MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR
(Deemed University)
(Declared Under Distinct Category by Ministry of Education, Government of India)
NAAC Accredited with A++ Grade

BACHELOR OF ARCHITECTURE

SYLLABUS

(I Semester)
Batch 2025 Onwards

DEPARTMENT OF ARCHITECTURE & PLANNING

First Year First Semester

1. Graphics I (Code - 21251101) & 7. Graphics Studio I (Code - 21251107)

Objectives –The course aims to obtain presentation skills, visual expression and representation, imaginative thinking and creativity through a hands on working with various mediums and materials, grammar of art by involving them in a series of free hand exercises both indoor and outdoor to understand form, proportion, scale, etc., exercises that look at graphic and abstract representations of art, concepts and fundamentals of Architectural Drawing, language of architecture & buildings as two dimensional and three dimensional representations.

S. No.	Course Code	Category Code	Course Name	Maximum Marks Allotted						Total Marks	Contact Hours per week			Total Credits	Mode of Learning	Mode of Exam.
				Theory Block				Practical Block								
				Continuous Evaluation			Major Evaluation	Continuous Evaluation	Major Evaluation		L	T	P			
				Minor Evaluation I	Minor Evaluation II	Quiz/ Assignment		Lab Work & Sessional								
1.	21241101	DC	Graphics I	20	20	30	30	-	-	100	2	-	-	2	ace to Fac	PP
7.	21241107	DLC	Graphics Studio I	-	-	-	-	70	30	100	-	-	4	2	xperiment l	SO

UNIT-1 INTRODUCTION TO DRAWING

- Introduction to drawing instruments and their use
- Lettering and Dimensioning: Introduction to architectural lettering, styles, proportion and scale, Methods of dimensioning
- Lines: different types of lines, their thickness and applications in architectural drawing.
- Scale: Architectural Metric scale, necessity of scaled drawing, selection of scale while preparing architectural drawing.

UNIT-2 GEOMETRICAL DRAWING & ORTHOGRAPHIC PROJECTION

- Introduction to plane geometry: Construction and development of planar surface–square, rectangle, polygon etc.
- Construction of conic sections: Ellipse, parabola and hyperbola
- Introduction to orthographic projection: Representation of geometric solids in terms of plan, elevation and side elevation in first angle projection – exercise on simple solids.
- Conversion of solids to orthographic projection and vice versa.

UNIT-3 ISOMETRIC VIEW & AXONOMETRIC VIEW

- Isometric view: Isometric view of solids, Isometric application in building–buildings with different shape and different types of roofs to include pitched roof, hipped roof, flat roof, vault, cone, dome etc

UNIT-4 ISOMETRIC VIEW & AXONOMETRIC VIEW OF BUILDINGS

- **Isometric view: Exterior view of a simple residential building showing all building components.**
- **Axonometric view: Axonometric view of a room interior showing all interior components.**

UNIT-5 BUILDING ELEMENTS AND BUILDING COMPONENTS

- Building Elements: Techniques of representing building elements such as doors, windows, steps, chajja, porch, canopy, balcony, parapet, foundation, walls, roofs, column, staircase, difference of levels, furniture fittings such as hand wash basins, WC pans, traps etc. on drawings in plan, elevation and section.
- Material Indications: Symbolic representation of building materials as specified by Indian Standard Code of practice.
- Building components: Components of a simple residential building.

COs & LOs for Graphics I & Graphics Studio I			
Overall Course Outcome: Students will be able to develop, draw simple and complex objects in various types of views and will be able to visualize and draw buildings in different views.			
CO1	Students will be able to **draw** the elements of design and apply them in their drawings.	LO1	**Learn** various drawing instruments and their use.
		LO2	**Understand** the lettering and dimensioning technique.
		LO3	**Apply** the techniques by using lines type, letters, dimensioning and scale in drawing.
		LO4	**Analyze** the necessity of scaled proportionate and properly illustrated drawing.
		LO5	**Draw** compositions using all elements**.**
CO2	Students will be able to **draw** planar surface / conic sections in orthographic projections.	LO1	**Study** the construction and development of planar surfaces, conic and orthographic projection.
		LO2	**Understand** use of planar surfaces, conic and orthographic projection.
		LO3	**Construct** various geometrical shapes.
		LO4	**Interpret** and visualization of geometrical shapes in different views & angles.
		LO5	**Draw** compositions showcasing various objects in conic sections, orthographic projections.
CO3	Students will be able to **draw** solids and building elements in isometric projection.	LO1	**Study** the construction and development of solids and building roof elements.
		LO2	**Understand** the isometric projections.
		LO3	**Develop** solids and building roof elements in isometric projection.
		LO4	**Visualization** of geometric solids and building roof elements.
		LO5	**Draw** compositions of geometric solids and building roof elements in isometric projections.
CO4	Students will be able to **draw** plans, elevations and sections.	LO1	**Learn** various building elements, components and materials.
		LO2	**Understand** use of building elements, components and materials
		LO3	**Illustrate** the representation techniques of building elements, components and materials.
		LO4	**Analyze** all representations and symbols in buildings.
		LO5	**Draw** plans, elevations and sections using all building elements, components and materials.
CO5	Students will be able to **draw** interior and exterior views.	LO1	**Learn** about axonometric and isometric views of complex objects.
		LO2	**Understand** use of axonometric and isometric views for exteriors and interiors of buildings.
		LO3	**Illustrate** interiors, exterior elements.
		LO4	**Draw an isometric** view of the exterior of the building using all building components.
		LO5	**Draw an axonometric** view of interiors of rooms using building components.

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO13
CO1	3	3	2	1	1	3	1	2	2	3	1	1
CO2	3	3	2	1	1	3	1	2	2	3	1	1
CO3	3	3	2	1	1	3	2	2	2	3	1	1
CO4	3	3	2	2	2	3	3	2	2	2	1	2
CO5	3	3	2	2	2	3	3	3	3	3	1	2

1 - Slightly; 2 - Moderately; 3 – Substantially

REFERENCES:

1. Charles Wallschlacgerm& Cynthia Busic-Snyder, Basic Visual Concepts and Principles for Artists, Architects and Designers, McGraw Hill, New York1992.
2. V.S. Pramar, Design fundamentals in Architecture, Somaiya Publications Pvt. Ltd., New Delhi,1973.
3. Francis D.K.Ching - Architecture- Form Space and Order Van No strand Reinhold, Co., (Canada),1979.

4. Elda Fezei, Henry Moore, Hamlyn, London, New York, Sydney, Toronto,1972.
5. Exner. V, Pressel. D, Basics Spatial Design, Birkhanser,2009

Note: Five questions shall be asked. All questions may have equal or varied weightage in end semester exams.

