

SIDDAGANGA INSTITUTE OF TECHNOLOGY, TUMAKURU

School of Architecture

Vision

To establish as a pioneer institute in planning and design of built environment through excellence in teaching, research, consultancy and design innovation.

Mission

- To create conducive academic ambience that nurtures aesthetic attitude, technical confidence, and critical thinking among students.
- To develop research and design innovation skills in students to address various societal needs.
- To inculcate professional ethics based on values and entrepreneurial skills among students.

Program Educational Objectives (PEO's)

Graduates from school of Architecture will achieve the following Program Educational Objectives within few years of graduation

- Graduates will showcase capabilities for competent practice of Architecture and enhance career by pursuing higher education
- Graduates will exhibit strong design skills to solve complex real-time problems through high technical skills and strong communication along with the knowledge of various domains of architecture including landscape, architectural conservation, interior design, energy conscious architecture, urban design and planning, construction project management, alternative building techniques, building information modeling and digital architecture
- Graduates will demonstrate professionalism, ethical conduct, societal concerns, effective team work and adapt to dynamic global and local needs engaging in lifelong learning

Program Specific Outcomes (PSO's)

PSO1: Develop critical thinking to analyze, evaluate, synthesize and generate appropriate design solutions for varying scales and levels of complexity.

PSO2: Explore possibilities and application of various building materials, construction techniques, building systems and services.

PSO3: Draw inspiration from divergent architectural theories and history along with varied indigenous and vernacular settings.

PSO4: Demonstrate effective communication skills to present architectural works and comprehend professional practice.

Programme Outcomes (PO's)

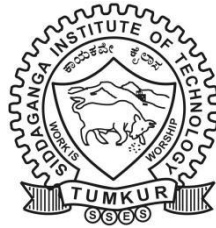
- 1. Architectural Knowledge:** Apply the knowledge of design principles, building systems & technologies, humanities and environmental aspects in design, planning and construction.
- 2. Problem Analysis:** Identify, formulate, review research literature and analyse various scales of architectural projects to arrive at tangible conclusions.
- 3. Design/ Development of solutions:** Design solutions to integrate interdisciplinary approach for contextual issues pertaining to built-environment.
- 4. Conduct investigations of complex problems:** Use research-based knowledge and methodologies including context analysis, case studies, project requirements and synthesis of the information to provide context sensitive solutions.
- 5. Modern tool usage:** Identify, select and apply the appropriate tools, techniques and resources to predict, design and simulate qualitative and quantitative outcomes with an understanding of its limitations.
- 6. The Architect and Society:** Apply reasoning to address socio-cultural, legal and safety aspects relevant to the professional practice and social responsibility.
- 7. Environment and Sustainability:** Understand the importance of the architectural design solutions in environmental and social contexts to demonstrate the need for sustainable built environment.
- 8. Ethics:** Apply ethical principles and commit to professional ethics, responsibilities and norms of Architectural profession.
- 9. Individual and teamwork:** Function effectively as an individual as well as a team member or a leader in diverse interdisciplinary settings.
- 10. Communication:** Comprehend and effectively communicate issues related to architecture, community and society at large through documentation, graphical and verbal presentations.
- 11. Project management and Finance:** Demonstrate knowledge and understanding of professional and management principles to apply to individual work, as a team member and as a leader, to manage projects in multidisciplinary environments.
- 12. Life-Long learning:** Recognize the need for, have the preparation and ability to engage in independent and lifelong learning in the changing domain of societal and technological advancement and adopt it in individual's professional practice.

SYLLABUS

FOR

I and II semester B.ARCH

2025 -2026



School of Architecture
Siddaganga Institute of Technology

(An Autonomous Institution affiliated to V.T.U., Belagavi, Approved by AICTE, New Delhi Accredited by NAAC with 'A++' Grade and ISO 9001:2015 Certified)

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SIDDAGANGA INSTITUTE OF TECHNOLOGY, TUMAKURU

(An Autonomous Institution affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC with 'A++' Grade & ISO 9001:2015 Certified)

B.ARCHITECTURE

SCHEME OF TEACHING AND EXAMINATION (270 Credits Scheme)

(Applicable to the students admitted during 2025-26)

I Semester

Sl. No.	Course and Course Code		Course Title	Teaching / Paper setting Dept.	Teaching hrs/week					Examination					Credits
					Lecture	Studio	Practical	Tutorial	Self Study	Duration in hrs.	Mode of Exam	CIE Marks	SEE Marks	Total Marks	
					L	S	P	T	SS						
1.	PCC	1ATS01	Introduction to Architectural Design			7					Viva	50	50	100	7
2.	BSAE	1ATS02	Building Materials & Construction -I		1	3					Viva	50	50	100	4
3.	PCC	1ATS03	Architectural Graphics - I		1	3					Term work	50	50	100	4
4.	SEC	1ATS04	Basic Design & Visual Arts		2	3					Term work	50	50	100	5
5.	SEC	1ATS05	Architectural Model Making			4					Term work	50	50	100	4
6.	PCC	1ATT01	History of Architecture-I		3					3	Theory	50	50	100	3
7.	AEC	CC09-AT	Soft Skills	T & P				2		1	-	100	0	100	PP
8.	HSMC	CC03-AT/ CC04-AT	Balake Kannada / Samskrutika Kannada	Any Dept.	1					1	Theory	50	50	100	1
9.	AEC	CC06-AT	Innovation and Design Thinking		1						Term work	50	50	100	1
			Total		9	20		2				500	400	900	29

Note: PCC: Professional Core Course, BSAE: Building Science and Applied Engineering Course, , INT –Internship,

HSMC: Humanity and Social Science & Management Courses, , SEC –Skill Enhancement Courses. AEC- Ability Enhancement Course UHV- Universal Human Value Courses

L –Lecture, S- Studio, P-Practical, SS – Self-Study Component, CIE: Continuous Internal Evaluation, SEE: Semester End Examination

SIDDAGANGA INSTITUTE OF TECHNOLOGY, TUMAKURU

(An Autonomous Institution affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Accredited by NAAC with 'A++' Grade & ISO 9001:2015 Certified)

B.ARCHITECTURE

SCHEME OF TEACHING AND EXAMINATION (270 Credits Scheme)

(Applicable to the students admitted during 2025-26)

II Semester

Sl. No.	Course and Course Code		Course Title	Teaching / Paper setting Dept.	Teaching hrs/week					Examination					Credits
					Lecture	Studio	Practical	Tutorial	Self Study	Duration in hrs.	Mode of Exam	CIE Marks	SEE Marks	Total Marks	
					L	S	P	T	SS						
1.	PCC	2ATS01	Architectural Design-I			7					Viva	50	50	100	7
2.	BSAE	2ATS02	Building Materials and Construction-II		1	3					Viva	50	50	100	4
3.	PCC	2ATS03	Architectural Graphics-II		1	3					Term work	50	50	100	4
4.	PCC	2ATS04	Design Theory & Principles		2	2					Viva	50	50	100	4
5.	BSAE	2ATS05	Site Surveying and Analysis	Civil			2				Term work	50	50	100	2
6.	PCC	2ATT01	History of Architecture-II		3					3	Theory	50	50	100	3
7.	BSAE	2ATT02	Building Structures-I	Civil	3					3	Theory	50	50	100	3
8.	AEC	CC08-AT	Communication Skills	T & P				2		2	Theory	50	50	100	1
9.	NCMC	CC10-AT	Indian Constitution & Professional Ethics	Any Dept.	1					1	-	100	-	100	PP
10.	HSMC	CC07-AT	Scientific Foundations of Health		1						Term work	50	50	100	1
			Total		12	15	2	2				550	450	1000	29

Note: PCC: Professional Core Course, BSAE: Building Science and Applied Engineering Course, , INT –Internship,

HSMC: Humanity and Social Science & Management Courses, , SEC –Skill Enhancement Courses. AEC- Ability Enhancement Course UHV- Universal Human Value Courses

L –Lecture, S- Studio, P-Practical, SS – Self-Study Component, CIE: Continuous Internal Evaluation, SEE: Semester End Examination

SIDDAGANGA INSTITUTE OF TECHNOLOGY
Tumakuru-572103

(An Autonomous Constituent Institution of Visvesvaraya Technological University, Belagavi)

SCHOOL OF ARCHITECTURE

DETAILED SYLLABUS FOR
FIRST SEMESTER
B. ARCHITECTURE

INTRODUCTION TO ARCHITECTURAL DESIGN

Contact Hours/Week	:	07	Credits	:	7.0
Total Lecture Hours	:	-	CIE Marks	:	50
Total Studio Hours	:	105	SEE Marks	:	50
Course Code	:	1ATS01	Exam Mode	:	Viva

Course Objectives: This course will enable students to:

1. Understand the role of Architecture and Design in Society.
2. Get familiarized with the universality and scope of design.
3. Understand the qualitative and quantitative aspects of the design process.
4. Get insight towards process of abstraction.
5. Develop forms with function in designing utilitarian spaces.

COURSE OUTLINE:

- **Introduction to Architecture:** Importance of Architectural Design in architectural education. Architect's role in Society and Architectural Design. Understanding of Architecture's connection with other disciplines of knowledge: Science & Technology, Mathematics, Philosophy, Religion, Sociology, Psychology, Ecology, Climate change etc.
- **Introduction to Design:** Universality of Design in various fields. Introduction to different fields in Design such as Basic design, Architectural design, Graphic design, Automobile design, Interior design, Fashion design, Product design, sustainable design, and so on.
- **Introduction to the Design Process:** To understand the Qualitative and Quantitative aspects of Design Process.
Qualitative design process: What is an Idea or Concept in Design? Understanding the relationship between idea, context, space (form & structure), and functional requirements. Introduction to the various methods of idea / concept generation - use of form, patterns in nature and in geometry, music, text, and other allied fields. Understanding the ambience of space using – Form, Colour, Texture, Light, Space and Scale.
- **Quantitative design process:** Anthropometry - Understanding the functional and spatial requirements with respect to the human body and its postures along with furniture. Study of Standard measurements, minimum and optimum areas for mono functions. User's data, movement and circulation diagrams. Case study of famous architect's work or local architecture with respect to spatial analysis, area requirement and program.
- **Introduction to Abstraction:** Elements of form from abstract concepts like point, line, plane, mass and / or volume, 2D forms - circle, square and triangle, 3D forms – cube, sphere and pyramid, therefore, development of more complex forms by the method of addition and / or subtraction. Concepts of volume and scale, width to height ratio. Additive and subtractive.
- **Form Development with function:** Design of Spaces such as a pavilion, gazebo, kiosk, bus stop, stage, (outdoor spaces) living/dining, bedrooms, (indoor spaces) Architect's office, Doctor's clinic, etc. (Utilitarian Spaces) (anyone in each category). Design of functional furniture layout with requisite circulation, lighting, and ventilation for a specific function. Understanding the difference and similarities while the design of a non-enclosed space, a semi-enclosed space, an enclosed space.

NOTE:

- a. Exercises related to each aspect have to be carried out distinctively.
- b. Relevant case studies and literature studies can be given by the studio teachers and a report must be compiled by the students.
- c. One or more design exercises can be carried out as group work to explore possibilities of students working as teams.
- d. Vertical studio involving other semesters can be encouraged to carry out one full or part project.
- e. The portfolio covering the above topics shall be presented viva.

REFERENCE BOOKS:

1.	Bruno Munari	Design as Art: Bruno Munari (Penguin Modern Classics), Penguin UK, Publishers, 2008, ISBN-10 – 0141035811, ISBN-13 - 978-0141035819
2.	Alain de Botton	The Architecture of Happiness, Penguin publisher, 2014, ISBN-10 : 0771026021, ISBN-13 : 978-0771026027
3.	Herman Hertzberger	Lessons for Students in Architecture, 010 Publishers, 2005, ISBN-10: 9064505624, ISBN-13: 978-9064505621
4.	Francis D. K. Ching, James F. Eckler	Introduction to Architecture, Wiley Publisher, 1st edition, 2012, ISBN-10: 9781118142066, ISBN-13: 978-1118142066
5.	Wucius Wong	Principles of Three-dimensional Design, Van Nostrand Reinhold Company, 1977 ISBN : 0442295618, 9780442295615
6.	Manfred Maier	Basic Principles of Design, Van Nostrand Reinhold Company, 1980, ISBN : 0671608207, 978-0671608200
7.	Roger H. Clark, Michael Pause	Precedents in Architecture: Analytic Diagrams, Formative Ideas, and Partis, John Wiley & Sons Publisher, 2004, ISBN-10: 0471479748 ISBN-13: 978-0471479741
8.	Yatin Pandya	Elements of Space Making, Mapin Publishing, 2013 ISBN : 9781935677307, 1935677306
9.	Debkumar Chakrabarti	Indian anthropometric dimensions for ergonomic design practice, National Institute of Design Publisher, 1997, ISBN: 81-86199-15-0
10.	Francis D. K. Ching	Architecture Form, Space, & Order; Wiley, 2014 ISBN : 9781118745083, 1118745086

Course Outcomes: After the completion of this course, students will be able to:

1. **Identify** the role of Architect in society.
2. **Recognize** the universality and scope of design across disciplines.
3. **Apply** qualitative and quantitative aspects of the design process.
4. **Interpret** and translate abstract concepts into architectural language.
5. **Design** functional and utilitarian spaces with appropriate form and layout.

