



DEPARTMENT OF ARCHITECTURE

PROGRAMME OUTCOMES (PO'S)

An Architecture Graduate at his/her 5th year of graduation.

1. Architectural knowledge: A graduate will be able to apply their creativity, skill knowledge to meet the ever-changing needs of the society.
2. Problem Analysis: A graduate will demonstrate his/her knowledge in History of Architecture, Theory of Architecture & Professional Practice for architectural design problems for local as well as global community.
3. Design & Development: A graduate will be able to use his skill in freehand sketching, graphics, model making and services to develop design solutions.
4. Conduct Investigation of Complex Problems: A graduate will be able to investigate client & user needs of space, furniture & equipments requirements and analyse site conditions, bye laws in relation to site, climate & design development.
5. Modern Tool Usage: A graduate will be able to apply the knowledge of latest computer software such as Auto CADD, Revit, Sketch up, 3D's Max, Lumion, Corel Draw, Photoshop & other supporting tools for the visualization of design projects.
6. An Architect & Society: An Architect & society apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional Architectural practices.
7. Environment and Sustainability: Understand the impact of the professional Architectural solution in societal and environmental contexts, and demonstrate the knowledge of and need for sustainable development.
8. Ethics: Apply ethical principles and commit to professional ethics, responsibilities, and norms of the Architectural practice.
9. Individual and Teamwork: Function effectively as an individual and as a member or leader in diverse teams and in multidisciplinary settings.
10. Communication: The graduate will be able to identify, Communicate effectively. The critical issues involved in the solutions of architectural design problems.



BLDE ASSOCIATION'S

VACHANA PITAMAHA DR. P. G. HALAKATTI

COLLEGE OF ENGINEERING AND TECHNOLOGY

Since 1980

Adarsh Nagar, Ashram Road, Vijayapur 586103, Karnataka, INDIA

11. Project Management and Finance: A graduate will be able to demonstrate the understanding of HR, Finance and Contract Management for the profession individually or as a team member.
12. Life-long Learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.



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DEPARTMENT OF ARCHITECTURE

PROGRAMME EDUCATIONAL OBJECTIVES (PEO'S)

1. A graduate will apply the Architectural knowledge gained during the course towards solving broad range of Architectural & Construction related problems.
2. A Graduate will have the perspective of lifelong learning for continuous improvement of knowledge in Architecture & Engineering, Advanced Studies & Research.
3. A Graduate will be able to respond to local, national and issues by imparting his/her knowledge of Architecture & Engineering (Construction, Services, Structures etc) in educational, Government, Financial and Private sectors.

PROGRAMME SPECIFIC OUTCOMES:

Graduate will be able to;

1. Apply the knowledge & concept of Architectural principles & fundamentals for Architectural domain.
2. Utilize modern software tools & innovative techniques for design development & implementation.
3. Achieve standardized process & control as per NBC codes, processes & green building criteria.
4. Demonstrate leadership professional skill in handling client, design & erection of projects.



DEPARTMENT OF ARCHITECTURE

1st Year

Course Plan

FIRST SEMESTER

SECOND SEMESTER

S. N	Code	Course	S. N	CODE	COURSE
1	21ARC11	Architectural Design-I	1	21ARC21	Architectural Design-II
2	21ARC12	Materials And Methods in Building Construction-I	2	21ARC22	Materials And Methods in Building Construction- II
3	21ARC13	Architectural Graphics-I	3	21ARC23	Architectural Graphics-II
4	21ARC14	History of Architecture– I	4	21ARC24	History of Architecture– II
5	21ARC15	Basic Design and Visual Arts	5	21ARC25	Basic Design and Theory of Design
6	21ARC16	Model Making Workshop	6	21ENG26	Building Structures- I
7	21IDT19/29	Innovation and Design Thinking	7	21ENG27	Site Surveying and Analysis
8	21EGH18	Communicative English	8	21EGH28	Professional Writing Skills in English
			9	21SFH19/29	Scientific Foundations of Health

COURSE OUTCOMES

1ST SEMESTER

Students will be able to:

1. ARCHITECTURAL DESIGN-I (21ARC11)

CO1	The student will understand and gain knowledge of science, mathematics,
CO2	The student will feel, and analyze the local stories of buildings with respect to architecture
CO3	Students will feel the space, internal as well as external spaces with respect to planning and circulation
CO4	Students will feel the space, internal as well as external spaces with enclosures and open spaces.
CO5	Students will go to the Site visits which will help in understanding spatial architecture means the relationship between open Spaces and build spaces, the development of forms, balance, contrast etc.
CO6	In Interior spaces, students will feel the relationship between Anthropometry, the human body, and architecture with consideration of design criteria.
CO7	Students will come to know the rule of scale and proportion in the building. Drawings will help in understanding the organization spaces with reference to the function, needs, cultural, traditional, religious, and climatic response, Light and ventilation in the building.