2. Building Materials (Code -21251102)

Objectives – The course aims to obtain various materials and systems, their properties and applications, develop a fundamental understanding of the relationship of materiality to construction systems and techniques, the intrinsic relationship of building materials to structural systems and environmental performance.

S. No.	Course Code	Category Code	Course Name	Maximum Marks Allotted						Total Marks	Contact Hours per week			Total Credits	Mode of Learning	Mode of Exam.
				Theory Block				Practical Block			L	T	P			
				Continuous Evaluation			Major Evaluation	Continuous Evaluation	Major Evaluation							
				Minor Evaluation I	Minor Evaluation II	Quiz/ Assignment		Lab Work & Sessional								
2.	21241102	BSC	Building Materials	20	20	30	30	-	-	100	2	1	-	3	ace to Fac	PP

Building Materials (Code -21241102)

Objectives – The course aims to obtain various materials and systems, their properties and applications, develop a fundamental understanding of the relationship of materiality to construction systems and techniques, the intrinsic relationship of building materials to structural systems and environmental performance.

UNIT-1 INTRODUCTION TO PRIMARY BUILDING MATERIALS
Historical evolution of building materials and construction methods. Clay and clay products (bricks, tiles), stones, timber, etc.

UNIT-2 BAMBOO & TIMBER
Timber types, qualities, and defects in timber seasoning. Processed materials - plywood, laminates, fiberboards, lightweight boards, panels & timber products. Bamboo as plant classification, species, geographical distribution, Anatomy of Bamboo, Properties, strength, processing, harvesting, working of Bamboo tools – Treatment and preservation of Bamboo and uses of Bamboo. Termite protection, sewage protection, fire protection materials of special needs.

UNIT-3 CEMENT AND OTHER RELATED MATERIALS.
Composition of cement, properties & various types of cement and their uses. Lime, sand, aggregate & mortar.
Special functional needs and categories of building materials abrasives, adhesives, asbestos, asphalt, bitumen, cork, electrical insulators, fuels, gypsum and heat insulation materials, lubricants, rubber sheets, roof coverings, and solders, sound absorb materials, tar and turpentine.

UNIT-4 GLASS
Classification of glass, types of glass, physical properties and uses of glass in building industries, a special variety of glass and architectural glass.

UNIT-5 PROPRIETARY BUILDING MATERIALS & OTHERS
Proprietary building materials: - Paints, Varnishes, distempers wallpaper, floor coverings, tiles, vinyl's, polyesters, fittings, furnishing materials for interiors & exteriors polymers, plastics resins and advanced surface finishes for interior and exterior.

Industrial, agricultural and mineral wastes and their utilization as building materials: Fly ash, blast furnace slag, calcium carbonate, lime kiln rejects, by-product, gypsum, red mud, throw-away packages, rice husk, sawdust, wooden chips, choir waste, wood wool, tailings etc. their application in components of different types of buildings.

Note: Assignments should be in the form of small reports, market surveys, seminars and notes on above- mentioned topics. The works of CBRI, NBO, HUDCO, and other related institutions are referred to and discussed.

COs & LOs for Building Materials

Overall Course Outcome: The course aims to obtain various materials and systems, their properties and applications, develop a fundamental understanding of the relationship of materiality to construction systems and techniques, the intrinsic relationship of building materials to structural systems and environmental performance.

CO1	Students will be able to **understand** the use of appropriate materials for building and construction.	LO1	**Learn** about different construction materials
		LO2	**Understand** the composition, properties and uses of various building materials.
		LO3	**Develop** a fundamental understanding it's application in building works.
		LO4	**Analyze** the building materials and its influence on prevailing architectural styles
		LO5	**Integrate** the market survey of different types of material
CO2	Students will be able to **understand** the detailing of building material and its applicability.	LO1	**Learn** Types of timber and it's processed materials.
		LO2	**Illustrate** specific use of materials and ascertain their application
		LO3	**Understand** the defects and treatment in timber seasoning.
		LO4	**Develop** an understanding of techniques used for it's application.
		LO5	**Integrate** the market survey of different types of material
CO3	Student will be able to **select** appropriate building materials based on properties, suitability, and it's application	LO1	**Remember** various types of building materials and their special functional needs.
		LO2	**Understand** their applicability, uses and their limitations
		LO3	**Analyze** their properties for their effective use in building construction works.
		LO4	**finalize** specific building materials for different types of buildings
		LO5	**Integrate** the market survey of different types of material
CO4	Students will be able to **understand** the structural component and glazing methods and how to make fenestrations delicate with it's appropriate usage.	LO1	**Understand** the different types of glass in the building industry.
		LO2	**Identify** suitable types of glass for use in field or Architecture.
		LO3	**Develop** understanding of its physical properties and varieties in buildings.
		LO4	**Analyze** specific use of glass and it's application techniques.
		LO5	**Integrate** the market survey of different types of material
CO5	Students will be able to **deal** with effective budgeting which will reduce the cost of construction through use of locally available materials along with improved skills and technology without sacrificing the strength, performance and life of the structure.	LO1	**Learn** Low cost Construction Techniques.
		LO2	**Analyze** building materials and its influence on prevailing architectural styles
		LO3	**finalize** specific building materials for different types of buildings
		LO4	**Consider** local material and its application techniques for low cost construction
		LO5	**Integrate** the market survey of different types of material

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO13
CO1	2	2	3	3	3	2	2	3	2	1	2	1
CO2	2	2	3	3	3	2	3	3	2	1	3	3
CO3	2	3	3	3	2	2	3	3	2	1	3	3
CO4	2	3	3	3	2	2	3	3	1	1	2	1
CO5	1	3	3	3	2	2	3	3	2	1	2	3

1 - Slightly;

2-Moderately; 3 –Substantially

TEXT BOOKS:

1. S.C. RANGWALA, " Engineering Materials" Published2012
2. S.P. ARORA & BINDRA, "Building Construction" Published Dec2010

REFERENCE BOOKS:

1. Advances in Building Materials and Construction,CBRI.
2. Specification Yearbook

3. Structure I (Code – 21251103)

Objectives – The course aims to obtain presentation skills, visual expression and representation, imaginative thinking and creativity through a hands on working with various mediums and materials, grammar of art by involving them in a series of free hand exercises both indoor and outdoor to understand form, proportion, scale, etc., exercises that look at graphic and abstract representations of art, concepts and fundamentals of Architectural Drawing, language of architecture & buildings as two dimensional and three dimensional representations.