Mapping of Course Outcomes (COs) to Program Specific Outcomes (PSOs)

	POs												PSOs				
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4
COs	C01						3							3			
	C02	3											3	3			
	C03	3												3			
	C04			3							3			3			
	C05			3										3			

BUILDING MATERIALS AND CONSTRUCTION - I

Contact Hours/Week	:	04	Credits	:	4.0
Total Lecture Hours	:	15	SEE Marks	:	50
Total Studio Hours	:	45	CIE marks	:	50
Course Code	:	1ATS02	Exam mode	:	Viva

Course Objectives: This course will enable students to:

1. Get introduced to basic building components.
2. Familiarize with various materials used for wall masonry.
3. Get introduced to timber as a material for buildings.
4. Familiarize with the construction details of wooden doors and windows.

COURSE OUTLINE:

- **Introduction to the primary building components** such as foundations, walls, floors, windows, doors, piers, arches and roofs.
- **Brick** - Types, properties, uses and manufacturing methods; types of brick walls and bonds, mortar types, plasters, buttresses, arches and lintels.
- **Stone** - Types, properties, quarrying and finishing; Stone Walls: Bonds, arches and lintels.
- **Concrete Masonry Unit** - Hollow and solid concrete Blocks: Manufacture, uses and properties, CMU Wall construction and detailing.
- **Alternative materials for Wall construction** - Clay Hollow Blocks, Fly Ash Blocks, Aerated Concrete Blocks, Autoclaved Cellular Concrete (Aerocon) walls, Stabilized Mud Blocks and Glass Blocks: Manufacture, uses and properties, wall construction and Detailing.
- **Masonry Foundation** - Simple load bearing foundations in brick and stone.
- **Wood** - Natural, hard and soft wood; quality, properties; joints in wood. Timber: Quality of Timber used in buildings External and Internal, defects, seasoning and preservation.
- **Wooden doors** - Types of wooden Doors: Doors with Frames, Doors on Pivot, Single & Double shutters, Wood with Glass shutters.
- **Wooden windows** - Types of wooden windows & ventilator; Casement, Top Hung & Fixed types, joinery details.

NOTE:

- a. Lectures on historical evolution of building materials and construction methods.
- b. Studio exercises in brick bonding, foundation details, external wall section for flat roofs (DPC, sill, lintel, roof level, waterproofing, parapet).
- c. Introduction to sustainability and energy conservation using cavity walls, rattrap bond etc.
- d. Working drawing for the construction of walls.
- e. Integrate with Architectural Design studio.
- f. Hands on session on wall masonry with different materials in construction yard.
- g. Site visits to manufacturing units of brick, cement block etc., stone quarries, and construction sites to be arranged by studio teachers and report to be compiled by students.
- h. Market survey of materials should be carried out by students.

REFERENCE BOOKS:

1.	Chudley	Construction Technology, Prentice Hall, 1993, ISBN: 978-0131286429
2.	Francis D. K. Ching	Building Construction Illustrated, 5th edition, John Wiley & Sons, 2014, ISBN-10 9781118458341, ISBN-13 978-1118458341
3.	Barry	Construction Of Buildings, Volume- 5, East West Press, 1999, ISBN: 978-8176710053
4.	W.B. Mc Kay	Building construction, Pearson Education India, 2013. ISBN: 978-8131504291
5.	Robin Barry	The Construction of Buildings, Volume 1, 7th Edition, Publisher Wiley-Blackwell, ISBN-10 : 0632052619, ISBN-13 : 978-0632052615
6.	Rangwala	Building Construction, Charotar Publishing House Pvt. Ltd., 2022, ISBN-10 : 9385039520, ISBN-13 : 978-9385039522
7.	Glenn M Hardie	Building Construction - Principles, Practices and Materials Pearson, 1995, ISBN: 0133505707
8.	Sushil Kumar	Building Construction 20th Edition, Standard Publishers, 2024 ISBN: 9788180141683, 9788180141683

Course Outcomes: After the completion of the course, students will be able to:

1. **Identify** various basic building components.
2. **Explore** various materials used for wall masonry.
3. **Recognise** the applications of timber for buildings.
4. **Explore** construction details of wooden doors and windows.

Mapping of Course Outcomes (COs) to Program Specific Outcomes (PSOs)

Mapping of Course Outcomes (COs) to Program Specific Outcomes (PSOs)																	
	POs												PSOs				
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4
COs	CO1	3													3		
	CO2	3													3		
	CO3	3											3		3		
	CO4	3											3		3		

ARCHITECTURAL GRAPHICS - I

Contact Hours/Week	:	04	Credits	:	4.0
Total Lecture Hours	:	15	CIE Marks	:	50
Total Studio Hours	:	45	SEE Marks	:	50
Course Code	:	1ATS03	Exam Mode	:	Term Work

Course Objectives: This course will enable students to:

1. Understand the fundamentals of technical drawing.
2. Familiarize with the techniques of Architectural drafting and lettering standards.
3. Get introduced to the methods of conversion of drawings into different scales.
4. Illustrate the techniques of drawing orthographic projections.
5. Familiarize with the various 3-dimensional representation of building forms.

COURSE OUTLINE:

- **Introduction to the fundamentals of drafting** - Drafting equipment and materials used, Architectural drafting conventions, drawing set up, drafting techniques, line work, line types, line weights, line quality.
- **Practice in lettering** - single stroke letters - uppercase, lowercase, vertical and inclined letters. Different fonts used in architectural lettering.
- **Introduction to scales** - Construction of reduced and enlarged scales and use of different standard scales like 1:100, 1:200, 1:500, 1:50 etc.
- **Introduction to Euclidean Geometry** - exercises in lines and angles. Basic geometrical constructions, construction of triangles, quadrilaterals and regular polygons.
- **Introduction to Arches** - Types of arches and their construction methods.
- **Introduction to plane curves** such as ellipse, parabola, hyperbola, ovals and involutes and their construction methods.
- **Orthographic projections** – Introduction to the principles of projection, first angle projection; Projection of planes, solids and built forms.
- **Three-dimensional representation** - Isometric and Axonometric projection of simple objects, architectural elements and built forms.

REFERENCE BOOKS:

1.	Francis D.K. Ching	Architectural Graphics, 4th Edition, John Wiley, 2015, ISBN-10: 111903566X, ISBN-13: 978-1119035664
2.	Francis D.K. Ching	Design Drawing Vol I & II, John Wiley, 1997, ISBN-10: 0471286540
3.	I. H. Morris	Geometrical Drawing for Arts Students, Orient, 2006, ISBN-10: 8125026096

4.	N. D. Bhat	Engineering Drawing, Charotar publishing house, 53 rd edition, 2014, ISBN-10: 9380358962
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Course Outcomes: After the completion of this course, students will be able to:

1. **Develop** the proficiency in Architectural lettering.
2. **Elucidate** the fundamentals of Architectural drafting.
3. **Apply** the drafting skills for preparing scaled drawings.
4. **Develop** orthographic projections for various building forms.
5. **Explore** the various three dimensional representation methods.

Mapping of Course Outcomes (COs) to Program Specific Outcomes (PSOs)

	POs												PSOs				
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4
COs	CO1	3															3
	CO2	3															3
	CO3	3											3				3
	CO4	3															3
	CO5	3															3

BASIC DESIGN & VISUAL ARTS

Contact Hours/Week	:	05	Credits	:	5.0
Total Lecture Hours	:	30	CIE Marks	:	50
Total Studio Hours	:	45	SEE Marks	:	50
Course Code	:	1ATS04	Exam Mode	:	Term Work

Course Objectives: This course will enable students to:

1. Understand the role of art and its impact on society.
2. Explore the skills of composition with free hand sketching and rendering.
3. Develop ability to appreciate various art forms and their relationship with architecture.

COURSE OUTLINE:

- **Definition of Art and role of Art in Society:** Role and meaning of art, various types of arts-fine arts, performing arts, commercial arts, industrial arts, folk arts, abstract art, visual arts, spatial arts, temporal arts, pop art etc. Relationship of architecture with other arts like Painting and Sculpture. **Study Tools- Any three can be explored:** Observation & Study to develop hand & cognitive skill. Colours, Pattern & textures, and function. Free hand Sketching of Additive and Subtractive Forms. Exercises of rendering techniques.
- **Principles of Composition:** Elements of Design & Principles of Design. Principles of Aesthetics and Architectural Composition -1 – Unity, Balance, Proportion, Scale in Architectural composition. Illustrations and its application to the practice of design with historical as well as contemporary buildings. **Study Tools- Any three can be explored:** Colours, Pattern & textures, and function, Additive and Subtractive of Forms, Freehand sketching, Exercises of rendering techniques, Material Study.
- **Patterns - Study of pattern:** Natural, Manmade and Geometric patterns. Recognizing patterns, analyzing ideas, synthesizing information, solving problems, and creating things involving the process of abstraction. Appreciation of use of patterns in design. Space making through patterns. Structure- Understanding gravity, and the different ways we resist it. Study of material & structure in nature, and how design brings them together. Sketch analysis of structure and form in an example taken from Patterns. **Study tools - Any three can be explored:** Deconstruction of natural, manmade pattern to grid and abstract patterns. Point, line, Plane, Form using Grid Pattern. Volumetric

Exercises- Solid & Void. Freehand sketching. Study of Material & structure in nature, and expressing through design.

- **Study of Art Forms & Crafts of India and Asia:** Difference between art and craft. Art Styles of India- folk, popular and modern art, Art trends, periods and Isms. **Study tools-** Explore and learn any one Indian art form and regional craft. Structural/Material translation from concept mind mapping.
- **Appreciation of oriental and western performing arts:** **Study tools-** Exploring Performing arts of India, Regional Folk Dance and Crafts like, Leather puppets etc. To understand the oriental & western styles. Use them in product design.

REFERENCE BOOKS:

1	Christopher Alexander	TIMELESS WAY OF BUILDING, OUP USA, 1980, ISBN-10: 0195024028, ISBN-13: 978-0195024029
2	Don Norman	The design of everyday things, Basic Books Publisher, 2013 ISBN-10 : 9780465050659, ISBN-13: 978-0465050659
3	Maitland Graves	Art of Color & Design, McGraw-Hill, 1951, ISBN-10 0070241198, ISBN-13 978-0070241190
4	Antony Mason	A History of Western Art: From Prehistory to the 21st Century, McRae Books, 2007, ISBN: 8860980631, 9788860980632
5	Wucius Wong	Perspective sketches(publisher: Van Nostrand Reinhold NY)
6	Fredrick Harh.	Principles of color composition by Wucius Wong
7	Wucius Wong	Principles of two Dimensional Design (publisher: Van Nostrand Reinhold NY)
8	Theodore D Walker Van Nostrand	A History of painting Sculpture & Architecture Reinhold, New York.
9	Wucius Wong	Water colour rendering by Hayashi Studio 1994, Graphic-sha publishing company Ltd. (publisher: Van Nostrand Reinhold NY)
10	Robert W. Gill	Rendering with Pen and Ink, Thames & Hudson Publisher, 1984, ISBN-10 : 9780500680261, ISBN-13: 978-0553214642

Course Outcomes: After the completion of this course, students will be able to:

1. **Develop** the sense of aesthetics and architectural composition using basic elements of design.
2. **Apply** the skill of space making through patterns.
3. **Recognize** the role of art forms and crafts of India in shaping the society.

