the final semester.

BACHELOR IN ARCHITECTURE (B. Arch.) - 9th SEMESTER

1. PROFESSIONAL TRAINING(ARCH 981)

OUTCOME:

Students will gain hands on knowledge of all aspects of Architectural Practice, specifically knowledge of design and details of varied types of buildings.

BACHELOR IN ARCHITECTURE (B. Arch.) - 10th SEMESTER

ELECTIVES I,II,III

ADVANCED STRUCTURES (ELEC I) (ARCH 1001)

OUTCOME :

Students will understand concepts and applications of critical and advance structures for future applications.

COST EFFECTIVE BUILDING TECHNOLOGY (ELEC I) (ARCH 1001)

OUTCOME:

Students will learn cost effective materials and construction methods of sustainable and green building design.

BUILDING MAINTENANCE (ELEC I) (ARCH 1001)

OUTCOME:

Students will learn important aspects of building maintenance.

RETROFITTING (ELEC I) (ARCH 1001)

OUTCOME:

The students will learn the different materials used and methods and strategies applied for retrofitting for future application.

ADVANCED LANDSCAPE (ELEC II)(ARCH 1002)

OUTCOME:

The students will understand the contemporary Landscape planning in urban scenario and assess the current trends for application in their design.

VERNACULAR ARCHITECTURE (ELEC II) (ARCH 1002)

OUTCOME:

The students will gain knowledge about materials and methods of construction, planning and forms of vernacular architecture in different regions of the country.

ENVIRONMENTAL PLANNING (ELEC II) (ARCH 1002)

OUTCOME:

The students will gain knowledge of the existing natural resources, various ecosystems the need for preserving the resources and the environmental legislations.

ARCHITECTURAL CONSERVATION (ELEC II) (ARCH 1002)

OUTCOME:

The students will understand current trends in architectural conservation, its need and the governing laws.

INTELLIGENT BUILDINGS (ELEC III) (ARCH 1003)

OUTCOME:

The students will gain knowledge of definitions, components, historical overview of Intelligent Buildings and will learn automating building services and intelligent building standards.

INDUSTRIAL ARCHITECTURE (ELEC III) (ARCH 1003)

OUTCOME:

Students will understand design aspects of industrial buildings and the codes affecting it.

BARRIER FREE ENVIRONMENT AND DESIGN (ELEC III) (ARCH 1003)

OUTCOME:

Students will understand the special design considerations for barrier free architecture and the guiding norms.

GREEN BUILDINGS & SUSTAINABLE ARCHITECTURE (ELEC III) (ARCH 1003)

OUTCOME:

Students will understand the sustainable site design analysis and assessment, operational systems and its impact on the microclimatic systems, selection of building materials, develop innovative ventilation system design strategies, lighting strategies and consideration of deconstruction and reuse, merits of BIM.

ARCHITECTURAL THESIS (ARCH 1081)

OUTCOME:

The students will learn to handle a complete architectural design project at an advanced level and give a complete solution to the problem through design and details.