S. No.	Course Code	Category Code	Course Name	Maximum Marks Allotted						Total Marks	Contact Hours per week			Total Credits	Mode of Learning	Mode of Exam.
				Theory Block				Practical Block			L	T	P			
				Continuous Evaluation			Major Evaluation	Continuous Evaluation	Major Evaluation							
				Minor Evaluation I	Minor Evaluation II	Quiz/ Assignment		Lab Work & Sessional								
3.	21241103	ESC	Structure I	20	20	30	30	-	-	100	2	1	-	3	ace to Fac	PP

UNIT-1FORCE & EQUILIBRIUM

Graphical and analytical treatment of Concurrent and non- concurrent coplanar forces, free body diagram and Bow's notations , Introduction to force system in space: Equilibrium concepts.

UNIT-2 EQUILIBRIUM PROBLEM INVOLVING FRICTIONAL FORCES

Laws of coulomb friction, inclined plane; ladder friction ; wedge friction, square threaded screws; belt friction; rolling resistance.

UNIT-3 PROPERTIES OF AREAS

Centroid of plane areas, moment of inertia, theorem of parallel axis and theorem of perpendicular axis; product of inertia of areas, polar moment of inertia, principal

axis and principal moments of inertia.Shear force and bending moments for strained beams subjected to concentrated load and Distributed loadings (Simply supported and cantilever only) support reactions.

UNIT-4 SHEAR FORCE AND BENDING MOMENT
Shear force and bending moment diagram for cantilever, simply supported and overhanging beam with concentrated, distributed load and couple.

UNIT-5 TRUSSES
Support reactions, analysis of plane trusses, method of joints, method of sections, graphical method.

Note: Assignment work should include design and analysis of simple elements as stated above with drawings.

COs & LOs for Structure I Overall Course Outcome: Students will be able to analyze simple structural behavior using principles of structural mechanics, bending moment and shear force diagrams.			
CO1	Students will be able to **understand** the behaviour of forces and various principles of strength of materials.	LO1	**Learn** statics of a particle, composition and resolution of forces, moment of a force, parallel forces, couples, general conditions of equilibrium.
		LO2	**Understand** the composition, resolution and types of forces, general conditions of equilibrium.
CO2	Students will be able to **understand** relationship between the bending to the material property and geometry	LO1	**Learn** centre of gravity and moment of inertia of composition and cut out sections.
		LO2	**Understand** parallel and Perpendicular axes theorem, stability of equilibrium
CO3	Students will be able to **calculate** stresses and strains.	LO1	**Learn** simple stress and strain.
		LO2	**Understand** direct and compound stress.
		LO3	**Calculate** direct and compound stress and strain
CO4	Students will be able to **apply** shear force and bending moments for strained beams subjected to concentrated load and Distributed loadings.	LO1	**Learn** shear force and bending moment.
		LO2	**Understand** Shear force and bending moments subjected to concentrated load.
		LO3	**Apply** shear force and bending moments for strained beams subjected to concentrated load and Distributed loadings (Simply supported and cantilever only) support reactions.
CO5	Students will be able to **calculate** the level of stress in beams.	LO1	**Learn** various stresses in beam.
		LO2	**Understand** direct, bending and shearing stress in beams.
		LO3	**Calculate** the various levels of stress in beams.

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO13
CO1												
CO2												
CO3												
CO4												
CO5												

1 - Slightly; 2 - Moderately; 3 – Substantially

REFERENCES:

1. K. Venugopalet al., “Engineering Drawing + AutoCAD”, New Age International Publishers,2010.
2. Francis D.K Ching, “Architectural Graphics- Fifth Edition”, John Wiley and Sons, NewJersey,2009.
3. N.D. Bhatt et al., “Engineering Drawing” (53rd Edition), Charotar Publishing House, Anand,India,2014.
4. Morris et al., “Geometrical Drawing for Art Students”, Universities press, 2012.
5. Leslie Martin C., “Architectural Graphics”, The Macmillan Company, New York,1978.

Note: Four questions shall be asked. First question will contain 20 marks & will be compulsory. Other three questions will be of equal marks and one question may have options.

4. Architectural History of Ancient Civilizations (Code – 21251104)

Objectives – The course aims to obtain knowledge of evolution with regarding to Indian architecture, in India as this is an integrated expression of art, culture, vernacular material and techniques of the place, designs that are rooted in this country and suitable to the lifestyle of its people, varied culture and the resulting architectural productions which are unique in time and place.

S. No.	Course Code	Category Code	Course Name	Maximum Marks Allotted						Total Marks	Contact Hours per week			Total Credits	Mode of Learning	Mode of Exam.
				Theory Block				Practical Block								
				Continuous Evaluation			Major Evaluation	Continuous Evaluation	Major Evaluation		L	T	P			
				Minor Evaluation I	Minor Evaluation II	Quiz/ Assignment		Lab Work & Sessional								
4.	21251104	DC	Architectural History of Ancient Civilizations	20	20	30	30	-	-	100	2	1	-	3	ace to Fac	MCQ

UNIT-1RIVER VALLEY CIVILIZATIONS OF INDIA

Prehistoric civilization, Neolithic & Paleolithic. Indus Valley Civilization: culture and pattern of settlement. Vedic culture - Vedic village and rudimentary forms of bamboo and wooden construction - Aryan civilization - origin of earlyHinduism.

UNIT-2 BUDDHIST ARCHITECTURE

Origins of Buddhism and Jainism, Evolution of Buddhist Architecture and its salient features- Examples – Ashokan Pillar at Sarnath and Sanchi stupa. Chaitya hall and Vihara - Buddhist rock cut architecture Examples - Chaitya hall at Karli, Viharas at Nasik.

UNIT-3 EGYPTIAN ARCHITECTURE

Study of the influences & architectural character of ancient Egypt with relevant examples of Tomb & Temple structures (Cult and Mortuary temples), Mastaba – development and typical components of Pyramids – Complex of Zoser, Pyramid of Cheops and Cephren.

UNIT-4 WEST ASIATIC ARCHITECTURE

Study of Mesopotamian architecture, Urbanization in the Fertile Crescent – Sumerian, Babylonian, Assyrian and Persian (with examples of Ziggurat, Sargon palace & Palace of Persepolis). Mayan Civilization- Ceremonial platforms, palaces, pyramids and temples.

UNIT-5 INTRODUCTION TO SOUTH EAST ASIAN AND EAST ASIAN ARCHITECTURE

StudyofprominentarchitecturalcharacterofsouthAsiancountries.StudyofrelevantexampleslikeAngkorwat Cambodia. Introduction to Chinese architecture and typical examples of Pagoda, Pylons, Great Wall of China, temples, etc. Introduction to Japanese architecture, its characteristic features and typical examples: Pagoda, temples, monasteries, tea houses etc.