Mapping of Course Outcomes (COs) to Program Specific Outcomes (PSOs)

		POs												PSOs			
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4
COs	CO1	3											3				3
	CO2	3											3				3
	CO3	3															3

ARCHITECTURAL MODEL MAKING

Contact Hours/Week	:	04	Credits	:	4.0
Total Lecture Hours	:	--	CIE Marks	:	50
Total Studio Hours	:	60	SEE Marks	:	50
Course Code	:	1ATS05	Exam Mode	:	Term Work

Course Objectives: This course will enable students to:

1. Get introduced to the basic skills required for Architectural model making.
2. Familiarize with the skills of making abstract models using different materials.
3. Demonstrate the techniques and precision involved in making detailed Architectural models.

- Get introduced to digital modeling and techniques to construct different geometrical forms

COURSE OUTLINE:

- Generation of basic forms-** cube, cone, dome and arch. Generating of organic and geometrical forms/objects using different types of sheets and boards etc.
- Generation of forms &Material exploration:** hands on skill by using wood, bamboo, metal wire, thread, balsa wood, clothe, paper board etc
- Composite forms:** Experimental form generation by combining various materials and shapes.(rods, pipes, slabs, etc.) Free Forms: Tensile structures, Funicular Shells using wood, fabric, plastic etc.
- Architectural forms:** making of windows, wall doors, roofs, trees, shrubs, roads, vehicles etc.
- Introduction to digital modelling like 3D printing and laser cutting:** Introduction to 3D printing techniques and using of various materials to construct architectural models and different geometrical forms.

NOTE:

- Photographs at different stages of preparation as well as sectional and plan models to be used for documentation to study aspects like light, shade and shadows to understand visual quality.
- Materials like Cardboard, mount board, mill board, balsa wood, solid wood, plywood, soap, foam, plastic, glass, paper, gauze, mesh, metal sheet, canvas, clay to be experimented with to understand their limitations and qualities.

REFERENCE BOOKS:

1.	Bernard Otte, Arjan Karssen	Model Making: Conceive, Create and Convince, Frame Publishers, 2014, ISBN-10 : 9491727273, ISBN-13 : 978-9491727276
2.	David Neat	Model-Making: Materials and Methods, The Crowood Press, 2008, ISBN-10 1847970176, ISBN-13: 978-1847970176
3.	Matthew Driscoll	Model Making for Architects, The Crowood Press Ltd, 2013, ISBN-10: 1847974902, ISBN-13: 978-1847974907
4.	Jacqui Atkin	250 Tips, Techniques, and Trade Secrets for Potters: The Indispensable Compendium of Essential Knowledge and Troubleshooting Tips, Barron's Educational Series, 2009, ISBN-10 0764141163 , ISBN-13: 978-0764141164
5.	Megan Werner	Architectural Model Building (The Architecture Brief Series), Princeton Architectural Press, , 2010, ISBN-10: 9781568988702, ISBN-13 978-1568988702
6.	Roark T. Congdon	Architectural Model Building, Fairchild Publications, 1st edition, 2010, ISBN-10: 1563677733
7.	Dunn Nick	Architectural Modelmaking (2nd ed), Laurence King, 2014, ISBN-10: 1780671725, ISBN-13: 978-1780671727
8.	Driscoll Matt	Model Making for Architects, The Crowood Press Ltd, 2013, ISBN-10: 1847974902
9.	David Neat	Model-making: Materials and Methods, The Crowood Press Ltd, 2008, ISBN-10: 1847970176

Course Outcomes: After the completion of this course, students will be able to:

- Develop** skills to use different materials for architectural model making.
- Create** architectural and site model details using various materials.
- Develop** skills to use digital modeling to construct architectural models.

Mapping of Course Outcomes (COs) to Program Specific Outcomes (PSOs)

Mapping of Course Outcomes (COs) to Program Specific Outcomes (PSOs)																	
	POs												PSOs				
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4
COs	C01	3											3				3
	C02										3		3				3
	C03					3					3		3				3

HISTORY OF ARCHITECTURE-I

Contact Hours/Week	:	03	Credits	:	3.0
Total Lecture Hours	:	45	CIE Marks	:	50
Total Tutorial Hours	:	--	SEE Marks	:	50
Course Code	:	1ATT01	Exam Mode	:	Theory

Course Objectives: This course will enable students to:

1. Get introduced to pragmatic early shelter forms & burial traditions of the Prehistoric era.
2. Identify the socio-economic, culture, environment, demographic, political, regional influences on the evolution of ancient river valley civilization.
3. Interpret architectural character, construction methods, materials and socio-religious character of Eastern Civilizations.
4. Comprehend the theoretical and philosophies of Pre-classical architecture and Desert and Mountainous Cultures.
5. Understand the evolution of architectural form with reference to technology, style and character during pre-classical and buddhist rise era.

UNIT I

Introduction to Pre-Historic Civilization (early cultures): Introduction to Architectural history. Primitive man - shelters, settlements, ritual centres (religious and burial systems) e.g.: Oval hut, Nice; settlement at Catal huyuk; Megalithic architecture (Dolmen tomb, gallery grave, passage grave); Henge Monuments, Stonehenge.

09 Hrs

UNIT II

Introduction to architecture and planning of river valley civilizations of ancient Indus, Egypt, Mesopotamia.

Indus Valley Civilization (Indus and Ghaggar Hakra): Forces shaping settlements and habitats, E.g.: Mehrgarh, Layout of Mohenjo-Daro, dwellings and monumental architecture (House plan, Community well, Great Bath, Granary).

Mesopotamia (Tigris and Euphrates): Forces shaping settlements and habitats E.g.: Ziggurats at Warka, Ur and Tchoga Zanbil, Palace of Sargon.

Egyptian Civilization (Nile): Forces shaping settlements and habitats (funerary and sacred spaces), e.g.: Mastabas, Pyramid complex, Temple of Khons, Karnak..

09 Hrs

UNIT III

Introduction to Eastern Civilization: Chinese Architecture-Forbidden city in Beijing, Mausoulea, Buddhist temples. Japanese Architecture-Imperial palace, Kyoto. Shinto shrines.

Introduction to Tribal Cultures: Forces shaping settlements and habitats of Indigenous People of India. E.g: Bhil and Gond Tribes.

09 Hrs

UNIT IV

Introduction to Pre-Classical Civilization: Mycenaean, Etruscan, Persian (Achaemenid) E.g.: Lion Gate and Treasury of Atreus, Mycenae; Palace of Tiryns (Megaron), Etruscan Temples (Juno Sospita, Lanuvium), Tomb of Cyrus, Pasargadae, Palace of Persepolis.

Introduction to Desert and Mountainous Cultures: Forces shaping settlements and habitats (environmental and cultural influences) e.g.: Include first civilization of America, Andes, Mayans, early societies/cultures in the Sahara, Thar, and North America.

09 Hrs

UNIT V

Introduction to Pre-Classical Architecture (Indian sub-continent): Aryan and early Mauryan E.g.: Vedic village, typologies in Vedic Town and Vedic house. Study of civic architecture, Domestic architecture, like palaces, tombs, temples and houses. e.g.: Palace at Pataliputra.

Rise and development of Buddhist phase: Study of the early Hinayana and Mahayana phases. Types of structures and elements developed Eg: Stupas, Viharas, Chaityas, Rock cut examples. Smaller elements like Stambas, railings, ornamental paintings etc.

09 Hrs

NOTE:

- a. Assignments to include study of concepts relating to cultural and religious beliefs, structure, climatic interfaces and integration of all these in the resultant forms.

- b. Models, analytical studies individually or in groups.

REFERENCE BOOKS:

1.	Francis D. K. Ching, Mark M. Jarzombek, Vikramaditya Prakash	A Global History of Architecture, 3rd Edition, Wiley, 2017, ISBN-10: 9781118981337 ISBN-13 : 978-1118981337
2.	Christopher Tadgell	The History of Architecture in India, From the Dawn of Civilization to the End of the Raj, Architecture Design and Technology Press, 1990, ISBN : 9781854543509, 1854543504
3.	Banister Fletcher	A History of Architecture on the Comparative Method for Students, Craftsmen & Amateur; B.T. Batsford, Limited, 1901, ISBN: 9781343929623, 1343929628
4.	Dora P. Crouch	History of Architecture - Stonehenge to Skyscrapers, McGraw-Hill, 1985, ISBN: 9780070145313, 0070145318
5.	Talbot Hamlin	Architecture Through the Ages, Putnam, 1953, ISBN: 9780399300011, 0399300015
6.	Leland M. Roth	Understanding Architecture - Its Elements, History and Meaning, Herbert Press, 1994, ISBN: 9781871569612, 1871569613
7.	Cyril M. Harris	Illustrated Dictionary of Historic Architecture, Dover Publications, 1983, ISBN: 9780486244440, 048624444X
8.	David Watkin	A history of Western architecture, Laurence King Publishing, 2005, ISBN: 9781856694599, 1856694593
9.	Henri Stierlin	Persian Art & Architecture, Thames & Hudson, 2012, ISBN: 9780500516423, 0500516421
10.	Percy Brown	Indian Architecture (Buddhist And Hindu Period), 2nd edition, Read Books, 2010, ISBN-10: 1446510212, ISBN-13: 978-1446510216

Course Outcomes: After the completion of this course, students will be able to:

1. **Elucidate** the architectural characteristics of pre-historic period.
2. **Differentiate** the architecture and planning principles of various river valley civilizations.
3. **Identify** the vernacular characteristics of Asian civilizations.
4. **Analyse** the design and construction of buildings during Pre-Classical Civilization, Desert and Mountainous Cultures.
5. **Explore** the Vedic and Buddhist architecture phase of India.

Mapping of Course Outcomes (COs) to Program Specific Outcomes (PSOs)

Mapping of Course Outcomes (COs) to Program Specific Outcomes (PSOs)																	
	POs												PSOs				
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4
COs	CO1	3														3	
	CO2	3														3	
	CO3	3														3	
	CO4	3														3	
	CO5	3														3	

SOFT SKILLS

Contact Hours/Week	:	02	Credits	:	PP
Total Lecture Hours	:	-	CIE Marks	:	100
Total Tutorial Hours	:	30	SEE Marks	:	-
Course Code	:	CC09-AT	Exam Mode	:	-

Course Objectives: This course will enable students to:

1. Apply social skills for clear communication, persuasion, self-awareness, and active listening.
2. Use emotional skills to build confidence, manage stress, and adapt to change.
3. Set ambitious goals, practice empathy, and apply creativity for problem-solving.
4. Demonstrate discipline, time management, and structured problem-solving.

5. Work in teams, negotiate, resolve conflicts, and think critically.

UNIT I

Social Skills - Communication: Principles of clear and effective exchange of ideas in professional and social contexts. • Persuasion: Techniques to influence and convince through logical, emotional, and ethical appeals. • Self-Awareness: Identifying personal strengths, weaknesses, opportunities, and challenges (SWOC analysis). • Active Listening: Paraphrasing, questioning techniques, and demonstrating attentiveness.

03 Hrs

UNIT II

Emotional Skills I - Emotional Intelligence (EI): Recognizing and managing emotions, empathy, relationship management, and conflict resolution. • Stress Management: Identifying stress triggers, relaxation techniques, work-life balance strategies, and mindfulness practices. • Time Management: Prioritization (Eisenhower Matrix), setting SMART goals, avoiding procrastination, and effective scheduling. • Adaptability & Resilience: Handling change, bouncing back from setbacks, and developing a growth mindset.

03 Hrs

UNIT III

Emotional Skills II - Ambition & Goal Setting: Defining personal and professional aspirations, creating SMART goals, and aligning actions with long-term vision. • Sympathy & Empathy: Understanding emotional perspectives, differentiating between the two, and applying them in workplace and social interactions. • Creativity & Innovation: Generating original ideas, problem-solving, and applying creative thinking techniques (mind-mapping, SCAMPER).

03 Hrs

UNIT IV

Professional Skills I - Problem Solving: Identifying root causes, analysing options, and implementing solutions using methods like 5 Whys and Fishbone Diagram. • Discipline: Building consistency, accountability, and professional habits. • Time Management: Prioritizing tasks (Eisenhower Matrix), scheduling, avoiding procrastination.