2. MATERIALS AND METHODS IN BUILDING CONSTRUCTION-I (21ARC12)

CO1	Students will be able to Explain and Demonstrate building components, different materials and construction techniques.
CO2	Students will be able to Illustrate and Explain style of Construction, various conventions about drawings (Plans, Elevations, Sections and Joinery details)
CO3	Students will be able to Discuss and Demonstrate manufacturing methods of different materials/brick blocks, properties of the same.
CO4	Students will be able to Understand and Demonstrate different types of foundations.
CO5	Students will be able to Develop the skills and Apply different types of openings, joinery details.(Doors, Windows, Ventilators)

3. ARCHITECTURAL GRAPHICS (21ARC13)

CO1	Use a range of freehand drawing media and skills related to visual communication.
CO2	Use drawing as the means of architectural problem solving.
CO3	Use graphic tools to record visual observations.
CO4	Draw freehand lines of various forms, shapes, textures, and qualities.
CO5	Students will be equipped with Graphical skill.
CO6	Graphical skill shall be useful in translating the Graphical ideas into technically appropriate drawing presentation.

4. HISTORY OF ARCHITECTURE – I (21ARC14)

CO1	Students will learn the primitive architecture, of early periods
CO2	Students will get the knowledge of culture of early civilizations
CO3	Students will understand the history and accuracy of the monumental buildings

5. BASIC DESIGN AND VISUAL ARTS (21ARC15)

CO1	To encourage a critical orientation to design thinking and action through drawings.
CO2	Develop observation skill in students towards design in various fields with Imagination skill
CO3	Appreciate art in various forms like 2D, 3D and Models.
CO4	Develop curiosity as how elements of design manifested in nature in materials uses
CO5	Effects of enclosures and non-enclosures on human mind and body with basic principles of Architecture function, strength, beauty.

6. MODEL MAKING WORKSHOP (21ARC16)

CO1	Students will understand model making workshop and how to implement architectural design
CO2	The students will learn the actual construction process with models.
CO3	The students will explore new structural techniques in modeling and better visualization
CO4	Learning and understanding of architectural materials with the different properties and methods of using materials for models
CO5	Understand the properties of clay and all other possible materials for model making

7. INNOVATION AND DESIGN THINKING (21IDT19/29)

CO1	The student will understand the fundamentals of the concept of design thinking in product and service development
CO2	Understand the basic concepts of innovation and design thinking
CO3	Students will conduct discussions on how to implement design thinking in the real world

8. COMMUNICATIVE ENGLISH (21EGH18)

CO1	Understand the basics of communication skills and apply them to your communication skills. Adopt techniques for conveying information through presentations.
CO2	Identify nuances of speech and intonation to improve your pronunciation skills.
CO3	We will teach you basic English grammar and essential language skills according to your current requirements.
CO4	Understand and use all types of English vocabulary and language skills.
CO5	Adopt techniques for conveying information through presentations.

COURSE OUTCOMES

2nd SEMESTER

Students will be able to:

1. ARCHITECTURAL DESIGN-I (21ARC21)

CO1	To Use basic architectural principles of design of buildings, interior spaces, etc where the Use of structural technologies (developed in other fields) is a starting point.
CO2	Get knowledge of gathering, assessing, recording, and applying relevant information in the Design of an architectural project.
CO3	Explore the relationship between human behavior and the physical environment in buildings that are heavily serviced.
CO4	Ability to design both site and building to accommodate individuals with varying physical abilities

2. MATERIALS AND METHODS IN BUILDING CONSTRUCTION-I (21ARC22)

CO1	Gain basic knowledge of roofing materials- timber and steel with construction details.
CO2	Understand the core material like Cement, its properties and application areas along with its uses with steel in the construction field.
CO3	Gain knowledge on the application of cement concrete for different components of the buildings and understand the basic knowledge about the foundations.
CO4	Understand the different components of staircases and constructional details in different materials.
CO5	Suggest a suitable type of staircase and construction techniques for different functional buildings.

3. ARCHITECTURAL GRAPHICS- II (21ARC23)

CO1	Use a range of freehand drawing media and skills related to visual communication.
CO2	Use drawing as the means of architectural problem solving.
CO3	Use graphic tools to record visual observations.
CO4	Draw freehand lines of various forms, shapes, textures, and qualities.
CO5	Students will be equipped with Graphical skill.
CO6	Graphical skill shall be useful in translating the Graphical ideas into technically appropriate drawing presentation.

4. HISTORY OF ARCHITECTURE – II (21ARC24)

CO1	Exploring the development of Greek, Roman, Byzantine, Medieval and Gothic architecture through critical analysis of relevant examples
CO2	To facilitate the study of architecture in the context of past eras
CO3	Students will understand the history of the monument building and the accuracy of the sketches.

5. BASIC DESIGN AND THEORY OF DESIGN (21ARC25)

CO1	To encourage Visual creative thinking and critical orientation to design thinking and action.
CO2	Development and explanations concepts.
CO3	Hands on practical experimentation of different ways of composition to understand the creativity.
CO4	Creative Visual thinking exercise by using Elements and Principles of design to enhance the imagination.
CO5	Adopt multidisciplinary collaboration to understand the fundamentals of all art forms like visual arts and performing arts. Expose students to different exhibitions and performing art.