COs & LOs for Architectural History of Ancient Civilizations Overall Course Outcome: Students will be able to **develop** an appreciation of varied cultures and the resulting architectural productions that are unique in time and place & suitable to the lifestyle of its people.			
CO1	Students will be able to **apply** concepts and architectural expressions in their own design.	LO1	**Remember** basic concepts regarding the historical and architectural development in ancient civilization.
		LO2	**Observe** diverse artistic and architectural expressions with regard to the ancient civilizations.
		LO3	**Illustrate** visual and verbal vocabularies of architecture of ancient civilizations.
		LO4	**Evaluate** architectural forms and space with reference to architecture of ancient civilizations,
		LO5	**Reproduce** with help of sketches/visuals (softwares)/3D (models) of various architectural forms and styles of ancient civilizations.
CO2	Students will be able to **apply** elements of Buddhist architecture in their own design.	LO1	**Understand** basic concepts regarding the historical and architectural development in buildings in Buddhist Architecture.
		LO2	**Identify** diverse artistic and architectural expressions with regard to the Buddhist Architecture.
		LO3	**Illustrate** visual and verbal vocabularies of Buddhist Architecture.
		LO4	**Analyse** architectural forms and space with reference to Buddhist Architecture,
		LO5	**Replicate** with help of sketches/visuals (softwares)/3D (models) of various architectural forms and styles of Buddhist Architecture.
CO3	Studying this, students will be able to **apply** elements of Egyptian architecture in their own design.	LO1	**Understand** the architectural characters of the Ancient Egyptian buildings.
		LO2	**Identify** development and typical components of Egyptian pyramids.
		LO3	**Illustrate** visual and verbal vocabularies of Egyptian Architecture.
		LO4	**Analyze** architectural forms and space with reference to Tomb, Mastaba, Temples, etc. in Egyptian architecture.
		LO5	**Replicate** with help of sketches/visuals (softwares)/3D (models) of various architectural forms and styles of Egyptian Architecture.
CO4	Studying this, students will be able to **apply** elements and concepts of West Asiatic Architecture in their own design.	LO1	**Remember** basic concepts regarding the historical and architectural development in ancient civilization of Mesopotamian, Sumerian, Babylonian, Assyrian & Persian.
		LO2	**Identify** diverse artistic and architectural expressions with regard to these civilizations
		LO3	**Illustrate** visual and verbal vocabularies of each of Ziggurats, Palaces, Temples, Ceremonial platforms, Pyramids, etc.
		LO4	**Analyse** architectural forms and space with reference to West Asiatic Architecture.
		LO5	**Replicate** with help of sketches, visuals (softwares) and 3D (models) of various architectural forms and styles of West Asiatic Architecture.
CO5	Studying this, students will be able to **apply** elements of South East & East Asian architecture in their own design.	LO1	**Understand** basic concepts regarding the historical and architectural development in buildings in South East & East Asian Architecture.
		LO2	**Identify** prominent architectural character of the South East & East Asian Architecture with help of typical examples of Pagoda, Pylons, Temples, Monasteries, etc.
		LO3	**Illustrate** visual and verbal vocabularies of South East & East Asian Architecture.
		LO4	**Analyse** architectural forms and space with reference to South East & East Asian Architecture.
		LO5	**Replicate** with help of sketches, visuals (softwares) and 3D (models) of various architectural forms and styles of South East & East Asian Architecture.

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO13
CO1	3	3	3	2	3	1	2	2	1	3	2	1
CO2	1	2	3	2	3	3	3	3	2	3	1	2
CO3	1	2	3	2	3	3	3	3	2	3	1	2
CO4	1	2	3	2	3	3	3	3	2	3	1	2
CO5	1	2	3	2	3	3	3	3	2	3	1	2

1 - Slightly; 2 - Moderately; 3 – Substantially

TEXT BOOKS:

1. SATISH GROVER, "The Architecture of Indian (Buddhist &Hindu)"
2. A VOLWANSEN, "Living Architecture (Indian)", Oxford & IBHLondon
3. Pier LuigiNervi, General Editor, "History of World Architecture –Series"

REFERENCE BOOKS:

1. PERCY BROWN, "Indian Architecture (Buddhist & Hindu), Taraporewala & Sons, Bombay. 2ndEdition
2. CHRISTOPHERTADGILL, "History of Architecture in India", Phaidon Press.
3. History Of Architecture by Sir Bannister Fletcher 20thedition
4. The Story Of Architecture by Patrick Nuttgens 2ndEdition
5. Space, Time And Architecture by Siegfried Gideon 5th Edition

5. Theory of Design (Code – 21251105)

Objectives – The course aims to obtain the theoretical aspects of design and understand how it could be manifested in architectural design, the ideologies from works of architects and planners, the design communication skills to enable to put forth the design ideas in graphics and literature.

S. No.	Course Code	Category Code	Course Name	Maximum Marks Allotted						Total Marks	Contact Hours per week			Total Credits	Mode of Learning	Mode of Exam.
				Theory Block				Practical Block			L	T	P			
				Continuous Evaluation			Major Evaluation	Continuous Evaluation	Major Evaluation							
				Minor Evaluation I	Minor Evaluation II	Quiz/ Assignment		Lab Work & Sessional								
5.	21251105	DC	Theory of Design	20	20	30	30	-	-	100	2	-	-	2	ace to Fac	PP

UNIT-1 PRIMARY ELEMENTS IN ARCHITECTURE

Geometry in Architecture - points, lines and shapes. Linear elements, planar elements and volumetric elements. Patterns in nature and building design. Order to chaos. Regularity and irregularity.

UNIT-2 FORM AND SPACE

Elements of spatial definition – form defining space - elevated base plane, depressed base plane-vertical and horizontal elements defining space -depth and density of space - spatial juxtaposition and interpenetration – spatial characteristics of elementary shapes - qualities of architectural space - degree of enclosure. Works of famous architects in India & abroad.

UNIT-3 ORDERING PRINCIPLES AND MEANING IN ARCHITECTURE

Ordering Principles-Axis -Symmetry -Hierarchy - Datum -Rhythm -Repetition -Transformation - Measure and balance – spaces on human scale - proportion -- Golden Section, Le modular, Fibonacci series, Figure and ground, positive and negative spaces.

UNIT-4 CONCEPTS IN ARCHITECTURAL DESIGN

Concept – types- Ideas and Intent in design - Intuitive, contextual, Iconic, Experiential, Symbolic, Modular. Ideologies and philosophies of architects'. Case Studies. Importance of graphics in architectural design. Study of site plans, city plans, conceptual drawings. Interpretation of architects' conceptual sketches and the respective buildings.