03 Hrs

UNIT V

Professional Skills II - Collaboration & Teamwork: Working effectively in diverse teams, fostering trust, and achieving shared goals. • Negotiation & Conflict Resolution: Strategies to resolve differences and reach win-win outcomes. • Critical Thinking: The ability to analyze, evaluate, and synthesize information to make well-reasoned decisions.

03 Hrs

Activity Based Learning (Suggested Activities in Class)/ Practical Based learning:

1. Contents related activities (Activity-based discussions)
2. For active participation of students instruct the students to prepare Flowcharts and Handouts
3. Organizing Group wise discussions Connecting to placement activities
4. Quizzes and Discussions, Seminars and assignments

TEXT BOOKS:

1	Principles of Scientific and Technical Writing, 1e, By Pratap K. J. Mohapatra, Sanjib Moulick, © 2025 Published: December 23, 2024
2	Soft Skills, 1e, By Soma Mahesh Kumar © 2024 Published: June 8, 2023

REFERENCE BOOKS:

1	Effective Technical Communication, 3e, By Ashraf M. Rizvi, Priyadarshi Patnaik, © 2024 Published: September 12, 2024
2	Yadav, D. P. (2022). A course in English pronunciation. Notion Publications.

Course Outcomes: Students will be able to:

1. **Apply** social skills for clear communication, persuasion, selfawareness, and active listening
2. **Use** emotional skills to build confidence, manage stress, and adapt to change
3. **Set** goals, practice empathy, and apply creativity for problemsolving
4. **Demonstrate** discipline, time management, and structured problemsolving

5. **Work** in teams, negotiate, resolve conflicts, and think critically

Mapping of Course Outcomes (COs) to Program Specific Outcomes (PSOs)

		POs												PSOs			
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4
COs	CO1									1	3		2				3
	CO2										3		2				3
	CO3										3		2				3
	CO4									1	3		2				3
	CO5									1	3		2				3

INNOVATION AND DESIGN THINKING

Contact Hours/Week	:	01	Credits	:	1.0
Total Lecture Hours	:	15	CIE Marks	:	50
Total Tutorial Hours	:	-	SEE Marks	:	50
Course Code	:	CC06-AT	Exam Mode	:	Term Work

Course Objectives: This course will enable students to:

1. Explain the concept of design thinking for product and service development
2. Explain the fundamental concept of innovation and design thinking
3. Discuss the methods of implementing design thinking in the real world.

UNIT I

UNDERSTANDING DESIGN THINKING: Meaning of Design Thinking, Definition of Design Thinking, Origins of Design Thinking, Design Thinker in the organizations, Features of Design Thinking, Principles of Design Thinking, Stages of Design Thinking, Benefits of Design Thinking, Theories and Practices of Design Thinking, Practices of Design Thinking, Team based Design Thinking

03 Hrs

UNIT II

TOOLS FOR DESIGN THINKING: Visualization, Journey mapping, Value chain analysis, The mind map, Rapid Concept development, Assumption testing, Prototype, Co-creation, Learning Launches, Storytelling.

03 Hrs

UNIT III

DESIGN THINKING FOR BUSINESS PROCESS MODELING: Business Process Modelling (BPM), Advantage of Business Process Modelling, Design Thinking in Business Process Modelling, Agile in Virtual Collaboration, Scenario Based Prototyping.

03 Hrs

UNIT IV

DESIGN THINKING FOR STRATEGIC INNOVATIONS: Strategic Management, Innovation Management, types of innovation, Strategic Innovation, Features of Strategic Innovation, Scope of Strategic Innovation, Design Thinking and Strategic Innovation, Practices of Integrating Design Thinking in Strategic Innovation.

03 Hrs

UNIT V

Design thinking workshop: Design Thinking Work shop Empathize, Design, Ideate, Prototype and Test.

03 Hrs

TEXT BOOKS:

1	John. R. Karsnitz, Stephen O'Brien and John P. Hutchinson	"Engineering Design", Cengage learning (International edition) Second Edition, 2013.
2	Roger Martin	"The Design of Business: Why Design Thinking is the Next Competitive Advantage", Harvard Business Press, 2009

3	Hasso Plattner, Christoph Meinel and Larry Leifer (eds)	"Design Thinking: Understand – Improve – Apply", Springer, 2011
4	Idris Mootee	"Design Thinking for Strategic Innovation: What They Can't Teach You at Business or Design School", John Wiley & Sons 2013.

REFERENCE BOOKS :

1	Yousef Haik and Tamer M. Shahin	"Engineering Design Process", Cengage Learning, Second Edition, 2011.
2	Jeanne Liedtka, Andrew King, Kevin Bennett	Solving Problems with Design Thinking - Ten Stories of What Works (Columbia Business School Publishing) Hardcover – 20 Sep 2013

Course Outcomes: After the course students will be able:

1. **Appreciate** various design process procedure.
2. **Analyze** different tools used in Design thinking.
3. **Identify** the significance of Design thinking for Business Process Modeling.
4. **Identify** the significance of Design thinking for Design Thinking for strategic innovations.

Mapping of Course Outcomes (COs) to Program Specific Outcomes (PSOs)

		POs												PSOs			
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4
COs	CO1	3												3			
	CO2	3												3			
	CO3	3												3			
	CO4	3												3			
	CO5	3												3			

ಬಳಕೆ ಕನ್ನಡ ಡ Balake Kannada (Kannada for Usage)

Contact Hours/Week	:	01	Credits	:	1.0
Total Lecture Hours	:	15	CIE Marks	:	50
Total Tutorial Hours	:	-	SEE Marks	:	50
Course Code	:	CC03-AT	Exam Mode	:	Theory

Course Objectives: This course will enable students to:

1. Create the awareness regarding the necessity of learning local language for comfortable and healthy life.
2. Enable learners to Listen and understand the Kannada language properly.
3. Speak, read and write Kannada language as per requirement.
4. Train the learners for correct and polite conversation.
5. Know about Karnataka state and its language, literature and General information about this state.

UNIT I

1. Introduction, Necessity of learning a local language, Methods to learn the Kannada language.
2. Easy learning of a Kannada Language: A few tips, Hints for correct and polite conversation, Listening and Speaking Activities, Key to Transcription.
3. ವೈಯಕ್ತಿಕ ಕ, ಸ್ವಾಮ್ಯ ಸೂಚಕ/ಸಂಬಂಧಿತ ಸರ್ವನಾಮಗಳು ಮುಖ್ಯ ಪ್ರತ್ಯಯ ವರ್ಗ ಪದಗಳು - Personal Pronouns, Possessive Forms, Interrogative words.

03 Hrs

UNIT II

1. ನಾಮ್ಪುಗಳ ಸಂಬಂಧಾರ್ಥ ರೂಪಗಳು, ಸಂದೇಹಾಸಪದ ಪ್ರಶ್ನೆಗಳು ಮತ್ತು ಸಂಬಂಧವಾಚಕ ನಾಮ್ಪುಗಳು - Possessive forms of nouns, doubtful question and Relative nouns.
2. ಗುಣ, ಪ್ರಮಾಣ ಮತ್ತು ಛೇದ ಬಣಣ ವಿಶೇಷಣಗಳು, ಸಂಖ್ಯೆಯ ವಾಚಕಗಳು - Qualitative, Quantitative and Colour Adjectives, Numerals.
3. ಕಾರಕ ರೂಪಗಳು ಮತ್ತು ವಿಭಕ್ತಿ ಪ್ರತಿಯ ಯಗಳು - ಸಪ್ತಮಿ ವಿಭಕ್ತಿ ಪ್ರತಿಯ ಯ - (ಆ, ಅದು, ಅವು, ಅಲ್ಲಿ) - Predictive Forms, Locative Case.

03 Hrs

UNIT III

1. ಚತುರ್ಥವಿಭಕ್ತಿ ಪ್ರತಿಯ ಯದ ಬಳಕೆ ಮತ್ತು ಸಂಖ್ಯೆಯ ವಾಚಕಗಳು - Dative cases and Numerals.
2. ಸಂಖ್ಯೆಯ ಗುಣವಾಚಕಗಳು ಮತ್ತು ಬಹುರ್ವಚನ ನಾಮ್ಪುಗಳು - Ordinal Numerals and Plural markers.
3. ನ್ಯಯ ನ/ ನಿಷೇಧಾರ್ಥಕ ಕೃರ ಯಾಪ್ಪಗಳು ಮತ್ತು ಛೇದ ಗುಣವಾಚಕಗಳು - Defective / Negative verbs and Colour Adjectives.

03 Hrs

UNIT IV

1. ಅಪ್ಪಣೆ/ಒಪ್ಪಣೆಗೆ, ನಿರ್ದೇಶನ, ಪ್ರೋತ್ಸಾಹ ಮತ್ತು ಒತ್ತಾಯ ಅರೋಪ ಪದಗಳು ಮತ್ತು ವಾಕ್ಯಗಳು Permission, Commands, Encouraging and Urgin words (Imperative words and sentences)
2. ಸಾಮಾನ್ಯ ಸಂಭಾಷಣೆಗಳಲ್ಲಿ ದ್ವಿತೀಯ ವಿಭಕ್ತಿ ಪ್ರತಿಯ ಯಗಳು ಮತ್ತು ಸಂಭವನೀಯ ಪ್ರಕಾರಗಳು Accusative cases and Potential Forms used in General Communication.
3. "ಇರು ಮತ್ತು ಇರಲಿ" ಸಹಾಯಕ ಕೃರ ಯಾಪ್ಪಗಳು, ಸಂಭವಯ ಸೂಚಕ ಮತ್ತು ನಿಷೇಧಾರ್ಥಕ ಕೃರ ಯಾಪ್ಪಗಳು Helping verbs 'iru and iralla'. Corresponding Future and Negation verbs.
4. ಹೋಲಿಕೆ (ತ್ಯಕ್ತ), ಸಂಬಂಧ ಸೂಚಕ, ವಸ್ತು ಸೂಚಕ ಪ್ರತಿಯ ಯಗಳು ಮತ್ತು ನಿಷೇಧಾರ್ಥಕ ಪದಗಳ ಬಳಕೆ Comparative, Relationship, Identification and Negation words.

03 Hrs

UNIT V

1. ಕಾಲ ಮತ್ತು ಸಮಯದ ಹಾಗೂ ಕೃರ ಯಾಪ್ಪಗಳ ವಿವಿಧ ಪ್ರಕಾರಗಳು - Different types of Tense, Time and Verbs.
2. -ದ, -ತ್, -ತ್ತ, -ಇತ್ತ, -ಆಗಿ, -ಅಲಿ, -ಗ, -ಕ್, ಇದೆ ಕೃರ ಯಾ ಪ್ರತಿಯ ಯಗಳೊಂದಿಗೆ ಭೂತ, ಭವಿಷ್ಯ ಮತ್ತು ವರ್ತಮಾನ ಕಾಲ ವಾಕ್ಯ ರಚನೆ - Formation of Past, Future and Present Tense Sentences with Verb Forms.
3. ಸಂಭಾಷಣೆಯಲ್ಲಿ ದ್ವನೋಪಯೋಗಿ ಕ್ಷನ ಪದಗಳು - Kannada Vocabulary List. Kannada Words in Conversation.

03 Hrs

TEXT BOOKS :

1	ಬಳಕೆ ಕನ್ನಡ - ಡಾ. ಎಲ್. ತಿಮ್ಮೇಶ ಪ್ರಕಟಣೆ : ಪ್ರಸ್ತಾಂಗ, ವಿಶ್ವೇಶ ರಾಯಯ ತಾಂತಿರ ಕ ವಿಶ್ವ ವಿದ್ಯಾಲಯ, ಬೆಳಗಾವಿ. ಸೂಚನೆ : ಹೆಚ್ಚಿನ ಮಾಹಿತಿ ಮತ್ತು ವಿವರಗಳಿಗೆ ಡಾ. ಎಲ್. ತಿಮ್ಮೇಶ (9900832331) ಇರನ್ನಾ ಸಂಪರ್ಕಿಸಿ. ಮಾದರಿ ಪ್ರಶ್ನೆ ಪಿರ ಕೆ, ಕೇರ್ವ ಆಯ್ಕೆ ಮಾಹಿತಿ, ಅಧಯನ ಸ್ವಪ್ನರ ಮತ್ತು ಬಹು ಆಯ್ಕೆ ಮಾದರಿಯ ಪ್ರಶ್ನೆಗಳ ಕೈಪಿಡಿಗಾಗ್ಯ ವಿಶ್ವವಿದ್ಯಾಲಯ ಲಯದ ವೆಬ್ಸೈಟ್ ನೇಡುವುದು.
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Course Outcomes: After the course students will be able:

1. Familiarize the necessity of learning of local language for comfortable life.
2. Speak, read and write Kannada language as per requirement.
3. Communicate (converse) in Kannada language in their daily life with Kannada speakers.
4. Listen and understand the Kannada language properly.
5. Speak in polite conversation.