6. BUILDING STRUCTURES- I (21ENG26)

CO1	Understand different construction materials and types of loads.
CO2	Compute the resultant and equilibrium of concurrent force systems.
CO3	Compute the resultant and equilibrium of non concurrent force systems.
CO4	Locate the centroid and Compute the moment of inertia of plane and built-up sections.
CO5	Analyze the trusses

7. SITE SURVEYING AND ANALYSIS (21ENG27)

CO1	Understand the basic principles of Geodetics
CO2	Learn Linear measurements and to know the different methods of plane table surveying and understand the drawing with real dimensions.
CO3	Employ conventional surveying data capturing techniques and process the data for computations.
CO4	Learn Linear and Angular measurements to arrive at solutions to basic surveying problems
CO5	Analyze the obtained spatial data to compute areas and volumes and draw contours to represent 3D data on plane figures.

8. PROFESSIONAL WRITING SKILLS IN ENGLISH (21EGH28)

CO1	Understand the basics of communication skills and apply them to your communication skills.
CO2	Identify nuances of speech and intonation and improve your pronunciation skills.
CO3	We will teach you basic English grammar and essential language skills according to your current requirements.
CO4	Understand and use all types of English vocabulary and all language skills.
CO5	Employ techniques to convey information through presentations.



9. SCIENTIFIC FOUNDATIONS OF HEALTH (21SFH19/29)

CO1	Understand health and well-being (and their beliefs)
CO2	For health, balance and a positive attitude
CO3	Instruct and acquire healthy lifestyle habits to maintain good health.
CO4	Building healthy and caring relationships to meet the demands of multinational corporations and the LPG industry
CO5	Applying innovative and proactive methods to avoid risks from harmful practices on campus, outside of campus
CO6	Actively fight harmful diseases and ensure your health by having a positive attitude.



DEPARTMENT OF ARCHITECTURE

2nd Year

Course Plan

THIRD SEMESTER

FOURTH SEMESTER

S. N	Code	Course	S.N	CODE	COURSE
1	21ARC31	Architectural Design-III	1	21ARC41	Architectural Design-IV
2	21ARC32	Materials And Methods In Building Construction-III	2	21ARC42	Materials And Methods In Building Construction- IV
3	21ARC33	Climatology	3	21ARC43	History Of Architecture – IV
4	21ARC34	History of Architecture– III	4	21ARC44	Building Services -II (Electrical Services And Illumination)
5	21ARC35	Building Services –I(Water Supply And Sanitation)	5	21ENG45	Building Structure -III
6	21ENG36	Building Structure -II	6	21ARC46/ 21CP39/49	Constitution Of India & Professional Ethics
7	21KSK39/49	Sanskrit Kannada	7	21ARC47	Computer Application In Architecture -I
8	21KBK39/49	Balake Kannada	8	21ARC48	Elective-2
9	21ARC38	Elective- 1	9	21UH49	Universal Human Values And Professional Ethics
10	21UHV39	Social Connect & Responsibilities			

COURSE OUTCOMES

3rd SEMESTER

Students will be able to:

1. ARCHITECTURAL DESIGN-III (21ARC31)

CO1	Students will be able to understand the definition of space, place and space into place making.
CO2	Students will be able to create and modify place with respect to physical boundaries (temporary and permanent) .
CO3	Students will be able to illustrate the functional aspects and activities of the place (outdoor and indoor).
CO4	Students will be able to analyze and explain the essence and sense of place w.r.t scale, proportion, physicality, materiality, situations etc.
CO5	Students will be able to design and create the place by considering its identity, memory, belongingness, culture, social and cultural aspects, context, surroundings and architectural characteristics.

2. MATERIALS AND METHODS IN BUILDING CONSTRUCTION-III (21ARC32)

CO1	Demonstrate all RCC structure details integrated with building structures and practical methods of construction and design of reinforcement & present in the form of drawing.
CO2	Understanding the techniques used for the construction of arches, domes and vaults in olden days, which helps to understand the design.
CO3	Understand basic building material and its application process in the context of building construction.
CO4	Understand the supporting factors of floorings and plastering.
CO5	Understanding the interlocking of paving blocks.

2. CLIMATOLOGY (21ARC33)

CO1	To understand and analyze the elements of climate and their effects on human body in different climatic zones in tropics.
CO2	To apply and assess climatic data, with respect to various climatic zones for thermal comfort of the human body.
CO3	To relate and appraise compare the thermo physical properties of various building materials in different climatic zone.
CO4	To plan and design the elements of shelters for passive heating/cooling in different climatic zones.
CO5	To appraise and develop the effects of climatic elements with respect to sun –earth relationship

3. HISTORY OF ARCHITECTURE – III (21ARC34)

CO1	Conceptualize the relation between architecture and materials as integral elements of local ecology and cultural practices.
CO2	Develop the ability to critically understand concepts of built environment through history.
CO3	Ability to appreciate the ways in which art reflects or communicate social, political, economic, ideological and religious values.
CO4	Understand and describe the different ways man relates to nature through time and his various ways of inhabiting it.
CO5	Experience the correlation of man, nature and their living habitat, as an integral dimension of culture and to explore material resources through time and place.