UNIT-5 RESPONSIVE AND RESPONSIBLE ARCHITECTURE

Phenomena of perception – looking, listening, feeling and moving through architecture –light and shade – Architecture as Making Frames. Basic Terminology in Architecture.

COs & LOs for Theory of Design Overall Course Outcome: Students will be able to **develop** an appreciation of design principles and elements and the resulting theories in architectural fields that are unique in time and place.			
CO1	Student will be able to **Understand** basic fundamental of design in natural and manmade environment	LO1	**Relate** various elements , spaces and design principles
		LO2	**Categorize** essential theoretical aspects in architectural studies
		LO3	**Distinguish** between regularity and irregularity
		LO4	**Experiment** patterns in design inspired from nature
CO2	Students will be able to **Discuss** best examples of built forms and situate them in the theoretical framework.	LO1	**Define** spatial elements of design to achieve good designs
		LO2	**Learn** spatial characteristics of shapes. spaces
		LO3	**Analyze** works of famous national and international architects
CO3	Student will be able to **Understand** the significance of aesthetics, history in architectural design.	LO1	**Memorize** aesthetic principles of design
		LO2	**Journal** about historical design concepts and theories
		LO3	**Link** human scale and proportion within the space
CO4	Students will be able to **develop** architectural thinking through past and present work to link design & theory.	LO1	**Relate** theories and ideologies of different architects in comparative mode
		LO2	**Analyze**Ideas from abstract thinking and implement them
		LO3	**Judge** Different types of architectural plans and drawings
		LO4	**Interpret** thoughts of architects through their sketches
CO5	Students will be able to **Prioritize** social responsibility for perfecting designs that improve the functions.	LO1	**Relate** human senses with architecture
		LO2	**Experiment** light and shadows in building form and design
		LO3	**Adapt** sustainable goals for designs
		LO4	**Focus** on ecological and humanitarian issues

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO13
CO1	3	3	3	3	2	2	3	3	2	3	1	1
CO2	3	3	3	3	2	3	3	3	2	3	1	2
CO3	3	3	3	3	3	3	3	3	2	3	2	2
CO4	3	3	3	3	3	3	3	3	2	3	2	2
CO5	2	3	3	3	3	3	3	3	2	3	3	3

1 - Slightly; 2 - Moderately; 3 – Substantially

REFERENCES:

1. Francis D.K.Ching, Architecture-Form, Space and Order, Van Nostrand Reinhold Company, New York, 2007.
2. Simon Unwin, Analysing Architecture, Rouledge, London, 2003.
3. V.S.Pramar, Design Fundamentals in Architecture, Somaiya Publications Private Ltd., New Delhi, 1973.
4. Peter von Meiss -Elements of architecture - from form to place, Spon Press 1992.
5. Steen Eiler Rasmussen - Experiencing architecture, MIT Press, 1964.

6. Basic Design (Code – 21251106)

Objectives – The course aims to obtain the fundamentals of design – elements and principles that govern the aesthetic aspects of design, experimental understanding of graphic elements and compositions in 2D / 3D, experimental understanding of colours, textures and compositions. Experimental understanding of form building, experimental understanding of design.

S. No.	Course Code	Category Code	Course Name	Maximum Marks Allotted						Total Marks	Contact Hours per week			Total Credits	Mode of Learning	Mode of Exam.
				Theory Block				Practical Block			L	T	P			
				Continuous Evaluation			Major Evaluation	Continuous Evaluation	Major Evaluation							
				Minor Evaluation I	Minor Evaluation II	Quiz/ Assignment		Lab Work & Sessional								
6.	21251106	DLC	Basic Design	-	-	-	-	70	30	100	-	-	4* (1.5)	6	xperiment l	SO

UNIT-1 GRAPHIC ELEMENTS, COMPOSITIONS & COLORS – 2D

Impart elements and principles of design theory with sample exercises supported by illustrative PowerPoint presentations. Exercises: Dots, lines, shapes & forms, hatching patterns, 2D compositions with geometric & organic shapes and Impart colour theory with sample exercises supported by illustrative PowerPoint presentations, colour compositions on 2d compositions, textures replacing colors.

UNIT-2 3-DCOMPOSITIONS / COLOUR & TEXTURE APPLICATIONS

Texture portfolio, 3D compositions with geometric & organic forms (model), Color compositions on 3D compositions (model), Texture applications & material compositions (model)

UNIT-3 2-D & 3-D ABSTRACTIONS

2-D image abstraction (colour, black/white, grey tone/mono colour, textures), 3-D image abstraction (colour, black/white, grey tone/mono colour, texture), 3-D model abstraction (colour)

UNIT-4 FORM BUILDING (MODELS)

Make a vivid PowerPoint presentation / video presentation on form building models with ample samples.

Exercises: 3-D sculpture exercises (additive & subtractive forms – solids & voids), Space frame model using a linear module (space creation), Origami models (space creation + solids & voids), Life scale models (group)

UNIT-5 PRODUCT DESIGN

Make a vivid PowerPoint presentation on product design with emphasis on user, purpose, material & form.

Exercises: Small scale product design, Life scale furniture design (group), 3-D model abstraction (colour).

COs & LOs for Basic Design			
Overall Course Outcome: The course aims to obtain the fundamentals of design – elements and principles that govern the aesthetic aspects of design, experimental understanding on graphic elements and compositions in 2D /3D, experimental understanding of colors, textures and compositions. Experimental understanding of form building, experimental understanding of design.			
CO1	Students will be able to **develop** graphical understanding of visuals.	LO1	**Illustrate** the elements and composition of Design.
		LO2	**Apply** principle of design/additive & subtractive form (using 2d/ 3d compositions)
		LO3	**Illustrate** the color theory principles using color compositions & texture
		LO4	**Evaluate** the geometric & organic forms (2D & 3D in building)
		LO5	**Develop** analytical thinking towards spatial analyses of visual culture in 2-Dimensions.
CO2	Students will be able to **develop** understanding towards application of color and texture.	LO1	**Illustrate** the elements and composition of design in 3-D.
		LO2	**Apply** principle of design/additive & subtractive form (using 2d/ 3d compositions)
		LO3	**Illustrate** the color theory principles using color compositions & texture
		LO4	**Evaluate** the geometric & organic forms (2D & 3D in building)
		LO5	**Elaborate** analytical thinking towards spatial analyses of visual culture in 3D.
CO3	Students will be able to **illustrate** geometric and organic forms.	LO1	**Identify** the elements and principle of design theory
		LO2	**Associate** various graphical elements
		LO3	**Illustrate** the color theory principles using color compositions & texture
		LO4	**Distinguish** the geometric & organic forms (2D & 3D in building)
		LO5	**Elaborate** analytical thinking towards spatial analyses of visual culture
CO4	Students will be able to **create** building forms through model making.	LO1	**Identify** the elements and principle of design theory
		LO2	**Apply** principle of design/additive & subtractive form (using 2d/ 3d compositions)
		LO3	**Illustrate** the color theory principles using color compositions & texture
		LO4	**Categorize** the geometric & organic forms (2D & 3D in building)
		LO5	**Develop** analytical thinking towards spatial analyses of visual culture
CO5	Students will be able to **design** products with emphasis on user, purpose, material & form.	LO1	**Demonstrate** the elements and principle of design theory
		LO2	**Associate** various graphical elements
		LO3	**Illustrate** the color theory principles using color compositions & texture
		LO4	**Examine** the geometric & organic forms (2D & 3D in building)
		LO5	**Create** analytical thinking towards spatial analyses of visual culture