Mapping of Course Outcomes (COs) to Program Specific Outcomes (PSOs)

		POs												PSOs			
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4
CO	CO1										3						3
	CO2										3						3

CO3										3						3
CO4										3						3
CO5										3						3

ಸಾಂಸ್ಕೃತಿಕ ಕನ್ನಡ Samskruthika Kannada

Contact Hours/Week	:	01	Credits	:	1.0
Total Lecture Hours	:	15	CIE Marks	:	50
Total Tutorial Hours	:	-	SEE Marks	:	50
Course Code	:	CC04-AT	Exam Mode	:	Theory

Course Objectives : This course will enable students to:

ಸಾಂಸ್ಕೃತಿಕ ಕನ್ನಡ ಪಠ್ಯ ಕಲಿಕೆಯ ಉದ್ದೇಶಗಳು:

- ವ್ಯತಿಪರ ಪದವಿ ವಿದ್ಯಾರ್ಥಿಗಳಾಗಿರುವುದರಿಂದ ಕನ್ನಡ ಭಾಷೆ, ಸಾಹಿತ್ಯ ಮತ್ತು ಕನ್ನಡದ ಸಂಸ್ಕೃತಿಯ ಪರಿಚಯ ಮಾಡಿಕೊಡುವುದು.
- ಕನ್ನಡ ಸಾಹಿತ್ಯದ ಪ್ರಧಾನ ಭಾಗವಾದ ಆಧುನಿಕ ಪೂರ್ವ ಮತ್ತು ಆಧುನಿಕ ಕಾವ್ಯಗಳನ್ನು ಸಾಂಕೇತಿಕವಾಗಿ ಪರಿಚಯಿಸುವುದು.
- ವಿದ್ಯಾರ್ಥಿಗಳಲ್ಲಿ ಸಾಹಿತ್ಯ ಮತ್ತು ಸಂಸ್ಕೃತಿಯ ಬಗ್ಗೆ ಅರಿವು ಹಾಗೂ ಆಸಕ್ತಿಯನ್ನು ಮೂಡಿಸುವುದು.
- ತಾಂತ್ರಿಕ ವ್ಯಕ್ತಿಗಳ ಪರಿಚಯವನ್ನು ಹಾಗೂ ಅವರುಗಳು ಸಾಧಿಸಿದ ವಿಷಯಗಳನ್ನು ಪರಿಚಯಿಸುವುದು.
- ಸಾಂಸ್ಕೃತಿಕ, ಜನಪದ ಹಾಗೂ ಪ್ರವಾಸ ಕಥನಗಳ ಪರಿಚಯ ಮಾಡಿಕೊಡುವುದು.

ಘಟಕ - 1

ಕನ್ನಡ ಸಂಸ್ಕೃತಿ ಮತ್ತು ಭಾಷೆ ಕುರಿತಾದ ಲೇಖನಗಳು

03 ಗಂಟೆಗಳು

1. ಕರ್ನಾಟಕ ಸಂಸ್ಕೃತಿ - ಹಂ.ಪ. ನಾಗರಾಜಯ್ಯ
2. ಕರ್ನಾಟಕದ ಏಕೀಕರಣ - ಒಂದು ಅಪೂರ್ವ ಚರಿತ್ರೆ - ಜಿ. ವೆಂಕಟಸುಬ್ಬಯ್ಯ
3. ಆಡಳಿತ ಭಾಷೆಯಾಗಿ ಕನ್ನಡ - ಡಾ. ಎಲ್. ತಿಮ್ಮೇಶ ಮತ್ತು ಪ್ರೊ. ವಿ. ಕೇಶವಮೂರ್ತಿ

ಘಟಕ - 2

ಆಧುನಿಕ ಪೂರ್ವದ ಕಾವ್ಯ ಭಾಗ

03 ಗಂಟೆಗಳು

1. ವಚನಗಳು - ಬಸವಣ್ಣ, ಅಕ್ಕಮಹಾದೇವಿ, ಅಲ್ಲಮಪ್ರಭು, ಆಯ್ದಕ್ಕಿ ಮಾರಯ್ಯ, ಜೇಡರ ದಾಸಿಮಯ್ಯ, ಆಯ್ದಕ್ಕಿ ಲಕ್ಕಮ್ಮ
2. ಕೀರ್ತನೆಗಳು: ಅದರಿಂದೇನು ಫಲ ಇದರಿಂದೇನು ಫಲ - ಪುರಂದರದಾಸರು ತಲ್ಲಣಿಸಿದರು ಕಂಡ್ಯ ತಾಳು ಮನವೇ - ಕನಕದಾಸರು
3. ತತ್ವಪದಗಳು : ಸಾವಿರ ಕೊಡಗಳ ಸುಟ್ಟು - ಶಿಶುನಾಳ ಶರೀಫ

ಘಟಕ - 3

ಆಧುನಿಕ ಕಾವ್ಯ ಭಾಗ

03 ಗಂಟೆಗಳು

1. ಡಿವಿಜಿ ರವರ ಮಂಕುತಿಮ್ಮನ ಕಗ್ಗದಿಂದ ಆಯ್ದ ಕೆಲವು ಭಾಗಗಳು
2. ಕುರುಡು ಕಾಂಚಾಣ: ದ.ರಾ. ಬೇಂದ್ರೆ
3. ಹೊಸಬಾಳಿನ ಗೀತೆ : ಕುವೆಂಪು

ಘಟಕ - 4

ತಾಂತ್ರಿಕ ವ್ಯಕ್ತಿಗಳ ಪರಿಚಯ

03 ಗಂಟೆಗಳು

1. ಡಾ. ಸರ್ ಎಂ. ವಿಶ್ವೇಶ್ವರಯ್ಯ: ವ್ಯಕ್ತಿ ಮತ್ತು ಐತಿಹ್ಯ - ಎ.ಎನ್. ಮೂರ್ತಿರಾವ್
2. ಕರಕುಶಲ ಕಲೆಗಳು ಮತ್ತು ಪರಂಪರೆಯ ವಿಜ್ಞಾನ - ಕರೀಗೌಡ ಬೀಚನಹಳ್ಳಿ

ಘಟಕ - 5

ಸಾಂಸ್ಕೃತಿಕ, ಜನಪದ ಕಥೆ ಮತ್ತು ಪ್ರವಾಸ ಕಥನ

03 ಗಂಟೆಗಳು

1. ಯುಗಾದಿ : ವಸುಧೇಂದ್ರ
2. ಮೆಗಾನೆ ಎಂಬ ಗಿರಿಜನ ಪರ್ವತ : ಹಿ.ಚಿ. ಬೋರಲಿಂಗಯ್ಯ

TEXT BOOKS :

1	<p>ಸಾಂಸ್ಕೃತಿಕ ಕನ್ನಡ - ಡಾ. ಹಿ.ಚಿ. ಬೋರಲಿಂಗಯ್ಯ ಮತ್ತು ಡಾ. ಎಲ್. ತಿಮ್ಮೇಶ ಪ್ರಕಟಣೆ: ಪ್ರಸಾರಾಂಗ, ವಿಶ್ವೇಶ್ವರಯ್ಯ ತಾಂತ್ರಿಕ ವಿಶ್ವವಿದ್ಯಾಲಯ, ಬೆಳಗಾವಿ.</p> <p>ಸೂಚನೆ: ಹೆಚ್ಚಿನ ಮಾಹಿತಿ ಮತ್ತು ವಿವರಣೆಗಳಿಗೆ ಡಾ. ಎಲ್. ತಿಮ್ಮೇಶ (9900832331) ಇವರನ್ನು ಸಂಪರ್ಕಿಸಿ. ಮಾದರಿ ಪ್ರಶ್ನೆಪತ್ರಿಕೆ, ಕೋರ್ಸ್ ಆಯ್ಕೆ ಮಾಹಿತಿ, ಅಧ್ಯಯನ ಸಾಮಗ್ರಿ ಮತ್ತು ಬಹು ಆಯ್ಕೆ ಮಾದರಿಯ ಪ್ರಶ್ನೆಗಳ ಕೈಪಿಡಿಗಾಗಿ ವಿಶ್ವವಿದ್ಯಾಲಯದ ವೆಬ್‌ಸೈಟ್ ನೋಡುವುದು.</p>
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Course Outcomes :

After the completion of this course, students will be able to:

ಸಾಂಸ್ಕೃತಿಕ ಕನ್ನಡ ಪಠ್ಯ ಕಲಿಕೆಯ ನಂತರ ವಿದ್ಯಾರ್ಥಿಗಳಲ್ಲಿ:

- CO1 :** ಕನ್ನಡ ಭಾಷೆ, ಸಾಹಿತ್ಯ ಮತ್ತು ಕನ್ನಡದ ಸಂಸ್ಕೃತಿಯ ಕುರಿತು ಅರಿವು ಮೂಡಿರುತ್ತದೆ.
- CO2 :** ಕನ್ನಡ ಸಾಹಿತ್ಯದ ಪ್ರಧಾನ ಭಾಗವಾದ ಆಧುನಿಕ ಪೂರ್ವ ಮತ್ತು ಆಧುನಿಕ ಕಾವ್ಯಗಳನ್ನು ಸಾಂಕೇತಿಕವಾಗಿ ಕಲಿತು ಹೆಚ್ಚಿನ ಓದಿಗೆ ಮತ್ತು ಜ್ಞಾನಕ್ಕೆ ಸ್ಫೂರ್ತಿ ಮೂಡುತ್ತದೆ.
- CO3 :** ವಿದ್ಯಾರ್ಥಿಗಳಲ್ಲಿ ಸಾಹಿತ್ಯ ಮತ್ತು ಸಂಸ್ಕೃತಿಯ ಬಗ್ಗೆ ಅರಿವು ಹಾಗೂ ಆಸಕ್ತಿ ಹೆಚ್ಚಾಗುತ್ತದೆ.
- CO4 :** ತಾಂತ್ರಿಕ ವ್ಯಕ್ತಿಗಳ ಪರಿಚಯವನ್ನು ಹಾಗೂ ಅವರುಗಳು ಸಾಧಿಸಿದ ವಿಷಯಗಳನ್ನು ತಿಳಿದುಕೊಂಡು ನಾಡಿನ ಇನ್ನಿತರ ವ್ಯಕ್ತಿಗಳ ಬಗ್ಗೆ ತಿಳಿದುಕೊಳ್ಳುವ ಕೌತುಕತೆ ಹೆಚ್ಚಾಗುತ್ತದೆ.
- CO5 :** ಸಾಂಸ್ಕೃತಿಕ, ಜನಪದ ಹಾಗೂ ಪ್ರವಾಸ ಕಥನಗಳ ಪರಿಚಯವಾಗುತ್ತದೆ.

Mapping of Course Outcomes (COs) to Program Specific Outcomes (PSOs)

		POs												PSOs			
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4
COs	CO1										3						3
	CO2										3						3
	CO3										3						3
	CO4										3						3
	CO5										3						3

SIDDAGANGA INSTITUTE OF TECHNOLOGY
Tumakuru-572103

(An Autonomous Constituent Institution of Visvesvaraya Technological University, Belagavi)

SCHOOL OF ARCHITECTURE

DETAILED SYLLABUS FOR
SECOND SEMESTER
B. ARCHITECTURE

ARCHITECTURAL DESIGN - I

Contact Hours/Week	:	07	Credits	:	7.0
Total Lecture Hours	:	-	CIE Marks	:	50
Total Studio Hours	:	105	SEE Marks	:	50
Course Code	:	2ATS01	Exam Mode	:	Viva

Course Objectives: This course will enable students to:

1. Nurture ideation of a functional space crafted by robust elements in an aesthetic manner.
2. Observe and analyze three dimensional forms in natural and built environments.
3. Explore architectural drawings as a medium of representation of an architectural intent.
4. Create architectural spaces with simple functional requirements.