4. BUILDING SERVICES –I (WATER SUPPLY AND SANITATION) (21ARC35)

CO1	Understands and explain in environment and health aspects related to water supply & sanitation.
CO2	Students will understand and explain water supply, sanitation and plumbing in buildings and of high-rise plumbing, and use of sanitary fixtures, fittings & wellness and solid waste management.
CO3	Summarize and analyses, introduction to fire and life safety and construction equipment's etc.
CO4	Students will understand and explain solar hot water generation, central LPG supply system, medical gases supply, and storage of high speed diesel, central vacuum and waste collection.
CO5	Apply, in construction industry like layout of water supply and sanitation with all fixtures in kitchen, bath and utility for a small residence i.e. Plan and section, terrace plan with rainwater down take pipes, sump and OHT calculation design.

5. BUILDING STRUCTURE –II (21ENG36)

CO1	Student will know to calculate the centroids and other technical data about the structural members.
CO2	Students will be able to calculate the bending moment and shear force values for the different types of beams.
CO3	They will be able to calculate the strength of different types of columns w.r.t their effective length.

6. SANSKRIT KANNADA (21KSK39/49) – BALAKE KANNADA(21KBK39/49)

CO1	Introduction of kannada , its grammar and rules in day to day administration.
CO2	To develop correspondence skill in kannada for an architect.
CO3	To translate from english and write reports for day to day administration



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7. ELECTIVE- 1 (21ARC38)

CO1	Student will acquire the knowledge of our own traditional local culture and heritage which will give life on the travelling path from ancient time to up till now in the different region of our india.
CO2	Student will get the skill of understanding use of local materials local construction techniques with local labor (indigenous)material and techniques.
CO3	Student will get the skill of documentation recording accurate in measuring and information about any of surrounding vernacular building.
CO4	Student will have a critical review a tradition and a changing techniques of a construction and building the gap properly responding climate of the region and local building materials.

8. SOCIAL CONNECT & RESPONSIBILITIES (21UHV39)

CO1	Student will understand social responsibility
CO2	Student will practice sustainability and creativity
CO3	Student will get to showcase planning and organizational skills.
CO4	Student will apply the learning's in practical field

COURSE OUTCOMES

4th SEMESTER

Students will be able to:

1. ARCHITECTURAL DESIGN-IV (21ARC41)

CO1	To Use basic architectural principles of design of buildings, interior spaces, etc where the use of structural technologies (developed in other fields) is a starting point.
CO2	Get a knowledge of gather, assess, record, and apply relevant information in Design of an architectural project
CO3	Explore the relationship between the human behavior and the physical environment in buildings which are heavily serviced.
CO4	Ability to design both site and building to accommodate individuals with varying physical abilities

2. MATERIALS AND METHODS IN BUILDING CONSTRUCTION- IV (21ARC42)

CO1	Understand and experiment moment framed, flat slab and flat plate, filler slabs, waffle slab.
CO2	Students will acquaint practice RCC filler slabs and waffle slabs.
CO3	Summarize and analyze about informatics construction big data, cloud collaboration, information management and construction equipment's etc.
CO4	Predict and design steel construction in buildings and renovation works.
CO5	Apply in construction industry like green building, and design of aluminum & steel in doors, windows & partitions.

3. HISTORY OF ARCHITECTURE – IV (21ARC43)

CO1	Students will learn about critical appreciation of architectural features.
CO2	Students will understand design principles and concept of historic monuments.
CO3	It helps in understanding about scale, proportion, composition, geometric shapes, visual effects of the buildings.
CO4	It helps to get knowledge about human and monumental scale of the building.
CO5	It helps in utilizing few of the ideas into present construction depending on the climate, requirement.

4. BUILDING SERVICES -II (ELECTRICAL SERVICES AND ILLUMINATION) (21ARC44)

CO1	Explain the electrical services, power system components, electrical codes and building codes, green building technology used in design of buildings for benefit of society.
CO2	Describe the importance of renewable and non-renewable energy sources, low voltage distribution systems, net zero building technology used in new design of buildings.
CO3	Apply the skills to choose proper electrical protective and safety equipment's like fuse, circuit breaker, relays, earthing in electrical wiring installations for different types of commercial buildings and substations.
CO4	Explain the present energy consumption, energy conservation opportunities for lighting systems, design of lighting systems for different buildings and industries.
CO5	Apply the skills about electrical wiring, wiring layout and estimation of electrical load for type of building, extra low voltage system in design of new buildings.

