



## Course Outcome

<b>B. ARCHITECTURE - SEMESTER I</b>	
<b>Name:</b>	<b>Basic Design &amp; Visual Arts, 1S - A - 1</b>
<b>COURSE CODE</b>	<b>OUTCOMES</b>
<b>1S - A - 1 - CO1</b>	To Understand basic elements of design.
<b>1S - A - 1 - CO2</b>	To Understand the principals of design and its role in architectural expression.
<b>1S - A - 1 - CO3</b>	To Understand various techniques of arts with two dimensional and three dimensional compositions.
<b>1S - A - 1 - CO4</b>	To Understand and appreciate the art and express design ideas through various medium.
<b>1S - A - 1 - CO5</b>	To Understand colour composition
<b>Course Name</b>	<b>Construction Technology &amp; Materials – I, 1S-A-2</b>
<b>COURSE CODE</b>	<b>OUTCOMES</b>
<b>1S -A - 2 - CO1</b>	To Understand building elements and material
<b>1S - A - 2 - CO2</b>	To Understand Various construction techniques
<b>1S - A - 2 - CO3</b>	To Understand basic principles of construction and its application in terms of structural system and material. .
<b>1S - A - 2 - CO4</b>	To Understand implication of construction techniques, materials, elements with respect to climate analysis at site level.
<b>1S - A - 2 - CO5</b>	To Understand basic structural systems for construction of building.
<b>Course Name</b>	<b>Structural Design &amp; Systems – I, 1S-A-3</b>
<b>COURSE CODE</b>	<b>OUTCOMES</b>
<b>1S - A - 3 - CO1</b>	To Understand basic types of structural forces & describe co-planer forces, Lami's Theorem and their Application
<b>1S - A - 3 - CO2</b>	Describe basic principles, condition and free body diagrams for Equilibrium of 2 D elements.
<b>1S - A - 3 - CO3</b>	Describe basic principles of resolution of Equilibrium of 2 D elements & understand types of structural supports, structural reactions, types of beam and loads.
<b>1S - A - 3 - CO4</b>	Understand types of structural supports, structural reactions, types of beam and loads.
<b>1S - A - 3 - CO5</b>	Basic Principles of Static Friction and its application for elements on horizontal plane, inclined planes and ladders & properties of plane sections in terms of center of gravity and moment of inertia.
<b>1S - A - 3 - CO6</b>	Understand application for perfect frames, analytical and graphical simply supported beams and weight less cables / strings.
<b>Course Name</b>	<b>History of Art &amp; Architecture –I, 1S-A-4</b>
<b>COURSE CODE</b>	<b>OUTCOMES</b>
<b>1S - A - 4 - CO1</b>	To Understand various styles of art and architecture
<b>1S - A - 4 - CO2</b>	To Understand development from prehistoric period.
<b>1S - A - 4 - CO3</b>	To Understand Indian art and architecture.
<b>1S - A - 4 - CO4</b>	To Understand western art and architecture.
<b>1S - A - 4 - CO5</b>	To Understand implemented elements of Art & Principles of Design.
<b>Course Name</b>	<b>Architectural Graphics - I, 1S-A-5</b>
<b>COURSE CODE</b>	<b>OUTCOMES</b>
<b>1S - A - 5 - CO1</b>	To Understand light and shade of natural and geometric forms
<b>1S - A - 5 - CO2</b>	To Understand architectural representation of symbols used in architectural drawings.
<b>1S - A - 5 - CO 3</b>	To Understand scales used in Architectural practice
<b>1S - A - 5 - CO 4</b>	To able use different line weights in graphical presentation
<b>Course Name</b>	<b>Workshop Practice- I, 1S-A-6</b>
<b>COURSE CODE</b>	<b>OUTCOMES</b>
<b>1S - A - 6 - CO1</b>	To Able to connect Practicality and Knowledge
<b>1S - A - 6 – CO2</b>	To Able to use various tools for workshop
<b>1S - A - 6 – CO3</b>	To Analyze various building materials with property of different materials used in construction
<b>1S - A - 6 – CO4</b>	To Able to gather relevant data & tools to analyze it and application in design.
<b>Course Name</b>	<b>Computer Application(NG) , 1S-A-7</b>
<b>COURSE CODE</b>	<b>OUTCOMES</b>
<b>1S-AA-1- CO1</b>	To understand computer tools used for documentation
<b>1S-AA-1 – CO2</b>	To understand presentation skills on computers
<b>1S-AA-1 – CO3</b>	To Able to use computer for recording
<b>1S-AA-1 – CO4</b>	To understand basic skills of computer which utilize in practice.