COURSE OUTLINE:

- To relearn the “principles of Design” and anthropometric requirements of space planning.
- **Introduction to “Nature of Space”:** Understanding the notions of PLACE: A “boundary”, a “center” and a “spirit”, PATH: A “way” and a “goal”, DOMAIN: A conglomeration of paths and goals that forms a “whole” with its own “identity”, Understanding the notions of “Enclosure, Ambiguity, and Transparency”, “Spatial Context in formal and informal built environment. - open, closed, transition spaces”, “cultural context – inclusion, exclusion, spatial segregation”, Culture & Design: Understanding social attitudes to Built-form: extroverted/introverted, formal/informal, typical/individual, simple/labyrinthine, contiguous/isolated etc.
- **Introduction to “Poetics of Space”:** light, movement, transformation, scale, structure and skin, key tools for learning : text / language as a tool; emotion, cultural, climatic, eg.- contemplative / severe / dramatic / minimalist / natural / organic / contemporary / traditional / etc.,
- **Hands-on Design exercise** – creation of a simple design in which form is distinct from structure and creation of a simple design in which form is integral with structure. Presentation of case studies based on literature survey & field visit. Study models, Sketches and Drawings of study models - plans and sections (suitable scale) using a mono functional space.
- Design process to test the learning of the semester using a multifunctional program to incorporate “nature of space”, “poetics of space” and “physical constraints”, Generation of a design brief for a multifunctional program, generation of areas based on human activity and anthropometric data, Selection a of suitable site, Idea generation, design development, & design drawings, Eg. - A House for self, Guest House, Farm house, Villa, Container house, Courtyard house, Tree house, house in an informal settlement etc.

NOTE:

- a. Exercises related to each unit have to be carried out distinctively.
- b. Relevant case studies and literature studies can be given by the studio teachers and a report has to be compiled by the students.
- c. One or more design exercises can be carried out as group work to explore possibilities of students working as teams.
- d. Vertical studio involving other semesters can be encouraged to carry out one full or part project.
- e. The portfolio covering the above topics shall be presented viva.
- f. Projects to be presented with the help of drawings, sketches, and models.
- g. Applications of techniques learnt in visual arts and architectural graphics must be incorporated.
- h. The projects listed in the syllabus are only to state the scale and complexity. The projects of similar scope can be introduced by the teachers.

REFERENCE BOOKS:

1.	Maurice de Sausmarez	Basic Design - The Dynamics of Visual Form, Bloomsbury USA, 2009 ISBN : 9780713683660
2.	Ernest E. Burden	Design Communication- Developing Promotional Material for Design Professionals, McGraw-Hill Bk. Company, 1987, ISBN : 9780070089327, 0070089329
3.	Tom Alphin	The Lego Architect, No Starch Press,US, 2015, ISBN-10: 9781593276133 ISBN-13: 978-1593276133
4.	François Blanciak	Siteless : 1001 Building Forms by François Blanciak, MIT Press, 2008, ISBN-10: 0262026309, ISBN-13: 9780262026307

5.	Michael Clark, Roger H.; Pause	Precedents in Architecture, Van Nostrand Reinhold, 1985, ISBN-10: 0442216688 ISBN-13: 978-0442216689
6.	John Hancock Callender	Time-saver Standards for Architectural Design Data, McGraw-Hill, 1974 ISBN : 9780070096479, 0070096473
7.	Grillo, Paul J.	Form, Function & Design (Dover Art Instruction and Reference Books) – Softcover, Dover Publications, 1975, ISBN 10: 0486201821 / ISBN 13: 9780486201825
8.	Charles George Ramsey, Harold Reeve Sleeper	Architectural Graphic Standards; Wiley Publishers, 1998 ISBN : 9780471247623, 0471247626
9.	Yatin Pandya	Elements of Space Making; Mapin Publishing, 2013 ISBN : 9781935677307, 1935677306
10.	Francis D. K. Ching	Architecture Form, Space, & Order; Wiley, 2014 ISBN : 9781118745083, 1118745086

Course Outcomes: After the completion of this course, students will be able to:

1. **Explore** strong conceptual framework and ideation for functional space.
2. **Derive** three dimensional forms in natural and built environments.
3. **Interpret** architectural drawings as a medium of representation of an architectural intent.
4. **Design** and detail the functional spaces for the project.

Mapping of Course Outcomes (COs) to Program Specific Outcomes (PSOs)

Mapping of Course Outcomes (COs) to Program Specific Outcomes (PSOs)																	
	POs												PSOs				
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4
COs	CO1	3									3			3			
	CO2	3	3											3			
	CO3			3							3			3			
	CO4			3							3			3			

BUILDING MATERIALS AND CONSTRUCTION - II

Contact Hours/Week	:	04	Credits	:	4.0
Total Lecture Hours	:	15	SEE Marks	:	50
Total Studio Hours	:	45	CIE marks	:	50
Course Code	:	2ATS02	Exam mode	:	Viva

Course Objectives: This course will enable students to:

1. Get introduced to the timber roofing & staircase for buildings.
2. Get introduced to Reinforced Cement Concrete as a building material.
3. Familiarize with various types of stairs using different materials.

COURSE OUTLINE:

- **Timber Roof** - Lean to roof, Collared Roof, King post roof, Queen Post Roof; details of joinery.
- **Introduction to Staircase** - Anthropometry of stairs, types of Staircases.
- **Timber Stairs** - Single and Double Stringer stairs: construction methods and joinery.
- **Introduction to Cement** - Types of cement, applications, manufacturing process, laboratory and field tests.
- **Steel** - Properties and uses of reinforced steel. Study of market forms of steel and its applications.
- **Concrete** - Ingredients, grades, admixtures, properties, production, mix, proportioning and placing of concrete.
- **Introduction to Reinforced Cement Concrete** - Form work, placing, and compaction, curing of concrete, sampling and testing of concrete. Construction joints, expansion joints, finish in concrete, chemical admixtures. Advantages and disadvantages with respect to thermal properties and impact on life cycle of a building.
- **RCC Foundations** - Isolated footing and Square and circular columns. Raft foundations, Mat foundation, Grillage foundation and combined footing.

- **Introduction to RCC staircase** - Principles and methods of construction - Waist slab, folded plate and stringer.
- **Introduction to Steel Stairs** - Stringer stairs, Folded Type, Spiral stairs, Fire escape stairs: construction methods and joinery.
- **Introduction to Composite Stairs** - Brick/stone, Steel/Timber, Concrete/wood, steel/ glass: construction methods and joinery.

NOTE:

- Working Drawing of a door/ window with dimensions and specifications.
- Details of traditional roofs and their applicability in contemporary design.
- Integrate with Architectural Design studio.
- Site visits to timber yards, Saw mills, Carpentry workshops, and case studies of timber staircases, roofs and trusses to be arranged by studio teachers and report to be compiled by students.
- Market survey of materials should be carried out by students.

REFERENCE BOOKS:

1.	Mr R. Chudley, Mr R. Greeno	Construction Technology, 3rd Edition, Longman, 1999, ISBN-10: 0582316162, ISBN-13: 978-0582316164
2.	Chudley	Construction Technology, Prentice Hall, 1993, ISBN: 978-0131286429
3.	Francis D. K. Ching	Building Construction Illustrated, 5th edition, John Wiley & Sons, 2014, ISBN-10 9781118458341, ISBN-13 978-1118458341
4.	R. Barry	Construction of Buildings, Volume- 5, East West Press, 1999, ISBN: 978-8176710053
5.	W.B. Mc Kay	Building construction, Pearson Education India, 2013. ISBN: 978-8131504291
6.	Glenn M Hardie	Building Construction - Principles, Practices and Materials Pearson, 1995, ISBN: 0133505707

Course outcomes: After the completion of the course, students will be able to:

1. **Explore** timber roofing, staircase and its application in buildings.
2. **Apply** the skills and techniques of RCC construction in buildings.
3. **Interpret** various types of staircases with different materials.

Mapping of Course Outcomes (COs) to Program Specific Outcomes (PSOs)

Mapping of Course Outcomes (COs) to Program Specific Outcomes (PSOs)																	
	POs												PSOs				
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4
COs	C01	3											3		3		
	C02	3											3		3		
	C03	3											3		3		

ARCHITECTURAL GRAPHICS - II

Contact Hours/Week	:	04	Credits	:	4.0
Total Lecture Hours	:	15	CIE Marks	:	50
Total Studio Hours	:	45	SEE Marks	:	50
Course Code	:	2ATS03	Exam Mode	:	Term Work

Course Objectives: This course will enable students to:

1. Get introduced to fundamental principles of development of surfaces and section of solids.
2. Familiarize with construction techniques of one point and two-point perspectives.
3. Understand the principles of Sciography and graphical representation methods.

COURSE OUTLINE:

- **3D-Projections** - exercises in 3D representation of exploded isometric and axonometric views of objects, furniture and built forms.
- **Development of surfaces** - architectural roof forms, built enclosures and envelopes such as tents, upholstery etc..
- **Section of Solids** - of geometrical solids and construction of true shapes.
- **Interpenetration** of geometric solids, combination of different forms in architectural compositions.
- **Introduction to perspectives** - Principles of perspective drawings and varying visual effects of three-dimensional objects. Study and understanding of picture plane, cone of vision, center of vision, station point, ground level, horizon level or eye level, vanishing points, their variations and resultant effects.
- **Introduction to the methods of constructing perspective drawings** – Free hand sketches of one-point, two-point and three-point perspectives of building exterior with surroundings and interior view of a room.
- **Construction of one-point perspective** drawings of building elements and Building forms.
- **Construction of two-point perspective** drawing of any buildings, corridors, interiors etc.
- **Principles of Sciography** - study and understanding of light, shade and shadow. Standardization of direction of light and graphical representation methods of constructing shadow patterns. Construction of shadow patterns of planes and solids at different positions, different shapes and their combinations.
- **Construction of shadow patterns for Buildings** - Plans, Elevations, Perspective views and develop the site plan for different time of the day.

NOTE:

- a. Exercises related each unit has to be carried out precisely.
- b. Emphasize on one point and two point free hand perspective drawings of buildings.
- c. Integrate with design studio to study shadow patterns by using models.
- d. The portfolio covering above topics shall be presented for viva.

REFERENCE BOOKS:

1	Francis D.K. Ching	Architectural Graphics, 4th Edition, John Wiley, 2015, ISBN-10: 111903566X, ISBN-13: 978-1119035664
2	I. H. Morris	Geometrical Drawing for Arts Students, Orient, 2006, ISBN-10: 8125026096
3	Robert.W.Gill	Rendering with pen and ink, Thames & Hudson, 1984, ISBN-10: 9780500680261, ISBN-13: 978-0500680261
4	Milind Mulik	Perspective, Jyotsna Prakashan, 2006, ISBN-10: 8179251349, ISBN-13: 978-8179251348

Course Outcomes: After the completion of this course, students will be able to:

1. **Illustrate** the basic principles of surface development of solids.
2. **Apply** the skills in drafting sections and interpenetration of solids.
3. **Develop** perspective drawings for various building forms.
4. **Implement** the principles of Sciography for constructing shadow patterns.

Mapping of Course Outcomes (COs) to Program Specific Outcomes (PSOs)

		POs												PSOs			
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4
COs	CO1										3						3
	CO2										3		3				3
	CO3										3		3				3
	CO4										3						3

DESIGN THEORY & PRINCIPLES

Contact Hours/Week	:	04	Credits	:	4.0
Total Lecture Hours	:	30	SEE Marks	:	50
Total Studio Hours	:	30	CIE marks	:	50
Course Code	:	2ATS04	Exam mode	:	Viva

Course Objectives: This course will enable students to:

1. Understand the role of art and its impact on society.
2. Explore the skills of architectural composition through design principles.
3. Interpret the applications of organizing principles in design.
4. Familiarize with types of Ornamentation and their characteristics.
5. Identify the relationship between art and architectural styles.