5. BUILDING STRUCTURE –III (21ENG45)

CO1	Students will understand technology of concrete and behaviour of steel in concrete
CO2	Students will understand the mechanics of reinforced concrete
CO3	Students will learn the different types of slab systems and also practical things

6. CONSTITUTION OF INDIA & PROFESSIONAL ETHICS (21ARC46 / 21CP39/49)

CO1	To know about the basic structure of Indian Constitution.
CO2	To know the Fundamental Rights (FR's), DPSP's and Fundamental Duties (FD's) of our constitution.
CO3	To know about our Union Government, political structure & codes, procedures.
CO4	To know the State Executive & Elections system of India.
CO5	To learn the Amendments and Emergency Provisions, other important provisions given by the constitution.

7. COMPUTER APPLICATION IN ARCHITECTURE –I (21ARC47)

CO1	Students will learn 3d modeling software's.
CO2	Students discover the value of BIM in the AEC sector
CO3	Develop basic drawing and Revit tools.
CO4	Study graphic software for image editing.5. Students also learn how to use elevation

8. ELECTIVE-2 (21ARC48)

CO1	To stimulate students talent and enthusiasm in understanding & recording historic structures
CO2	To foster among architecture students sensitivity and awareness of India's architectural history.
CO3	To develop students' abilities to comprehend, evaluate, and recognize the components and values of the built heritage.
CO4	To be familiar with the techniques used to document cultural heritage, such as sketches, drawings, and visual records

9. UNIVERSAL HUMAN VALUES AND PROFESSIONAL ETHICS (21UH49)

CO1	Understand the significance of value inputs in a classroom, distinguish between values and skills, understand the need, basic guidelines, content and process of value education, explore the meaning of happiness and prosperity and do a correct appraisal of the current scenario in the society
CO2	Distinguish between the self and the body, understand the meaning of harmony in the self the co-existence of self and body.
CO3	Understand the value of harmonious relationship based on trust, respect and other naturally acceptable feelings in human-human relationships and explore their role in ensuring a harmonious society
CO4	Understand the harmony in nature and existence, and work out their mutually fulfilling participation in the nature.
CO5	Distinguish between ethical and unethical practices, and start working out the strategy to actualize a harmonious environment wherever they work.



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DEPARTMENT OF ARCHITECTURE

3rd Year

Course Plan

FIFTH SEMESTER

SIXTH SEMESTER

S. N	Code	Course	S.N	CODE	COURSE
1	18ARC51	Architectural Design-V	1	18ARC61	Architectural Design-VI
2	18ARC52	Materials And Methods In Building Construction-V	2	18ARC62	Materials And Methods In Building Construction- VI
3	18ARC53	Building Services-II	3	18ARC63	Building Services -III
4	18ARC54	History Of Architecture– V	4	18ARC64	Contemporary Architecture
5	18ARC55	Building Structure -V	5	18ARC65	Building Structure - VI
6	18HUM56	Sociology And Building Economics	6	18ENG 66	Landscape Architecture
7	18ARC57	Working Drawing-1	7	18ARC67	Working Drawing-II
8	18ARC58	Elective- III	8	18ARC68	Elective-IV
			9	18ARC69	Study Tour

COURSE OUTCOMES

5th SEMETER

Students will be able to:

1. ARCHITECTURAL DESIGN-V (18ARC51)

CO1	To use basic architectural principles of design of buildings, interior spaces, etc where the use of structural technologies (developed in other fields) is a starting point.
CO2	Get a knowledge of gather, assess, record, and apply relevant information in design of an architectural project
CO3	Explore the relationship between the human behavior and the physical environment in buildings which are heavily serviced.
CO4	Ability to design both site and building to accommodate individuals with varying physical abilities

2. MATERIALS AND METHODS IN BUILDING CONSTRUCTION-V (18ARC52)

CO1	Students should understanding of the logic and details of construction technologies of complex system of advanced building construction techniques which happening presently on the site.
CO2	Student will acquaint with knowledge of fixing details with appropriate construction and bounding materials.
CO3	Student will gain knowledge about different material materials with functions of the building.
CO4	Student will attain knowledge prefabrication and post tensioning building component advantages and relevance in the Indian context.
CO5	Student will attain knowledge and properties and specifications of building materials which are very much essential to do the complex buildings

3. BUILDING SERVICES-II (18ARC53)

CO1	Value the importance of electrical building services
CO2	Develop understanding of electrical supply system at city levels .
CO3	Design of electrical supply in buildings , to design electrical detailing in various buildings & design calculation parts
CO4	Illumination & uses in building ,to design electrical detailing

4. HISTORY OF ARCHITECTURE – V (18ARC54)

CO1	Students will understand the Global level Architectural background.
CO2	It gives knowledge about different materials, techniques used in the History
CO3	It helps in understanding cultural background which reflects on building
CO4	It helps students to utilize architectural ideas of previous era into present context
CO5	Students will learn about various historical background, culture, environment, design concept, socio-economic condition which reflects in their buildings.