<b>B. ARCHITECTURE - SEMESTER II</b>	
<b>Course</b>	<b>Architectural Design I, 2S-A-1</b>
<b>COURSE CODE</b>	<b>OUTCOMES</b>
2S-A-1 - CO 1	To Able to visualize the spaces
2S-A-1 - CO 2	To understand anthropometry
2S-A-1 - CO 3	To understand the relationship between form, space and structure
2S-A-1 - CO 4	To Understand basic elements of build forms for architectural expression
2S-A-1 - CO 5	To Understand the concept in design & to develop it
2S-A-1 - CO 6	Understand climatic condition & implimentation of architectural elements
<b>Course Name:</b>	<b>Construction Technology &amp; Materials – II, 2S-A-2</b>
<b>COURSE CODE</b>	<b>OUTCOMES</b>
2S -A - 2 - CO1	Understand basic building material, their physical and Aesthetic properties
2S -A - 2 – CO2	Understand basic principles/rules of masonry for load bearing capacity and stability.
2S -A - 2 – CO3	Understand concept of span and application in creating openings.
2S -A - 2 – CO4	Understand basic principles to use timber as a building material
<b>Course Name:</b>	<b>Structural Design &amp; Systems – II , 2S-A-3</b>
<b>COURSE CODE</b>	<b>OUTCOMES</b>
2S -A - 3 - CO1	Understand stability of Masonry Structural elements
2S -A - 3 – CO2	Understand concept and application of simple stresses and strains. Describe stress, strain, study of stresses & strains, Hook’s law.
2S -A - 3 – CO3	Understand principle of superimposition & stresses in composite sections
2S -A - 3 – CO4	Describe concept and application of thermal stresses and strains : Simple and composite section
2S -A - 3 – CO4	Describe Elastic Constants, Poisson’s ratio, Bulk Modulus, Modulus of elasticity, Modulus of rigidity.
2S -A - 3 – CO5	Describe concept and application of shear stresses and its distribution in Rectangular, Circular, I & T section only.
2S -A - 3 – CO6	Understand concept and application of bending stresses in circular bending & describe concept and application of torsion of solid and hollow circular shafts of same material.
<b>Course Name:</b>	<b>History of Art &amp; Architecture –II , 2S-A-4</b>
<b>COURSE CODE</b>	<b>OUTCOMES</b>
1S -A - 4 - CO1	Analyze the River valley Civilizations of the world
1S -A - 4 - CO2	Analyze the principles of Greek, Roman & Christian architecture.
1S -A - 4 - CO3	Analyze and Understand the Islamic, Hindu temple, jain & Buddhist architecture.
1S -A - 4 – CO4	understand the role of various factors in shaping the evolution of building type.
<b>Course Name:</b>	<b>Architectural Graphics - II , 2S-A-5</b>
<b>COURSE CODE</b>	<b>OUTCOMES</b>
2S -A - 5 - CO1	Understand concept of reference plane and projection
2S -A - 5 – CO2	Apply the concept of projection for graphical drawing
2S -A - 5 – CO3	Apply basic drafting methods for visualising object
2S -A - 5 – CO4	Apply skills for drafting architectural drawings.
<b>Course Name:</b>	<b>Workshop Practice – II , 2S-A-6</b>
<b>COURSE CODE</b>	<b>OUTCOMES</b>
2S -A -6 - CO1	Understand of various material and efficiency in technique.
2S -A -6 – CO2	Able use surface finishes techniques and processes.
2S -A -6 – CO3	Understand various application & techniques for painting.
2S -A -6 – CO4	Apply tools of workshop for producing object
<b>Course Name:</b>	<b>Elective a – II , Presentation skill II - 2S-AA-1</b>
<b>COURSE CODE</b>	<b>OUTCOMES</b>
2S-AA-1- CO1	Able to understand different presentation skills for present architectural work.
2S-AA-1- CO2	Able to present ideas by using skills like sketching, rendering, drawing.
2S-AA-1- CO3	Able to implement the presentation skill enhance the object
2S-AA-1- CO4	Able to involve your design skills for design project.
<b>Course Name:</b>	<b>Elective b – II , Fundamentals of drawing techniques II - 2S-AA-2</b>
<b>COURSE CODE</b>	<b>OUTCOMES</b>
2S-AA-2- CO1	Able to understand fundamentals of architectural Drawing.
2S-AA-2- CO2	Able to present drawing and their details.
2S-AA-2- CO3	Able to expressing ideas in the form of drawings
2S-AA-2- CO4	Able to develop a repertoire for their design work.