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO13
CO1	3	3	3	2	3	2	2	2	2	3	3	2
CO2	3	3	3	2	3	2	3	3	2	2	3	2
CO3	3	3	3	2	2	2	2	3	2	3	2	3
CO4	3	3	2	2	2	2	2	3	2	3	2	3
CO5	3	3	3	2	2	2	2	3	2	3	2	3

1 - Slightly; 2 - Moderately; 3 – Substantially

REFERENCES:

1. Charles Wallschlacgerm& Cynthia Busic-Snyder, Basic Visual Concepts and Principles for Artists, Architects and Designers, McGraw Hill, New York1992.
2. V.S. Pramar, Design fundamentals in Architecture, Somaiya Publications Pvt. Ltd., New Delhi,1973.
3. Francis D.K.Ching - Architecture- Form Space and Order Van No strand Reinhold, Co., (Canada),1979.
4. Elda Fezei, Henry Moore, Hamlyn, London, New York, Sydney, Toronto,1972.
5. Exner. V, Pressel. D, Basics Spatial Design, Birkhanser,2009

8. Semester Proficiency (Code – 21251106)

Objectives – The course aims to assess the cumulative knowledge and skills acquired by students over the semester in various core subjects, ensuring they meet academic benchmarks.

S. No.	Course Code	Category Code	Course Name	Maximum Marks Allotted						Total Marks	Contact Hours per week			Total Credits	Mode of Learning	Mode of Exam.
				Theory Block				Practical Block								
				Continuous Evaluation			Major Evaluation	Continuous Evaluation	Major Evaluation		L	T	P			
				Minor Evaluation I	Minor Evaluation II	Quiz/ Assignment		Lab Work & Sessional								
8.	21251108	SP	Semester Proficiency	-	-	-	-	50	-	50	-	-	2	1	ace to Fac	SO

This course evaluates the overall proficiency of students across architectural design, theory, and practical applications, promoting a holistic understanding and competence in architectural practices.

9. Micro Project-I# (Workshop I)(Code –21251109)

Objectives – The course aims to obtain the ability to appreciate the three dimensional implications of design and to introduce the students to the techniques of model making, basics of rendering, presentation skills & model making with various materials and to provide hands-on experience in specific architectural skills, tools, and techniques through guided practical sessions.

S. No.	Course Code	Category Code	Course Name	Maximum Marks Allotted						Total Marks	Contact Hours per week			Total Credits	Mode of Learning	Mode of Exam.
				Theory Block				Practical Block								
				Continuous Evaluation			Major Evaluation	Continuous Evaluation	Major Evaluation		L	T	P			
				Minor Evaluation I	Minor Evaluation II	Quiz/ Assignment		Lab Work & Sessional								
9.	21251109	PBL	Micro Project-I# (Workshop I)	-	-	-	-	70	30	100	-	-	4	2	Experientia	SO

UNIT-1 VISUAL ART

General characteristics of visual art/Fundamentals of visual art: Space, Form, size, Shape, Line, Color, Tone values, Perspective, Design and aesthetic organization of Visual elements in art object (Composition).The use of two and three dimensions in visual art. Tactile quality in art. Environment and art. Perceptual and conceptual aspects in art. Use of various kinds of papers in art making.

Exercise: Art Installation using above techniques.

UNIT-2 CARPENTRY & FOUNDRY

Introduction to the carpentry tools, processes, joints and wood working machines. Preparation of various carpentry joints, fixing of plywood, Blackboards, commercial boards and their application in furniture. Models in appropriate materials for understanding of joinery in wooden construction. Introduction, type of patterns, pattern making, preparation of moulds and moulding equipment details.

Exercise: Construction of Joints and basic Furniture.

UNIT-3 DEVELOPMENT OF SURFACES

Development of simple and composite forms using paper, Thermocol, wire, Wax, acrylic, sheets and similar materials. Introduction to metallic sections, joinery tools, joinery processes and working with them. Bonds in masonry based on the programme of building construction to make the various forms of masonry structures. Mixing of concrete, preparation of various objects.

Exercise: Surface development examples using different materials and creating joints in masonry structures using above techniques.

UNIT-4 FABRICATION

Introduction to welding equipment, processes and its applications.

Exercise: Create an Art installation from metal pieces by welding them.

UNIT-5 PAINTING & POLISHING

Classification of paints, varnishes ingredients of paints, painting methods-brush, spray, hot spray etc.

Exercise: Murals and wall paintings using above techniques.

COs & LOs for Micro Project-I (Workshop I)			
Overall Course Outcome: Students will be able to develop, draw simple and complex models in various materials using different techniques.			
CO1	Students will be able to **create** visual art installations.	LO1	**Learn** various visual art typologies and kinds of paper in art making.
		LO2	**Understand** the fundamentals of visual art.
		LO3	**Analyse** the perceptual and conceptual aspects of visual art
		LO4	**Compose** an art installation using the above knowledge.
CO2	Students will be able to **Construct** various joints and models in different materials.	LO1	**Learn** the tools, joints and machineries used in carpentry.
		LO2	**Understand** different materials and their appropriate use.
		LO3	**Construct** various joints and models in wood, ply board, etc.
CO3	Students will be able to **build** moulds and joints for model making.	LO1	**Learn**various patterns in foundry.
		LO2	**Understand** the pattern making, moulding and making moulds.
		LO3	**Build** a mould and foundry joints using different materials.
CO4	Students will be able to **construct** models out of metal.	LO1	**Learn**about welding and its process.
		LO2	**Understand**the welding equipment and their application.
		LO3	**Weld** a model or an abstract using the different processes and equipment.
CO5	Students will be able to **draw** murals and paint.	LO1	**Learn** about various types of paints and ingredients in paints.
		LO2	**Understand** use of varnishes, etc. and methods of painting.
		LO3	**Draw** murals with the use of various paints, varnishes, and methods of painting.
		LO4	**Integrate** the above learned materials and techniques in creating their design models in further studies