5. BUILDING STRUCTURE –V (18ENG55)

CO1	Student will come to know about the Integration of structures with architectural objectives by developing an understanding of building structures
CO2	Student will come to know about the Selection criteria for appropriate horizontal systems
CO3	Student will come to know about the Conceptual design of long span structures for gravity and lateral wind and seismic loads.

6. SOCIOLOGY AND BUILDING ECONOMICS (18HUM56)

CO1	Understand the social scenario and economic scenario of India
CO2	Understand the effect of unplanned growth of urbanization.
CO3	Relevance of sociology and economics in architecture.
CO4	Systematic and scientific understanding of social research.
CO5	Existing social life and its importance.
CO6	Concept of rural and urban communities and its influence on architecture.

7. WORKING DRAWING-1 (18ARC57)

CO1	Students have learnt architectural drafting, lettering, dimension lines and drafting technique, making of the title blocks and meeting office standards in working and drawing
CO2	Students will able to understand blocks, templates, plot style
CO3	Students will able to understand drafting for preparation of the center line foundation plan, basement, ground floor, first floor, second floor etc, terrace, lift room, machine room, duct details
CO4	Students have learnt schedule of doors and windows, finishes
CO5	Knowledge/Use of different materials in plan, elevation and section, study of graphic symbols

8. ELECTIVE- III (18ARC58)

CO1	Student will able to understand the need of alternate materials and construction techniques.
CO2	Knowledge of sustainable approaches in construction using different materials.
CO3	Student will get knowledge to explore with alternate materials in field in future and to work in context.

COURSE OUTCOMES

6th SEMETER

Students will be able to:

1. ARCHITECTURAL DESIGN-VI (18ARC61)

CO1	To enable the students to integrate design with history, theory, building construction and material science in a more informed way.
CO2	To understand the role of built environments of increasing complexity in the process of Campus Design.
CO3	To explore structuring of various spaces in a design program.
CO4	To document and apply the outcomes of a Case study for design development.
CO5	To Prepare and present a Campus Plan of the given Architectural project.

2. MATERIALS AND METHODS IN BUILDING CONSTRUCTION- VI (18ARC62)

CO1	Students should understand the logic and details of construction technologies of complex system of advanced building construction techniques which happening presently on the site.
CO2	Student will acquaint with knowledge of fixing details with appropriate construction and bounding materials.
CO3	Student will gain knowledge about different materials with functions of the building.
CO4	Student will attain knowledge about prefabrication and post tensioning building component, advantages and relevance in the Indian context.
CO5	Student will attain knowledge, properties and specifications of building materials which are very much essential to do the complex buildings

3. BUILDING SERVICES -III (18ARC63)

CO1	Student will acquire knowledge and skill about mechanical services in buildings.
CO2	Student will understand the need of mechanical ventilation and air-conditioning systems at different spaces
CO3	Student will acquire knowledge about types of ventilation and air conditioning systems, mechanical transportation systems in buildings like elevators, escalators and revelators and its working systems and applications.
CO4	Student will acquire Knowledge on fire safety rules as per NBC.
CO5	Student will acquire Knowledge about the types of fire safety systems and its requirements for high rise buildings in India.

4. CONTEMPORARY ARCHITECTURE (18ARC64)

CO1	Student will learn the architectural styles
CO2	Student will explore the evolution and development of architectural styles in India
CO3	Student will get ideal philosophy of architectural scholars.

5. BUILDING STRUCTURE –VI (18ARC65)

CO1	Student will come to know about the Integration of structures with architectural objectives by developing an understanding of building structures
CO2	Student will come to know about the Conceptual design of long span structures for gravity and lateral wind and seismic loads.
CO3	Student will come to know about the Integration of structures with architectural objectives and selection criteria for appropriate vertical systems

6. LANDSCAPE ARCHITECTURE (18ARC66)

CO1	Students will identify and characterize the complex nature of problems and questions associated with human/ landscape interactions across a broad range of scales.
CO2	Students will identify, collect, and analyze necessary information using appropriate technologies and analytical techniques as they relate to the identified problem or question.
CO3	Students will justify and defend the proposed design or planning solution within the context of aesthetic, social, political, economic, and environmental conditions.
CO4	Students will understand multiple aspects of practice; and gain a capacity for collaboration.
CO5	Students will possess knowledge and understanding about allied fields and the value of interdisciplinary design.

7. WORKING DRAWING II (18ARC67)

CO1	Students will understand the preparation of structural drawing
CO2	Students will understand the preparation of electrical drawing
CO3	Students will understand the preparation of water supply drawing
CO4	Students will understand the preparation of sanitary drawing
CO5	Students will be able to produce working drawings according to the industry standards.

8. ELECTIVE-IV (18ARC68)

CO1	The Student will be understanding evolution of sky scrapers, Basic design considerations other natural forces acting on them
CO2	The Student will be understanding structural systems in high-rise buildings
CO3	The Student will be understanding services in high-rise buildings
CO4	The Student will be understanding fire safety norms in high-rise buildings
CO5	The Student will be able to design habitable spaces in tall buildings

9. STUDY TOUR (18ARC69)

CO1	The students will have exposure on the various HERITAGE buildings and CONTEMPORARY buildings.
CO2	An ability to analyze the space and form relation in monumental scale.
CO3	The students will be able to develop an Architectural Vision.