<b>B. ARCHITECTURE - SEMESTER III</b>	
<b>Course Name:</b>	<b>Architectural Design II, 3S-A-1</b>
<b>COURSE CODE</b>	<b>OUTCOMES</b>
3S-A-1 - CO 1	To Create complexity in aesthetic qualities and functional aspects.
3S-A-1 - CO 2	To Create proper circulation and movement.
3S-A-1 - CO 3	To Create Conceptual design with space organization.
3S-A-1 - CO 4	To Apply basic building material with respect to functional quality and form of building.
3S-A-1 - CO 5	To Create aesthetic and functional solution with climatic consideration for design.
<b>Course Name</b>	<b>Construction Technology &amp; Materials – III, 3S-A-2</b>
<b>COURSE CODE</b>	<b>OUTCOMES</b>
3S -A - 2 - CO 1	To Understanding of vertical connectivity
3S -A - 2 - CO 2	To Understanding of spanning using different roofing material
3S -A - 2 - CO 3	To Understanding of flooring and roofing material
3S -A - 2 - CO 4	To Understanding the role of reinforcement in R.C.C construction
<b>Course Name</b>	<b>Structural Design &amp; Systems – III , 3S-A-3</b>
<b>COURSE CODE</b>	<b>OUTCOMES</b>
3S -A - 3 - CO1	Able to understand Principal stresses and strain and describe application of Mohr's Circle method.
3S -A - 3 - CO2	Able to understand concept and application of direct and bending stresses & stability of retaining walls.
3S -A - 3 - CO3	Describe stress and strain curves for concrete and steel & understand concept and application of Column and struts :Eulers and Rankins theory
3S -A - 3 - CO4	Understand Hoop stress / longitudinal stress in cylinders and pipes & understand Simply supported beams –BM and SF Diagrams, Cantilever beams.
<b>Course Name</b>	<b>History of Art &amp; Architecture –III , 3S-A-4</b>
<b>COURSE CODE</b>	<b>OUTCOMES</b>
3S -A - 4 - CO 1	To Analyse Social changes and architectural style in India due to Islam
3S -A - 4 - CO 2	To Analyse mughal architecture
3S -A - 4 - CO 3	To Analyze schools thoughts and Understand modern architecture with their impact on contemporary architecture.
3S -A - 4 - CO 4	To Analyze industrial revolution and major impact of modern architecture on Indian contemporary architecture.
<b>Course Name</b>	<b>Architectural Graphics - III , 3S-A-5</b>
<b>COURSE CODE</b>	<b>OUTCOMES</b>
3S -A - 5 - CO1	Apply perception of an object & important terms planes, standpoint, eye level.
3S -A - 5 - CO2	Apply types of perspective views & geometrical drawing.
3S -A - 5 - CO3	Apply sciography & principle of conventional angle of light and its rays.
3S -A - 5 - CO4	Apply techniques for measure existing area and preparation of drawing in scale.
<b>Course Name</b>	<b>Suveying and Levelling – II , 3S-A-6</b>
<b>COURSE CODE</b>	<b>OUTCOMES</b>
3S -A - 6 - CO1	Remember types of surveying, its method and application.
3S -A - 6 - CO2	Remember chain & compass survey, method of using instruments on site, plotting and adjustment of closing errors on site.
3S -A - 6 - CO3	To understand methods and instruments used for survey & methods of leveling and its uses.
3S -A - 6 - CO4	To understand use of theodolite and contour survey & plan meter and its uses.
<b>Course Name</b>	<b>Climate &amp; Architecture, 3S-A-7</b>
<b>COURSE CODE</b>	<b>OUTCOMES</b>
3S -A - 6 - CO 1	To Remember different climatic zones and architecture according climatic condition.
3S -A - 6 - CO 2	Analyze traditional/vernacular architectural aspect according to different climatic zones in India.
3S -A - 6 - CO 3	Analyse climatic data, their analysis and method of presentation
3S -A - 6 - CO 4	Analyse effect of climatic on building design & term climate responsive design
<b>Course Name</b>	<b>Elective a- Vernacular architecture, 3S-AA-1</b>
<b>COURSE CODE</b>	<b>OUTCOMES</b>
3S -AA -1- CO 1	To understand concept of vernacular architecture.
3S -AA -1- CO 2	To Create vernacular architecture design
3S -AA -1- CO 3	Analyze techniques of vernacular architecture.
3S -AA -1- CO 4	Analyze climate responsive vernacular methods in modern context
<b>Course Name</b>	<b>Elective b- Critical appreciation, 3S-AA-2</b>
<b>COURSE CODE</b>	<b>OUTCOMES</b>
3S -AA -2- CO 1	To Understand Cricial Appreciation.