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO13
CO1	3	2	3	2	2	1	2	3	1	3	1	3
CO2	3	2	3	2	1	1	2	3	1	3	2	3
CO3	3	3	3	2	1	1	2	3	1	3	1	3
CO4	3	3	3	2	1	1	2	3	1	3	2	3
CO5	3	3	3	2	3	1	2	3	2	3	3	3

1 - Slightly; 2 - Moderately; 3 – Substantially

REFERENCES:

1. BENN, the book of the house ,Errnest Benn limited London
2. Jannsen, Constructional Drawings & Architectural models, Kari Kramer Verlag Stuttgart,1973.
3. Harry W.Smith, The art of making furniture in miniature, E.P.Duttor Inc., New York,1982.
4. Thames and Hudson Manual of Rendering with Pen and Ink-Robert WGill.

10. Language Lab (Code – 21251110)

Objectives – The course aims to obtain communication skills in English by developing their listening, speaking, reading and writing skills, speaking skills with specific reference to prospective/actual clients, suppliers, business partners and colleagues, reading ability of journals, research articles etc & develop their writing skills especially writing project proposals and reports.

S. No.	Course Code	Category Code	Course Name	Maximum Marks Allotted						Total Marks	Contact Hours per week			Total Credits	Mode of Learning	Mode of Exam.
				Theory Block				Practical Block								
				Continuous Evaluation			Major Evaluation	Continuous Evaluation	Major Evaluation		L	T	P			
				Minor Evaluation I	Minor Evaluation II	Quiz/ Assignment		Lab Work & Sessional								
10.	21251110	HSMC	Language Lab					70	30	100	-	-	2	1	Experientia	SO

Course Contents:

Unit I: Communication [CO1, CO2]
Communication: Approaches, Elements, Verbal and Nonverbal Communication; Barriers to Communication; Johari Communication Window.

Unit II: Listening [CO1, CO2]
Listening: Factors Affecting Listening and Improving Listening.

Unit III: Speaking: [CO2, CO3, CO5]
Public Speaking & Delivering Presentation.

Unit IV: Reading: [CO3, CO4, CO5]
Reading Passages & Comprehension: Steps and Methods.

Unit V: Writing: [CO4]
Writing: Essentials of good writing; Drafting CV/biodata/Résumé)

***Reading Material** for story and poetry is to be selected by concerned teacher in class.

Language Laboratory:

The objective of the language lab is to expose students to a variety of listening and speaking drills. This would especially benefit students who are deficient in English and it also aims at confidence building for interviews and competitive examinations. The Lab is to cover following syllabus.

1. Communication lab exercises as specified in Lab Manual
2. Listening skills (using Marc Hancock, CUP).
3. Speaking skills
4. Oral presentation.

Laboratory Tasks:

- A Separate Lab Manual is attached as Annexure-3

COs & LOs for Language Lab			
Overall Course Outcome: Students will be able to develop the ability to write and communicate professionally in the language			
CO1	Students will be able to **speak** effectively.	LO1	**Learn** linguistics, IPA and English phonetics, etc.
		LO2	**Understand** the place and manner of articulation.
		LO3	**Analyse** the perceptual and conceptual aspects of speaking.
		LO4	**Speak** clearly, effectively and appropriately in a public forum to a variety of audiences and purposes
		LO5	**Prepare and deliver** oral presentations and arguments acceptable within the Engineering Profession Effectively
CO2	Students will be able to **communicate their** design and ideas.	LO1	**Learn** the communication approaches, elements, types and process.
		LO2	**Study Various** types of communication.
		LO3	**Practice Various** communication types and skills in life.
		LO4	**Demonstrate** knowledge and comprehension of major text and traditions in language as well as its social, cultural and historic context
CO3	Students will be able to learn the techniques to speak publically.	LO1	**Learn** various factors affecting listening.
		LO2	**Comprehend** to improve listening.
		LO3	**Learn** to make speeches and presentations.
		LO4	**Apply** the qualities and techniques learnt to make speeches, debate, interviews, etc.
		LO5	**Read** a variety of text critically and analytically so as to demonstrate in writing and / or speech the interpretations of those texts
CO4	Students will be able to **express** design ideas.	LO1	**Learn Various** grammatical aspects of writing and speaking the language.
		LO2	**Expand** the vocabulary.
		LO3	**Practice To** use the techniques in explaining Design.
		LO4	**Interpret** text written in English assessing the result in written and oral arguments using appropriate material for support
CO5	Students will be able to **write** reports explaining their design and later on papers.	LO1	**Learn** about report writing and its process.
		LO2	**Understand** the techniques and essentials of report writing.
		LO3	**Draft**Formal Application, mail, CV, Résumé, Memo, Report for design, etc.
		LO4	**Implement** professional work habits, including those necessary for effective collaboration and cooperation with others

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO13
CO1	1	1	2	2	1	3	3	2	3	1	1	3
CO2	1	1	2	2	1	3	3	2	3	1	1	3
CO3	1	1	2	2	1	3	3	2	3	1	1	3
CO4	1	1	2	2	1	3	3	1	3	1	1	3
CO5	1	1	2	2	1	3	3	2	3	1	1	3

1 - Slightly; 2 - Moderately; 3 – Substantially

Books: -

1. Technical Communication —- By Meenakshi Raman, OUP.2015
2. Understanding Human Communication — By Ronald Alderman byOUP2016
3. Communication Skills for Engineers – PearsonEducation.
4. Effective Business communication – Tata McGraw Hill2008
5. Business Communication – OUP, Tata McGraw.2005
6. Practical English Grammar by Thomson Martinet – Oxford University Press1986
7. A Handbook of Language laboratory by Cambridge UniversityPress.2009

11. Novel Engaging Course (Activity Based Learning) (Code – NEC00001)

Objectives – The course aims to offer students a chance to acquire interdisciplinary skills beyond the architectural curriculum, fostering creativity and adaptability. .