DEPARTMENT OF ARCHITECTURE

4th Year

Course Plan

SEVENTH SEMESTER

EIGHT SEMESTER

S. N	Code	Course	S.N	CODE	COURSE
1	18ARC71	Architectural Design - VII	1	18ARC81	Architectural Design - VIII(Architecture In Urban Context)
2	18ARC72	Materials And Methods In Building Construction VII	2	18ARC82	Materials And Methods In Building Construction VIII
3	18ARC73	Building Services – IV(Acoustics And Noise Control)	3	18ARC83	Thesis Seminar
4	18ENG74	Specification, Quantity And Costing Of Buildings	4	18ARC84	Professional Practice
5	18ARC75	Urban Design	5	18ENG85	Construction And Project Management
6	18ARC76	Interior Design	6	18ARC86	Urban Planning
7	18ARC77	Elective -V	7	18HUM87	Constitutional Law
			8	18ARC88	Elective -VI

COURSE OUTCOMES

7th SEMESTER

Students will be able to :

1. ARCHITECTURAL DESIGN-VII (18ARC71)

CO1	Understand the design aspects for designing a public building which integrates with Technology, Design, Economy, Ecology, Geography and Sociology and many more.
CO2	Understand Urban context, Socio-economic condition, Political status, culture of the place which helps in development of the city/ place.
CO3	Understand and this gives them ability to create spaces depending on the location and requirement.
CO4	Get hand on designing site level to city level spaces, and individual level to community level projects.
CO5	Gain knowledge about Principles of Self-Sustaining Design.

2. BUILDING CONSTRUCTION AND MATERIALS-VII (18ARC72)

CO1	Students learn about advanced building materials and construction techniques currently on the site
CO2	Students acquire knowledge of the details of carpentry with appropriate boundary materials.
CO3	Properly select and acquire knowledge about bulkhead materials.
CO4	Students acquire knowledge of component prefabrication and prestressing and their benefits.
CO5	Gain knowledge about the characteristics and specifications of interior building materials must for interior design

3. BUILDING SERVICES-IV(18ARC 7.3)

CO1	Define various terminologies related to sound and its properties.
CO2	Discuss behavior of sound in indoor and outdoor environment and its effects on building design.
CO3	Identify indigenous acoustical materials and their applications
CO4	Apply principles of acoustical design to detail various performance and speech oriented spaces.
CO5	Develop sensitivity in design towards external and internal noise mitigation.

4. SPECIFICATION, QUANTITY AND COSTING OF BUILDINGS(18ENG74)

CO1	To Prepare estimates for both load bearing and framed structure in details based on items wise type of estimation requires through knowledge of working drawing.
CO2	Prepare estimates for tender documents valuation reports and fire insurance report.
CO3	Prepare detailed specifications for different types of construction activities.
CO4	Prepare rate analysis for different items.
CO5	Valuate and certify building and land in brief.

5. URBAN DESIGN (18ARC75)

CO1	Students will be able Analyze and Explain the Behavioural and Perceptual approach to the city as visual experience with the help of Kevin Lynch and Gordon Cullon's theories
CO2	Students will be able to Analyze and Design Social and Cultural layer that influence Urban areas.
CO3	Students will be able to Classify and Create the spaces (built and unbuilt) in relation with Scale, Size, Byelaws in the process of transformation of Space and form.
CO4	Students will be able to Design formal and informal, functional and temporal space in Urban Environment.
CO5	Students will be able to Demonstrate and Design the relationship b/w Physical activity and built environment, Human activity and Built environment.

6. INTERIOR DESIGN(18ARC76)

CO1	Create a full set of design documents for an interior design project and develop skills required for handling interior design projects.
CO2	Equip with theoretical, conceptual, practical and creative aspects of Interior Design along with its allied fields with particular emphasis on commercial, habitat [residential & hospitality], educational and public space interiors.
CO3	Understand the Functional, aesthetic and psychological aspects of interior space components related to built space design.
CO4	Develop a comprehensive design concept based on creative problem solving research including viable space planning using industry standards
CO5	Understand critical thinking strategies generate an appropriate furniture, fixture and materials selection considering applicable codes and sustainability (social responsibility).

7. ELECTIVE-V (ARCHITECTURAL WRITING AND JOURNALISM-(18 ENG7.7)

CO1	Analysis of the role of lighting in architectural journalism.
CO2	Evaluate different techniques and methods for researching and writing architectural research papers.
CO3	Explain the possibilities of architectural writing and journalism.
CO4	Publish research papers on architectural topics.