3S -AA -2- CO 2	To Analyze Critics with their merits and demerits.
3S -AA -2- CO 3	To understand Effect of Appricaition on architecture
3S -AA -2- CO 4	To Anlyse any Known Building with the tools learnt



<b>B. ARCHITECTURE - SEMESTER IV</b>	
<b>Course Name</b>	<b>Architectural Design II, 4S-A-1</b>
<b>COURSE CODE</b>	<b>OUTCOMES</b>
4S-A-1 - CO 1	To Create complexity in aesthetic qualities and functional aspects.
4S-A-1 - CO 2	To Create proper circulation and movement.
4S-A-1 - CO 3	To Create Conceptual design with space organization.
4S-A-1 - CO 4	To Apply basic building material with respect to functional quality and form of building.
4S-A-1 - CO 5	To Create aesthetic and functional solution with climatic consideration for design.
<b>Course Name</b>	<b>Construction Technology &amp; Materials – IV, 4S-A-2</b>
<b>COURSE CODE</b>	<b>OUTCOMES</b>
4S -A - 2 - CO1	To Understand properties and application of Advance building material
4S -A - 2 – CO2	To Analyse and Design different types of Openings using different material
4S -A - 2 – CO3	To understand basics of partitions using different material.
4S -A - 2 – CO4	To Understand Temporary Structures
<b>Course Name</b>	<b>Structural Design &amp; Systems – IV , 4S-A-3</b>
<b>COURSE CODE</b>	<b>OUTCOMES</b>
4S -A - 3 - CO1	Able to understand concept of fixity and continuity by three moment theorem.
4S -A - 3 – CO2	Able to calculate moment of distribution for single portal frames and continuous beam.
4S -A - 3 – CO3	Able to understand deflection of beam by using Macaulay's method & determinate and in terminate structures and their method of analysis.
4S -A - 3 – CO4	stability.
<b>Course Name</b>	<b>Building Services – I , 4S-A-4</b>
<b>COURSE CODE</b>	<b>OUTCOMES</b>
4S -A - 4 - CO 1	Remember importance & application of building services with I.S. Codes.
4S -A - 4 - CO 2	To Analyze the qualitative and quantitative aspects of water supply
4S -A - 4 - CO 3	To understand details for Fitting, Fixtures And Technic used for water supply
4S -A - 4 - CO 4	To Understand various sewage collection and disposable systems
4S -A - 4 - CO 5	To understand aspects for refuse disposal.
<b>Course Name</b>	<b>Architectural Graphics - III , 4S-A-5</b>
<b>COURSE CODE</b>	<b>OUTCOMES</b>
4S -A - 5 - CO 1	Apply knowledge of visual effect of shades and shadow.
4S -A - 5 - CO 2	Apply principles of conventional lights on object
4S -A - 5 - CO 3	Apply shades and shadows cast by artificial light & draw perspective of interior of building.
4S -A - 5 - CO 4	Able to draw exterior perspective, bird eye views of objects of building with indicated different materials, shades and shadows
<b>Course Name</b>	<b>Theory of Design – I , 4S-A-6</b>
<b>COURSE CODE</b>	<b>OUTCOMES</b>
4S -A - 6 - CO1	To Understand Building elements in all aspects
4S -A - 6 – CO2	To analyze integration of aesthetic and function of architectural design.
4S -A - 6 – CO3	To analyze architectural spaces and mass & basic aesthetic component of design.
4S -A - 6 – CO4	To Analyse effective color in Architecture
<b>Course Name</b>	<b>Theory of Landscape Architecture , 4S-A-7</b>
<b>COURSE CODE</b>	<b>OUTCOMES</b>
4S -A - 7 - CO 1	Understand importance of landscape architecture.
4S -A - 7 - CO 2	Understand basics of landscape architecture from past to present.
4S -A - 7 – CO3	Understanding landscape elements and different factors of landscape.
4S -A - 7 - CO 4	Understand different aspects with respect to climatic conditions of the area.
<b>Course Name</b>	<b>Graphic software - Elective a , 4S-A-8</b>
<b>COURSE CODE</b>	<b>OUTCOMES</b>
4S -A - 8 - CO 1	To Understand different software which can be improving graphical representation.
4S -A - 8 - CO 2	To Apply the skill of presentation using graphical software
4S -A - 8 - CO 3	To Anakyse digital designs
4S -A - 8 - CO 4	To create computer aided drawings
<b>Course Name</b>	<b>Computer application -I - Elective a , 4S-A-8</b>
<b>COURSE CODE</b>	<b>OUTCOMES</b>
4S -A - 8 - CO 1	To Understand different software which can be utilized in professional work.