S. No.	Course Code	Category Code	Course Name	Maximum Marks Allotted						Total Marks	Contact Hours per week			Total Credits	Mode of Learning	Mode of Exam.
				Theory Block				Practical Block								
				Continuous Evaluation			Major valuatio	Continuous Evaluation	Major Evaluatio		L	T	P			
				Minor Evaluation I	Minor Evaluation II	Quiz/ Assignment		Lab Work & Sessional								
11.	NEC00001	NEC	Novel Engaging Course (Activity Based Learning)	-	-	-	-	-	50	50	-	1	-	1	Interactive	SO

These courses allow students to opt for skill-based learning from various departments, encouraging holistic development through subjects like photography, graphic design, or entrepreneurship, enriching their architectural skill set.

12. Universal Human Values & Professional Ethics (UHVPE) (Code – 21251111)

Objectives – The course aims to instill ethical and humanistic values in students, preparing them for responsible professional conduct and community engagement.

S. No.	Course Code	Category Code	Course Name	Maximum Marks Allotted						Total Marks	Contact Hours per week			Total Credits	Mode of Learni ng	Mode of Exam	Duratio of Exam.
				Theory Block				Practical Block									
				Continuous Evaluation			Major Evaluation	Continuous Evaluation	Major Evaluati n		L	T	P				
				Minor Evaluation I	Minor Evaluation II	Quiz/ Assignment		Lab Work & Sessional									
13.	21251111	MAC	Universal Human Values & Professional Ethics (UHVPE)	20	20	30	30	-	-	100	2	-	-	GRADE	Blended	MCQ	-

This course focuses on developing a moral and ethical framework for decision-making in architecture, fostering a sense of responsibility towards society, sustainability, and the built environment.

Course Content:

1: Course Introduction - Need, Basic Guidelines, Content and Process for Value Education:

- Self-Exploration–what is it? - Its content and process; 'Natural Acceptance' and Experiential Validation- as the process for self-exploration
- Continuous Happiness and Prosperity- A look at basic Human Aspirations
- Right understanding, Relationship and Physical Facility- the basic requirements for fulfilment of aspirations of every human being with their correct priority
- Understanding Happiness and Prosperity correctly- A critical appraisal of the current scenario

2: Understanding Harmony in the Human Being:

- Understanding human being as a co-existence of the sentient 'I' and the material 'Body'
- Understanding the needs of Self ('I') and 'Body' - happiness and physical facility
- Understanding the Body as an instrument of 'I' (I being the doer, seer and enjoyer)
- Understanding the characteristics and activities of 'I' and harmony in 'I'
- Understanding the harmony of 'I' with the Body

3: Understanding Harmony in the Family and Society- Harmony in Human-Human Relationship:

- Understanding values in human-human relationship; meaning of Justice (nine universal values in relationships) and program for its fulfilment to ensure mutual happiness; Trust and Respect as the foundational values of relationship
- Understanding the meaning of Trust; Difference between intention and competence
- Understanding the meaning of Respect, Difference between respect and differentiation; the other salient values in relationship
- Understanding the harmony in the society (society being an extension of family): Resolution, Prosperity, fearlessness (trust) and co-existence as comprehensive Human Goals
- Visualizing a universal harmonious order in society

4: Understanding Harmony in the Nature and Existence - existence as Coexistence:

- Understanding the harmony in the Nature
- Interconnectedness and mutual fulfilment among the four orders of nature recyclability and self-regulation in nature
- Understanding Existence as Co-existence of mutually interacting units in all pervasive space
- Holistic perception of harmony at all levels of existence.

5: Holistic Understanding of Harmony on Professional Ethics:

- Natural acceptance of human values
- Definitiveness of Ethical Human Conduct
- Basis for Humanistic Education, Humanistic Constitution and Humanistic Universal Order
- Competence in professional ethics:
    a. Ability to utilize the professional competence for augmenting universal human order
    b. Ability to identify the scope and characteristics of people friendly and eco-friendly production systems,
    c. Ability to identify and develop appropriate technologies and management patterns for above production systems.
- Strategy for transition from the present state to Universal Human Order:
    a. At the level of individual: as socially and ecologically responsible engineers, technologists and managers
    b. At the level of society: as mutually enriching institutions and organizations

Gender Sensitisation:

- Introduction to Sex, Gender & Culture
- Introduction to Women Studies and Socialisation, including man-woman relationship, work distribution
- A brief review of Feminism, Patriarchy, Feminist Studies, Feminist Ideologies.
- Women and Law Constitutional Provisions and Fundamental rights related to Women.

CO1: Course Introduction - Need, Basic Guidelines, Content and Process for Value Education
CO2: Understanding Harmony in the Human Being
CO3: Understanding Harmony in the Family and Society- Harmony in Human-Human Relationship
CO4: Understanding Harmony in the Nature and Existence - existence as Coexistence
CO5: Holistic Understanding of Harmony on Professional Ethics

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO13
CO1	2	1	1	1	1	2	3	1	3	1	1	3
CO2	2	1	1	1	1	2	3	1	3	1	1	3
CO3	2	1	1	1	1	2	3	1	3	1	1	3
CO4	2	1	1	1	1	2	3	1	3	1	1	3
CO5	2	1	1	1	1	2	3	1	3	1	1	3

1 - Slightly; 2 - Moderately; 3 – Substantially

13. Mandatory Workshop on Report Writing at Department Level (Duration: Two Days) (Code – 21251112)

Objectives – The course aims to familiarize students with the **Report Writing**, emphasizing their relevance in contemporary architectural report writing.

S. No.	Course Code	Category Code	Course Name	Maximum Marks Allotted						Total Marks	Contact Hours per week			Total Credits	Mode of Learning	Mode of Exam.	Duration of Exam.
				Theory Block				Practical Block									
				Continuous Evaluation			Major valuatio	Continuous Evaluation	Major Evaluation		L	T	P				
				Minor Evaluation I	Minor Evaluation II	Quiz/ ssignmen t		Lab Work & Sessional									
12.	21251112	MWS	Mandatory Workshop on Report Writing at Department Level	-										GRADE	Interactive	MCQ	

This workshop explores the principles of the Indian Constitution, indigenous knowledge in India.

14. Mandatory Workshop on Indian Constitution and cultural values at Department Level (Duration: Two Days) (Code – 21251113)

S. No.	Course Code	Category Code	Course Name	Maximum Marks Allotted						Total Marks	Contact Hours per week			Total Credits	Mode of Learning	Mode of Exam.	Duration of Exam.
				Theory Block				Practical Block									
				Continuous Evaluation			Major Evaluatio	Continuous Evaluation	Major Evaluation		L	T	P				
				Minor Evaluation I	Minor Evaluation II	Quiz/ Assignment		Lab Work & Sessional									
13.	21251113	MWS	Mandatory Workshop indian Constitution and cultural values	-										GRADE	Interactive	MCQ	