COURSE OUTCOMES

8th SEMESTER

Students will be able to :

1. ARCHITECTURAL DESIGN - VIII (ARCHITECTURE IN URBAN CONTEXT)(18ARC81)

CO1	Students will be able to understand the key components, terms like public spaces, physical infrastructure, socio-cultural aspects (heritage, gender, urban growth, informality, and place identity to shape the Urban fabric.
CO2	Students will be able to learn basic methods/techniques to read, analyze and interpret (mapping, diagramming and theoretical premise) ,the dynamics of urban environment, the design aspects for designing a public building which integrates with technology, Design, Economy, Ecology, Geography and Sociology and many more .
CO3	It helps students to create/design architecture that responds to the specific demands of the urban context and also in understanding of structures and services in the design of a complex building in the urban context.
CO4	Students will be able to design in terms of sensitive to the needs of differently abled, aged people ,children and also towards the local culture, requirements and locality. Through the study of the built environment which helps to develop a basic understanding of space and form.
CO5	Student will get knowledge about presentation skills such as drawings, models and report which helps in understanding Urban Context/ Precinct.

2. MATERIALS AND METHODS IN BUILDING CONSTRUCTION VIII(18ARC82)

CO1	Students will learn about advanced building techniques such as automation, prefabrication, modular construction, and environmentally friendly construction methods.
CO2	Learn about the knowledge of formwork construction of high-rise buildings and the limits of high-rise buildings.
CO3	Students sharpen and acquire knowledge in computer science, big data, cloud collaboration, information management, construction machinery, and more.
CO4	Students acquire knowledge of building repair, building renovation and renovation work.

3. THESIS SEMINAR(15ARC 8.3)

CO1	Outline the topic of your paper using your research ideas and experiments.
CO2	Literature research of the final topic for the conceptual formation of architectural proposals.
CO3	Independent learning to understand the depth, necessity, and purpose of the dissertation topic.
CO4	Innovative experiments in design, materials, and sustainability.
CO5	Submission of a summary or subject matter such as scope and boundaries, location, building proposals, etc. .

4. PROFESSIONAL PRACTICE(18ARC84)

CO1	To study the professional ethics
CO2	To analyze the present situation of architectural profession in India.
CO3	Brief knowledge about architectural firms and their establishments.
CO4	To get practical knowledge about tendering process.
CO5	To have sense of Contract and its management.



5. CONSTRUCTION AND PROJECT MANAGEMENT(18ENG85)

CO1	Understand the concept of planning, scheduling, cost and quality control, safety during construction, organization and use of project information necessary for construction project.
CO2	Inculcate Human values to grow as responsible human beings with proper personality
CO3	Able to learn Construction Management Techniques: Project Monitoring and Control

6. URBAN PLANNING(18ARC86)

CO1	To study, understand and analyze the evolution of human settlements through ages (Pre Historic period to Modern Period)
CO2	To study, understand and analyze planning theories of various pioneers in human settlement planning
CO3	To study, understand and analyze process of urbanization after Industrial revolution and its impact on human settlements.
CO4	To analyze and apply the Planning Techniques for Settlement Planning.
CO5	To study, understand and analyze Regional Planning Principles and Patterns.
CO6	To Prepare and present the study report for Urban Renewal schemes

7. CONSTITUTIONAL LAW(18HUM87)

CO1	To educate students about the Supreme Law of the Land.
CO2	To create an awareness about Civil Liberties.
CO3	To raise awareness and consciousness of the issues related to the profession and discuss the issue of liability of risks and safety at work place.

8. ELECTIVE -VI (18ARC88)

CO1	Students will be able to understand the significance of research in architecture and apply research design to his assignments
CO2	Students will be able to analyze literature study of the assignments
CO3	Students will be able to evaluate the methods of research in architecture
CO4	Students will be able to analyze and plan the data documentation.
CO5	Students will be able to design the data presentation and report writing



DEPARTMENT OF ARCHITECTURE

5th Year

Course Plan

NINTH SEMESTER

S.N	CODE	COURSE
1	18ARC91	Professional training

TENTH SEMESTER

S.N	CODE	COURSE
1	18ARC101	Architectural design project (thesis)

COURSE OUTCOMES:

9th SEMETER

Students will be able to :

1. PROFESSIONAL TRAINING -(18ARC91)

CO1	Students will be able to understand and apply the techniques of working drawings
CO2	Students will be able to express and create their creativity in design.
CO3	Students will be able to acquire practical knowledge by site visits and illustrate them their design
CO4	Students will be able to gain knowledge and adapting in different fields like, services, structures, material selection etc.
CO5	Students will be able to learn different types of documentation and implementing in respective architectural fields

COURSE OUTCOMES:

10th SEMETER

Students will be able to :

2. ARCHITECTURAL DESIGN PROJECT (THESIS)-(18ARC101)

CO1	Analyze and implement real-world design processes, come up with new ideas, and engage in specializations to design solutions to existing or current problems.
CO2	Explore realistic thematic ideas related to eco-friendly and green concepts based on culture, heritage, tradition, and architecture.
CO3	Improve your design skills with smart construction industry techniques.
CO4	Transforming design ideas into practical buildings those are feasible, comfortable, and sustainable from generation to generation.
CO5	Building solutions for all aspects of the building field.