4S -A - 8 - CO 2	To understand skills and tools of software which utilize in practice.
4S -A - 8 - CO 3	To Able to make more creative and presentable drawing.
4S -A - 8 - CO 4	To able to drawing and modeling and develop work.
<b>Course Name</b>	<b>Product design- Elective a , 4S-A-9</b>
<b>COURSE CODE</b>	<b>OUTCOMES</b>
4S -A - 9 - CO 1	To Create ideas into product through process.
4S -A - 9 - CO 2	To Able use creative skills for planning & artistic interpretation to respond to an environmental necessity.
4S -A - 9 - CO 3	To Able to design product inspired by the shape, form, and structure.
4S -A - 9 - CO 4	To Able to make creative product benifited to society



<b>B. ARCHITECTURE - FIFTH SEMESTER</b>	
<b>Course Name</b>	<b>Architectural Design IV, 5S-A-1</b>
<b>COURSE CODE</b>	<b>OUTCOMES</b>
5S-A-1 - CO 1	To Understand relation of building design with climate
5S-A-1 - CO 2	To analyse and design on contour site.
5S-A-1 - CO 3	To achieve correlation between built form & functions.
5S-A-1 - CO 4	To Understand development control regulations through the standard codes.
<b>Course Name</b>	<b>Construction Technology &amp; Materials – V, 5S-A-2</b>
<b>COURSE CODE</b>	<b>OUTCOMES</b>
5S -A - 2 - CO 1	To Understand different wall finishes.
5S -A - 2 - CO 2	To Understand construction details of Expansion Joints, Water-Proofing, earthquake resistant structures.
5S -A - 2 - CO 3	To understand design and detailing of false ceiling.
5S -A - 2 - CO 4	To Understand advance foundation techniques.
<b>Course Name</b>	<b>Structural Design &amp; Systems – V , 5S-A-3</b>
<b>COURSE CODE</b>	<b>OUTCOMES</b>
5S -A - 3 - CO 1	To analyse structural properties and concepts in RCC design.
5S -A - 3 - CO 2	To understand different limit states, partial safety factors and permissible stresses.
5S -A - 3 - CO 3	Learn To design singly & Doble reinforced RCC sections & 'T' and 'L' beam sections and shear reinforcement in beams.
5S -A - 3 - CO 4	Learn To design RCC sections in tension & understand IS 456 - Section III and design considerations.
<b>Course Name</b>	<b>Building Services – V , 5S-A-3</b>
<b>COURSE CODE</b>	<b>OUTCOMES</b>
5S -A - 4 - CO 1	To understand electrical distribution system at State, City and site level
5S -A - 4 - CO 2	To understand Water distribution system at City, site and house level
5S -A - 4 - CO 3	To understand system of hot water supply & understand rain water harvesting system.
5S -A - 4 - CO 4	To Understand sewage treatment starting from collection to disposal.
<b>Course Name</b>	<b>Architectural Graphics - V , 5S-A-5</b>
<b>COURSE CODE</b>	<b>OUTCOMES</b>
5S -A - 5 - CO 1	To Understand building bylaws as per national building codes.
5S -A - 5 - CO 2	To Understand concept of FSI & FAR.
5S -A - 5 - CO 3	To prepare submission drawing for project.
5S -A - 5 - CO 4	To make detail working drawing for execution
<b>Course Name</b>	<b>Theory of Design – II , 5S-A-6</b>
<b>COURSE CODE</b>	<b>OUTCOMES</b>
5S -A - 6 - CO 1	To understand special relationships & organizations.
5S -A - 6 - CO 2	To understand different styles and types of building.
5S -A - 6 - CO 3	To Understand principles of composition.
5S -A - 6 - CO 4	To Understand circulation pattern and its relation with form and activities.
<b>Course Name</b>	<b>Specification , 5S-A-7</b>
<b>COURSE CODE</b>	<b>OUTCOMES</b>
5S -A - 7 - CO 1	To Understand importance, types and application of specification.
5S -A - 7 - CO 2	To write about different building material.
5S -A - 7 - CO 3	To Gain knowledge about specification for services like, drainage, water supply and electricity.
5S -A - 7 - CO 4	To Understand the specification for temporary structures.



<b>B. ARCHITECTURE - SIXTH SEMESTER</b>	
<b>Course Name</b>	<b>Architectural Design IV, 6S-A-1</b>
<b>COURSE CODE</b>	<b>OUTCOMES</b>
6S-A-1 - CO 1	To design as per effect of climatic zone.