COURSE OUTLINE:

- **Definition of Art and role of Art in Society:** Role and meaning of art, various types of arts-fine arts, performing arts, commercial arts, industrial arts, folk arts, abstract art, visual arts, spatial arts, temporal arts, pop art etc. Relationship of architecture with other arts like Painting and Sculpture. **Study Tools-** Any three can be explored: Observation & Study to develop hand & cognitive skill. Colours, Pattern & textures, and function. Free hand Sketching of Additive and Subtractive Forms. Exercises of rendering techniques.
- **Principles of Aesthetics and Architectural composition-** Contrast, harmony, accentuation, restraint, definition, repose, vitality, strength. Illustrations and application to the practice of design in historical and contemporary buildings.
- **Organizing principles of Architectural composition-** Symmetry, Asymmetry, Hierarchy, Datum, Axis, Rhythm, Repetition. Illustrations and application to the practice of design in historical and contemporary buildings.
- **Spatial organizations of masses in Architecture** -Linear, centralized, radial, clustered and grid organization. Illustrations and application to the practice of design in historical and contemporary buildings. **Study Tools-** Process of Representation of natural pattern to abstraction using pure geometrical/dimensional form using various visual media. Eg. Charcoal/ pencil/crayons/oils etc. Use of 2D & 3D hands on working models to synthesize and create form to appreciate the difference between architecture and spatial organizations.
- **Introduction to Abstraction:** Ornamentation in Architecture: Historical perspective of the use of ornament in buildings and use of ornament as a decoration to embellish parts of a building. Use and need of ornament in architectural design – different types of ornamentation in buildings. Ornamentation in Architecture Criticism– Argument against ornamentation. Ideas of architect Adolf Loos (Ornament and Crime); Ornaments as economically inefficient and morally degenerate, reduction of ornament or lack of decoration as the sign of an advanced society. **Study Tools-** Structural/Material translation from concept and architectural form.
- **Style in art & Architecture:** Basis for classification of styles including chronology of styles arrangement according to order that changes over time. Evolution of styles; reflecting the emergence of new ideas as reaction to earlier styles as a result of changing of fashions, beliefs, technology etc. Popular and modern art, Art trends, periods and Isms. **Study Tools-** Material Study, Experience of architecture in basic psychological and physiological terms.

NOTE:

- a. Discussions, presentations, Study models, case studies & Activities will be part of the studio work.
- b. The portfolio covering all the progressive and final works shall be presented for Viva.
- c. Submission will include Idea generation, Study models, Sketches, and drawings to achieve the desired results.

REFERENCE BOOKS:

1.	Francis D. K. Ching	“Architecture: Form, Space, & Order”, Wiley, 2014. ISBN: 9781118745083, 1118745086
2.	Parmar V S	“Design Fundamentals In Architecture”, Somaiya Publications Pvt. Ltd., 1997. ISBN: 978-

		8170391708
3	Paul Alan Johnson	“Theory Of Architecture: Concepts, Themes And Practices” , Wiley, 2018. ISBN: 978-8126572021
4	Yatin Pandya	“Elements Of Space Making”, Grantha Corporation, 2014. ISBN: 978-1935677307
5	Jon Lang	“Creating Architectural Theory: Role Of Behavioural Sciences In Environmental Design”, John Wiley & Sons Inc, 1987. ISBN: 978-0442259815

Course Outcomes: After the completion of the course, students will be able to:

1. **Explore** the role and significance of various art in society and their relationship with architecture.
2. **Apply** the different fundamental principles of design to create abstract compositions.
3. **Interpret** various principles of spatial organization to the given problem.
4. **Comprehend** the ornamentation in architectural styles through historic and contemporary examples.
5. **Analyse** the cultural, technological, and philosophical shifts shape style evolution and artistic movements.

Mapping of Course Outcomes (COs) to Program Specific Outcomes (PSOs)

	POs												PSOs				
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4
COs	C01	3															3
	C02	3		3													3
	C03	3															3
	C04	3															3
	C05	3															3

SITE SURVEYING AND ANALYSIS

Contact Hours/Week	:	02	Credits	:	2.0
Total Lecture Hours	:	-	CIE Marks	:	50
Total Practical Hours	:	30	SEE Marks	:	50
Course Code	:	2ATS05	Exam Mode	:	Term Work

Course Objectives: This course will enable students to:

1. Gain the knowledge and skills related to surveying and leveling principles.
2. Explore the methods of surveying and prepare survey plans.

COURSE OUTLINE:

- **Introduction to Surveying** – Definition, classification, principles of surveying, character of work, shrunk scale. Introduction to Chain Surveying Instruments – Chain and its types, Ranging Rod, Tapes, pegs.
- **Chain Surveying 1** – Ranging and Types of Ranging. **Chain Surveying 2** – Setting out angles, erecting perpendicular, Obstacles in chain surveying, calculation of area by offsets.
- **Plane Table Surveying** – Accessories used advantages and disadvantages, Methods of plane table surveying (radiation and intersection).
- **Levelling** – Definition, Classification, booking and reduction of levels (HI Method, Rise and Fall Method). Profile levelling – Calculation of depth of cutting and filling. Contouring: Characteristics of contours, direct and indirect methods of contours, interpolation and uses of contours.
- **Introduction to Contemporary Survey Instruments** – Theodolite, Total Station, GPS, Theodolite – Basic Concepts, Measuring horizontal and vertical angles. Total Station – Accessories used, uses of total station and applications, Introduction to GPS.
- **Observation and Analysis of a Site** – Survey without instruments using geometry and anthropometric measures. To learn a terrain on site factors like topography, hydrology, soils, landforms, vegetation, climate and micro climate and influence of water bodies.

- **Studying Survey Drawing** – Learning to read a land survey drawing, types of land survey drawing, scale and north, legends and symbols.

REFERENCE BOOKS:

1	B.C. Punmia, Ashok Kumar Jain, Arun Kumar Jain	Surveying Volume I, 7 th edition, Laxmi Publications, 2016, ISBN-10: 9788170088530, ISBN-13: 978-8170088530
2	K R Arora	Surveying Volume - 1, Standard Book House, 17th edition, Standard book house, ISBN-13: 9788189401238
3	R. Subramanian	Fundamentals of Surveying and Levelling, Oxford Uni. Press., 2014, ISBN-10 : 0199454728, ISBN-13: 978-0199454723
4	S K Duggal	Surveying, Vol 1, 4th Edition, McGraw Hill Education, 2017, ISBN-10: 978125902899, ISBN-13: 978-1259028991
5	TP Kanetkar, SV Kulkarni	Surveying & Levelling Vol – I, PuneVidyarthi Griha Prakashan, 2014, ISBN: 9788185825113, 9788185825113

Course Outcomes: After the completion of this course, students will be able to:

1. **Explore** the basic concepts of site survey and its importance in architecture.
2. **Analyze** the topographical characteristics of a given site for its effective use in site planning.

Mapping of Course Outcomes (cOs) to Program Specific Outcomes (PSOs)

Mapping of Course Outcomes (COs) to Program Specific Outcomes (PSOs)																	
	POs												PSOs				
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4
COs	CO1	3											3		3		
	CO2	3											3		3		

HISTORY OF ARCHITECTURE-II

Contact Hours/Week	:	03		Credits	:	3.0
Total Lecture Hours	:	45		CIE Marks	:	50
Total Tutorial Hours	:	--		SEE Marks	:	50
Course Code	:	2ATT01		Exam mode	:	Theory

Course Objectives: This course will enable students to:

1. Get introduced to the evolution of Hindu temple.
2. Familiarize with the evolution of various styles in temple architecture.
3. Understand the architectural character and structural innovations in temple typology.
4. Understand the contextual influence and vernacular concepts in temple architecture in India.

UNIT I

Evolution of Hindu temple: Indo Aryan- Early temples of Gupta phase at Udayagiri, Tigwa, Sanchi & Deogarh. Developments under chalukyas at Aihole, pattadakal and Badami in Karnataka and at Ellora (rock cut and structural)

Early Dravidian experiments by Pallavas: Rathas at Mahabalipuram, Shore temple, Kailasanatha temple & Vaikuntaperumal temple in terms of essential layout and elements of a temple. **09 Hrs**

UNIT II

Contribution of Cholas: emergence of large-scale layout of temple complexes - Brihadeshwara temple complex at Tanjore and Gangaikondacholapuram temple. Vimanas and multiple shrines in the same complex.

Pandyan contribution: Gopurams and addition of elements to existing temples. **09 Hrs**

UNIT III

Hoysala contribution: Evolution and development of star shaped temples and other related special features like navaranga, multiple shrines etc..Eg: Temples of Belur, Halebid and Somnathpur.

Later Dravidian style: Vijayanagar style through examples at Hampi, Vittala temple, Virupaksha and Hazara Rama temple and features like giant sculptures, Kalyana mantapa etc.

Nayaks: Contributions & developments through examples at Madurai Meenakshi temple and Srirangam Ranganatha temple.

09 Hrs

UNIT IV

Orissan style: Features and layout, form, shikara, internal & external treatment and their aesthetics. Mukteshwara and Lingaraja temple at Bhubaneshwar and Jagannath temple at Puri. E.g. Raja Rani Temple at Bhubaneshwar and the Sun Temple at Konark.

Gujarat style: Development of typical basic unit of temple & additional features like entrance arches and bathing tanks etc. Sun Temple, Modhera.

09 Hrs

UNIT V

Khajuraho style: Temple layout, grouping and ornamental features. Eg: Khandariyo Mahadeva and Lakshmana temples.

Jain Architecture: Architectural features and examples at Ranakpur temple and Dilwara temple at Mt.Abu.

09 Hrs

NOTE:

- Assignments to include study of concepts relating to cultural and religious beliefs and structure.
- Models, sketches and analytical studies can be carried out individually or in groups.

REFERENCE BOOKS:

1.	Adam Hardy	The Temple Architecture of India, John Wiley & Sons Inc, 2008, ISBN-10: 0470028270, ISBN-13: 978-0470028278
2.	Sir Banister Fletcher, Andrew Saint, Dan Cruickshank, Kenneth Frampton, Peter Blundell Jones	Banister Fletcher's A History of Architecture, 20th edition, 1996, Architectural Press ISBN-10: 0750622679, ISBN-13: 978-075062267
3.	Percy Brown	Indian Architecture (Buddhist And Hindu Period), Read Books, 2010, ISBN-10: 1446510212, ISBN-13: 978-1446510216

Course Outcomes: After the completion of this course, students will be able to:

- Appraise** the architectural elements and structural material innovations during early phase of temple evolution.
- Identify** the evolution of temple typology during Cholas and Pandyans.
- Classify** the characteristics and structural innovations of South Indian temples.
- Summarize** the vernacular concepts and design principles in temples of Orissan and Gujarat style.
- Identify** the building systems and construction technologies of Khajuraho and Jain architecture.

Mapping of Course Outcomes (COs) to Program Specific Outcomes (PSOs)

		POs												PSOs			
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4
COs	CO1	3														3	
	CO2	3														3	
	CO3	3														3	
	CO4	3														3	
	CO5	3														3	

BUILDING STRUCTURES - I

Contact Hours/Week	:	03	Credits	:	3.0
Total Lecture Hours	:	45	CIE Marks	:	50
Total Tutorial Hours	:	--	SEE Marks	:	50
Course Code	:	2ATT02	Exam mode	:	Theory

Course Objectives: This course will enable students to:

- Get introduced to various structural elements and systems.
- Identify various loads acting on a building and the support reactions.

3. Familiarize with concepts of Force systems and Equilibrium of Forces.

UNIT I

Introduction to structural systems – An overview into evolution of structures through history with examples.

Different construction materials with emphasis on structural properties viz. steel, concrete, wood, glass, aluminium. Different types of loads, the structure is being subjected to as per IS 875 Part I & II. **09 Hrs**

UNIT II

Mechanics - Classification of mechanics, force, characteristics of force, classification of force system, Resultant of force, Composition of force, Axioms in mechanics, Principles of transmissibility, Moment of force, Resultant of coplanar concurrent force system, and Free body diagrams. **09 Hrs**

UNIT III

Resultant of coplanar noncurrent force system, couple & characteristics of couple, different types of loads, different types of beams, statically determinate & statically indeterminate, different types of supports, problems on support reactions, Equilibrium of Co-planar Concurrent and Non-Concurrent forces.