6S-A-1 - CO 2	To incorporate services in Design
6S-A-1 - CO 3	To understand correlation between built form & functions.
6S-A-1 - CO 4	To Understand development control regulations through the standard codes.
<b>Course Name</b>	<b>Construction Technology &amp; Materials –VI, 6S-A-2</b>
<b>COURSE CODE</b>	<b>OUTCOMES</b>
6S -A - 2 - CO 1	To Understand detail specification and application of cladding materials.
6S -A - 2 - CO 2	To Understand different construction materials and their applications.
6S -A - 2 - CO 3	To understand construction system for high rise building.
6S -A - 2 - CO 4	To Understand detailing of R.C.C. structures.
<b>Course Name</b>	<b>Structural Design &amp; Systems – IV , 6S-A-3</b>
<b>COURSE CODE</b>	<b>OUTCOMES</b>
6S -A - 3 - CO - 1	To Understand earthquake resistant structures.
6S -A - 3 - CO - 2	To design different types of slabs and independent column footings.
6S -A - 3 - CO - 3	To design RCC sections in compression of different columns & RCC grid structures & building frames.
6S -A - 3 - CO - 4	To design RCC section for retaining wall & large span RCC structural systems.
<b>Course Name</b>	<b>Building Services – II , 6S-A-4</b>
<b>COURSE CODE</b>	<b>OUTCOMES</b>
6S -A - 4 - CO 1	To Provide insight about components of communication systems & their Functionality.
6S -A - 4 - CO 2	To Provide Understand about BAS, its Functionality, and its importance in architecture to achieve precision & sustainability.
6S -A - 4 - CO 3	To understand Firefighting regulations and measures to control.
6S -A - 4 - CO 4	To Understand about the types of ventilation, need of ventilation and Mechanical ventilation.
<b>Course Name</b>	<b>Architectural Graphics - VI , 6S-A-5</b>
<b>COURSE CODE</b>	<b>OUTCOMES</b>
6S -A - 5 - CO 1	To make center line plan, all floor plans, lintel and slab level plans.
6S -A - 5 - CO 2	To draw Sections, elevations and large- scaled details.
6S -A - 5 - CO 3	To Understand Site development Plan.
6S -A - 5 - CO 4	To Understand & draw Toilet details, Drainage Layout showing soil, waste and rain water drainage system.
6S -A - 5 - CO 5	To Understand water supply system and equipments.
<b>Course Name</b>	<b>Design of Human Settlements , 6S-A-6</b>
<b>COURSE CODE</b>	<b>OUTCOMES</b>
6S -A - 7 - CO 1	To Understand the importance of town Planning history and its evolution.
6S -A - 7 - CO 3	To Understand the role of Pioneers, there work and concepts.
6S -A - 7 - CO4	To Understand the role of Planning in today's context and various methodologies of Planning.
6S -A - 7 - CO 5	To Understand the process of development plan making
<b>Course Name</b>	<b>Estimating and costing , 6S-A-7</b>
<b>COURSE CODE</b>	<b>OUTCOMES</b>
6S -A - 7 - CO 1	To Understand Purpose of estimates.
6S -A - 7 - CO 2	To Understand calculate bill of quantities for Structure, electrification, water supply and sanitation.
6S -A - 7 - CO 3	To Understand make rate analysis for different items.
6S -A - 7 - CO 4	Understand specification and schedule of rates.
<b>Course Name</b>	<b>Elective a - project management , 6S-AA-1</b>
<b>COURSE CODE</b>	<b>OUTCOMES</b>
6S -AA - 1-CO 1	To Understand the scope and structure of construction management.
6S -AA - 1-CO 2	To Understand the time management concepts in construction management.
6S -AA - 1-CO 3	To Understand the modern concepts of management and methods of management.
6S -AA - 1-CO 4	Understand the financial management concepts in construction management.



<b>B. ARCHITECTURE - SEVENTH SEMESTER</b>	
<b>Course Name</b>	<b>Architectural Design VII, 7S-A-1</b>
<b>COURSE CODE</b>	<b>OUTCOMES</b>
7S-A-1 - CO 1	To Understand urban design process and methods of analysis.
7S-A-1 - CO 2	To Recognize the relationship between user, activity and space.
7S-A-1 - CO 3	To Acquire proficiency in design for culture, tradition, topography, climate and building bye laws.
7S-A-1 - CO 4	To understand various design considerations for high rise/tall buildings.
<b>Course Name</b>	<b>Construction Technology &amp; Material - VII, 7S-A-2</b>
<b>COURSE CODE</b>	<b>OUTCOMES</b>
7S-A-2 - CO 1	To Understand pre-cast concrete, design consideration and what are their constraints
7S-A-2 - CO 2	To Understand the importance of grid and skeleton structures
7S-A-2 - CO 3	To Understand temporary structures its types and different joinery details in different construction material.
7S-A-2 - CO 4	To study all types of cladding material with joinery details and fixing details.
<b>Course Name</b>	<b>Building Services - IV, 7S-A-3</b>
<b>COURSE CODE</b>	<b>OUTCOMES</b>
7S-A-3 - CO 1	To Understand heat transfer and understand concept of air conditioning system, load calculation and their applications.
7S-A-3 - CO 2	To Understand electric supply, load calculation and distribution for different buildings.
7S-A-3 - CO 3	To Understand importance and function of various components required for electric supply.
7S-A-3 - CO 4	To Understand vertical transportation in building, their components, functions and construction details.
<b>Course Name</b>	<b>Structural Design &amp; Systems - VII, 7S-A-4</b>
<b>COURSE CODE</b>	<b>OUTCOMES</b>
7S-A-4 - CO 1	To Understand steel connections and welded joints.
7S-A-4 - CO 2	To Understand design tension & compression members.
7S-A-4 - CO 3	To Understand design built in columns and sections in bending.
7S-A-4 - CO 4	To Understand sections subjected to Biaxial bending and structural behavior of different types of steel structures.
<b>Course Name</b>	<b>Research skills &amp; Project Introduction, 7S-A-5</b>
<b>COURSE CODE</b>	<b>OUTCOMES</b>
7S-A-5 - CO 1	To Understand framing sequence of design objectives and methodology.
7S-A-5 - CO 2	To Understand methods used for research like data collection, references and their presentation skills.
7S-A-5 - CO 3	To Understand format for presentation of data collection.
7S-A-5 - CO 4	To Understand quantitative and qualitative research framework and methods.
<b>Course Name</b>	<b>Acoustics and Illumination, 7S-A-6</b>
<b>COURSE CODE</b>	<b>OUTCOMES</b>
7S-A-6 - CO 1	To Understand the concept of frequency ranges of audible sounds, sound isolations, and propagation of sounds.
7S-A-6 - CO 2	To Understand gain the knowledge of acoustical materials and interior finishes for good acoustical design.
7S-A-6 - CO 3	To Understand Understand the concept of light radiations and illumination
7S-A-6 - CO 4	To Understand various luminaries and their types and properties
<b>Course Name</b>	<b>Interior Design, 7S-AA-1</b>
<b>COURSE CODE</b>	<b>OUTCOMES</b>
7S-A-6 - CO 1	To Acquire the vocabulary of interior design.
7S-A-6 - CO 2	To understand overview of furniture design through Indian history
7S-A-6 - CO 3	To Understand various components of interior space like walls, floors, ceilings etc
7S-A-6 - CO 4	To Understand various types of lighting systems and gaining knowledge of luminaries and their types and properties.
<b>Course Name</b>	<b>Urban Planning, 7S-AA-2</b>
<b>COURSE CODE</b>	<b>OUTCOMES</b>
7S-A-6 - CO 1	To Understand evolution of town planning since Medieval, Renaissance and Industrial era.
7S-A-6 - CO 2	To Understand town planning in India and Planning after independence.
7S-A-6 - CO 3	To Understand Pioneers and their work and planning concept of master's architects.
7S-A-6 - CO 4	To Understand Role of Architects / Planners in a team, Importance and methodologies of surveys in the town planning.
7S-A-6 - CO 5	To Understand understand problems of urban and rural housing and analysis of demand and supply of services.



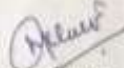
<b>B. ARCHITECTURE - EIGHT &amp; NINTH SEMESTER</b>	
<b>Course Name</b>	<b>Practical Training -8S-A-1 &amp; 9S-A-1</b>
<b>COURSE CODE</b>	<b>OUTCOMES</b>
7S-A-1 - CO 1	To Understand Rules and regulations for fieldwork
7S-A-1 - CO 2	To Understand thumb rules for execution of site
7S-A-1 - CO 3	To Understand client handling and satisfying their needs
7S-A-1 - CO 4	To Understand the architect's office records maintenance
<b>B. ARCHITECTURE - TENTH SEMESTER</b>	
<b>Course Name</b>	<b>Project - 10S-A-1</b>
<b>COURSE CODE</b>	<b>OUTCOMES</b>
10A-1 - CO 1	To Understand the scope of Research Project in Architectural Interest.
10A-1 - CO 2	To Find problems on the synthesis of their total experience and knowledge gained from the allied subjects
10A-1 - CO 3	To Understand the approach to the design solution rather than the end-result.
10A-1 - CO 4	To Understand make seminar and detail design on their selected topics.
<b>Course Name</b>	<b>Construction Technology and materials - 10S-A-2</b>
<b>COURSE CODE</b>	<b>OUTCOMES</b>
10A-2 - CO 1	To Understand construction techniques to large span, roofing, suspension, membrane and pneumatic structures
10A-2 - CO 2	To Understand gain knowledge about high rise structural systems and design considerations for same.
10A-2 - CO 3	To Understand courses of defects in building, tests and rehabilitation methods, chemical usage and repairing techniques.
10A-2 - CO 4	To Understand gain knowledge about Earthquake and architectural design.
10A-2 - CO 5	Understand Design and detailing of additions and alterations in existing building and precautions required for same.
<b>Course Name</b>	<b>Professional Practice - 10S-A-3</b>
<b>COURSE CODE</b>	<b>OUTCOMES</b>
10A-3 - CO 1	To Understand various responsibilities of an architect and liabilities of an architect towards the client.
10A-3 - CO 3	To Understand architects office, orientation and administration with setup, standardization, preparation of drawing and documentations.
10A-3 - CO 4	To Understand tenders opening & selection, reports, work order, types of contract, documents, and detailed knowledge of contract published by IIA.
10A-3 - CO 5	To Understand Architect act 1972 their effect and general information to various acts, laws and building Bye-laws.
<b>Course Name</b>	<b>Elective a -HIGH RISE BUILDING- 10S-AA-1</b>
<b>COURSE CODE</b>	<b>OUTCOMES</b>
10A-3 - CO 1	To Understand Gain knowledge about high rise building and their details.
10A-3 - CO 2	To Understand earthquake resistance techniques for high rise structures.
10A-3 - CO 3	To Understand design consideration and detailing of high rise building.
10A-3 - CO 4	To Understand construction detail, services and systems used in high rise building.





## Program Outcome

Tulsiramji Gaikwad-Patil College of Architecture, Nagpur	
Program outcome (PO)	
PO1	Do you Apply the knowledge of mathematics to the solution of complex engineering problems Do you Apply the knowledge of science to the solution of complex engineering problems Do you Apply the knowledge engineering fundamentals to the solution of complex engineering
PO2	Do You Identify, formulate, research literature Do You analyze complex engineering problems reaching substantiated conclusions using first Do You analyze complex engineering problems reaching substantiated conclusions using engineering
PO3	Do you able Design solutions for complex engineering Do you able design system components or processes that meet the specified needs with appropriate Do you able design system components or processes that meet the specified needs with the cultural,
PO4	Do you Use research-based knowledge to provide valid conclusions. Do you Use research methods including design of experiments, analysis and interpretation of to provide Do you Use synthesis of the information to provide valid conclusions.
PO5	Do you Create, select, and apply appropriate techniques to complex engineering activities with an understanding of the limitations. Do you use resources, and modern engineering to complex engineering activities with an understanding Do you use IT tools including prediction and modeling to complex engineering activities with an
PO6	Do you Apply reasoning informed by the contextual knowledge to assess societal and cultural to the professional engineering practice. Do you Apply reasoning informed by the contextual knowledge to assess health, safety to the Do you Apply reasoning informed by the contextual knowledge to assess legal and the consequent
PO7	Do you Understand the impact of the professional engineering solutions in societal Context for sustainable development. Do you Understand the impact of the professional engineering solutions in environmental contexts for Do you Understand the impact of the professional engineering solutions to demonstrate the knowledge
PO8	Do you able Apply ethical principles Do you commit to professional ethics and responsibilities Do you apply norms of the engineering practice
PO9	Do you Function effectively as an individual Do you Function effectively as a member or leader in diverse teams Do you Function effectively in multidisciplinary settings.
PO10	Do you Communicate effectively on complex engineering activities with the engineering community Do you Communicate effectively and able design documentation, make effective presentations Do you Communicate effectively and give and receive clear instructions.
PO11	Do you Demonstrate knowledge and understanding of the engineering and management principles as a Do you apply management principles and finance to manage projects Do you apply management principles and finance to one's own work, in multidisciplinary environments.
PO12	Do you realize the need for lifelong learning Have you prepared for lifelong learning Do your ability to engage in independent and lifelong learning in the broadest context of technological change

  
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of Architecture, Nagpur