Note: In the numerical pertaining to support reactions, loading on the beam shall be restricted to only point load & uniformly distributed load. **09 Hrs**

UNIT IV

Center of gravity, centroid, to locate the centroid of composite section from the 1st principles. Moment of inertia, radius of gyration, parallel axis theorem, perpendicular axis theorem. Numericals on determination of moment of inertia of composite section about any defined axis. **09 Hrs**

UNIT V

Truss - Triangulation concept, different types of trusses, assumption made in the analysis of truss. Analysis of the truss by the "Method of Joints" (Simple problems) to calculate the dead weight of the truss from given data. **09 Hrs**

REFERENCE BOOKS:

1.	S. S. Bhavikatti	Elements of Civil Engineering (4 th Edition), Vikas Publishing House, New Delhi. ISBN-13 : 978-8125918288, ISBN-10 :8125918280
2.	Dr. R K Bansal	Engineering Mechanics (8 th edition), Laxmi Publications, ISBN: 9788131808559
3.	Basavarajaiah & Mahadevappa	Strength of materials (3 rd Edition), Khanna Publishers, New Delhi. ISBN-10 : 8173714584, ISBN-13 : 978-8173714580
4.	Martin Bechthold and Daniel L Schodek	STRUCTURES, Pearson Education, New Delhi. 7 th Edition, 2014, ISBN (13): 978-0-13-255913-3, ISBN (10):0-13-255913-3
5.	Roberts A Heller and Deborah J Oakley	Salvadori's Structure in Architecture, 4 th Edition - Pearson Education, New Delhi. 2017, ISBN (13): 978-0-13-280320-5, ISBN (10):0-13-280320-8

Course Outcomes: After the completion of this course, students will be able to:

1. **Evaluate** the structural properties of materials, Specifications and applications as per IS Codes.
2. **Classify** forces, force systems, moment of force and draw free body diagrams.
3. **Calculate** the support reactions, equilibrium of Co-planar Concurrent and Non-Concurrent forces.
4. **Determine** centroid, Moment of Inertia, Radius of gyration of various sections.
5. **Predict** the dead weight of truss considering various materials and joining parameters.

Mapping of Course Outcomes (COs) to Program Specific Outcomes (PSOs)

Mapping of Course Outcomes (COs) to Program Specific Outcomes (PSOs)																	
	POs												PSOs				
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4
COs	CO1	3													3		
	CO2	3													3		
	CO3	3													3		
	CO4	3													3		
	CO5	3													3		

COMMUNICATION SKILLS

Contact Hours/Week	:	02	Credits	:	1.0
Total Lecture Hours	:	--	CIE Marks	:	50
Total Tutorial Hours	:	30	SEE Marks	:	50
Course Code	:	CC08-AT	Exam Mode	:	Theory

Course Objectives: This course will enable students to:

1. Identify the Common Errors in Writing and Speaking of English.
2. Achieve better Technical writing and Presentation skills for employment.
3. Read Technical proposals properly and make them to write good technical reports.
4. Acquire Employment and Workplace communication skills.
5. Learn about Techniques of Information Transfer through presentation in different level.

UNIT I

COMMUNICATION SKILLS - Glimpses of Essential English for Engineers (General Overview). Communication Skills: Process, Verbal and Non-Verbal, Proxemics, Chronemics and Barriers. Writing: Word Classification – Parts of Speech, Sentence structures. Speaking & Listening: Listening to English Pronunciation – English Phonemes – Intelligible Accent – Speech Organs- Syllable Structures, Stress, Intonation, and Practice. **03 Hrs**

UNIT II

INTERPERSONAL SKILLS - Speaking: Role Play Exercises Based on Workplace Contexts, Introducing Oneself - PEP Talks- Personal Empowerment, Participating in Group Discussion and Debates, Giving Technical Presentation. Reading: Reading the Interview of an Achiever (Skimming and Scanning) (Case Studies). Writing: Writing a Short Biography of an Achiever Based on given reflections, Grammar: Sentence patterns. Vocabulary Development: Idioms and Phrases. **03 Hrs**

UNIT III

ENGLISH FOR EMPLOYABILITY - Writing: Formal Letter writing (Enquiry, Order, and Complaint). Tenses – Reported Speech/Voice - Email Etiquettes, Structure, Writing and Responding to Emails. Paragraph Writing (Descriptive, Argumentative, Expository, Short Story, and Narrative), Blog Writing. Reading: Proof Reading (Spelling, Punctuation, Grammar). Error Identification Exercises. Speaking: Questions & Requests (non-Wh questions and Question tags). **03 Hrs**

UNIT IV

ENGLISH IN DIGITAL WORLD - Writing: Framing of search terms / keywords in search engines/ Commands for search on open AIs - Tools to support synchronous communication such as webinar platforms, and asynchronous communication such as forums and social media - Online communication - Types – pros and cons of online communication. Acceptable online roles and behaviours – Netiquettes - Etiquettes of social media. Problems and opportunities in handling digital resources -Tools to check grammar. Writing: Citing information accurately from source material - Plagiarism – Infringement, Importance of academic integrity. **03 Hrs**

UNIT V

APPLYING FOR JOBS - Listening: TED Talks. Speaking: Mock Interview, Telephone Interviews. Reading: Reading a Job Interview- language used in formal professional settings, formal vs. informal tone, nonverbal communication cues, Statement of Purpose, Company Profile and Completing Comprehension Exercises Writing: Job Applications and Resumes Grammar: Conditional Clauses, Modal verbs Vocabulary Development: Technical Vocabulary, Purpose Statement. **03 Hrs**

Activity Based Learning (Suggested Activities in Class)/ Practical Based learning:

- Contents related activities (Activity-based discussions)
- For active participation of students instruct the students to prepare Flowcharts and Handouts
- Organizing Group wise discussions Connecting to placement activities
- Quizzes and Discussions, Seminars and assignments

TEXT BOOKS:

1	Kumar, A. R. (2008). English for engineers and technologists. Orient BlackSwan.
2	Raman, M., & Sharma, S. (2015). Technical communication: Principles and practice (3rd ed.). Oxford University Press.

REFERENCE BOOKS:

1.	Floyd, K., & Cardon, P. W. (2019). Business and professional communication (3rd ed.). Principles of Scientific and Technical Writing, 1e, By Pratap K. J. Mohapatra, Sanjib Moulick, © 2025 Published: December 23, 2024
2.	Effective Technical Communication, 3e, By Ashraf M. Rizvi, Priyadarshi Patnaik, © 2024 Published: September 12,

	2024
3.	Yadav, D. P. (2022). A course in English pronunciation. Notion Publications.

Course Outcomes : After the completion of this course, students will be able to:

1. **Build** essential verbal, non-verbal, and phonetic communication skills for clarity and effectiveness.
2. **Use** interpersonal skills in group discussions, presentations, and professional interactions.
3. **Apply** formal writing, email etiquette, and creative content development for employability.
4. **Communicate** effectively in digital platforms, following netiquette and academic integrity.
5. **Prepare** job applications, resumes, and perform confidently in interviews.

Mapping of Course Outcomes (COs) to Program Specific Outcomes (PSOs)

	POs												PSOs				
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4
COs	C01									1	3		2				3
	C02										3		2				3
	C03										3		2				3
	C04									1	3		2				3
	C05										1	3		2			

INDIAN CONSTITUTION & PROFESSIONAL ETHICS

Contact Hours/Week	:	01	Credits	:	PP
Total Lecture Hours	:	15	CIE Marks	:	100
Total Tutorial Hours	:	--	SEE Marks	:	--
Course Code	:	CC10-AT	Exam Mode	:	--

Course Objectives: This course will enable the students to:

1. Know about the basic structure of Indian Constitution.
2. Know the Fundamental Rights (FR's), DPSP's and Fundamental Duties (FD's) of our constitution.
3. Know about our Union Government, political structure & codes, procedures.
4. Know the State Executive & Elections system of India.
5. Learn the Amendments and Emergency Provisions, other important provisions given by the constitution.

UNIT I

Introduction to Indian Constitution: The Necessity of the Constitution, The Societies before and after the Constitution adoption. Introduction to the Indian constitution, The Making of the Constitution, The Role of the Constituent Assembly. The Preamble of Indian Constitution & Key concepts of the Preamble. Salient features of India Constitution. **03 Hrs**

UNIT II

FR's, FD's and DPSP's: Fundamental Rights and its Restriction and limitations in different Complex Situations. Directive Principles of State Policy (DPSP) and its present relevance in our society with examples. Fundamental Duties and its Scope and significance in Nation building. **03 Hrs**

UNIT III

Union Executive : Parliamentary System, Union Executive – President, Prime Minister, Union Cabinet, Parliament - LS and RS, Parliamentary Committees, Important Parliamentary Terminologies. Supreme Court of India, Judicial Reviews and Judicial Activism. **03 Hrs**

UNIT IV

State Executive & Elections, Amendments and Emergency Provisions: State Executive, Election Commission, Elections & Electoral Process. Amendment to Constitution (How and Why) and Important Constitutional Amendments till today. Emergency Provisions. **03 Hrs**

UNIT V

Professional Ethics: Ethics & Values. Types of Ethics. Scope & Aims of Professional & Engineering Ethics. Positive and Negative Faces of Engineering Ethics. Clash of Ethics, Conflicts of Interest. The impediments to Responsibility. Trust & Reliability in Engineering, IPRs (Intellectual Property Rights), Risks, Safety and liability in Engineering. **03 Hrs**

TEXT BOOKS:

1	"Constitution of India" (for Competitive Exams) - Published by Naidhruva Edutech Learning Solutions, Bengaluru - 2022.
2	"Introduction to the Constitution of India", (Students Edition.) by Durga Das Basu (DD Basu) : Prentice Hall, 2008

REFERENCE BOOKS:

1.	Shubham Singles, Charles E. Haries, and et al	"Constitution of India, Professional Ethics and Human Rights", Cengage Learning India, Latest Edition - 2019.
2.	Merunandan K B	"The Constitution of India", Merugu Publication, Second Edition, Bengaluru.
3.	Justice H N Nagamohan Dhas, Sahayana, kerekon	"Samvidhana Odu" - for Students & Youths by.
4.	M. Govindarajan, S. Natarajan, V.S. Senthilkumar	"Engineering Ethics", Prentice Hall, 2004.

Course Outcomes: The students will be able to:

1. **Analyze** the basic structure of Indian Constitution.
2. **Remember** their Fundamental Rights, DPSP's and Fundamental Duties (FD's) of our constitution.
3. **Know** about our Union Government, political structure & codes, procedures.
4. **Understand** our State Executive & Elections system of India.
5. **Remember** the Amendments and Emergency Provisions, other important provisions given by the constitution.

Mapping of Course Outcomes (COs) to Program Specific Outcomes (PSOs)

		POs												PSOs			
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4
COs	CO1											2					3
	CO2											2					3
	CO3											2					3
	CO4											2					3
	CO5											2					3

SCIENTIFIC FOUNDATIONS OF HEALTH

Contact Hours/Week	:	01	Credits	:	1.0
Total Lecture Hours	:	15	CIE Marks	:	50
Total Tutorial Hours	:	--	SEE Marks	:	50
Course Code	:	CC07-AT	Exam Mode	:	Term Work

Course Objectives: This course will enable students to:

1. Know about Health and wellness (and its Beliefs) & It's balance for positive mindset.
2. Build the healthy lifestyles for good health for their better future.
3. Create a Healthy and caring relationships to meet the requirements of good/social/positive life.
4. Learn about Avoiding risks and harmful habits in their campus and outside the campus for their bright future
5. Prevent and fight against harmful diseases for good health through positive mindset

UNIT I

Good Health & its balance for positive mindset: Health -Importance of Health, Influencing factors of Health, Health beliefs, Advantages of good health, Health & Behavior, Health & Society, Health & family, Health & Personality, Psychological disorders- Methods to improve good psychological health, changing health habits for good health. **03 Hrs**

UNIT II

Building of healthy lifestyles for better future: Developing healthy diet for good health, Food & health, Nutritional guidelines for good health, Obesity & overweight disorders and its management, Eating disorders, Fitness components for health, Wellness and physical function, How to avoid exercise injuries **03 Hrs**

UNIT III

Creation of Healthy and caring relationships: Building communication skills, Friends and friendship - Education, the value of relationship and communication skills, Relationships for Better or worsening of life, understanding of basic instincts of life (more than a biology), Changing health behaviors through social engineering. **03 Hrs**

UNIT IV

Avoiding risks and harmful habits: Characteristics of health compromising behaviors, Recognizing and avoiding of addictions, How addiction develops, Types of addictions, influencing factors of addictions, Differences between addictive people and non-addictive people & their behaviors. Effects of addictions, how to recover from addictions. **03 Hrs**

UNIT V

Preventing & fighting against diseases for good health: How to protect from different types of infections, How to reduce risks for good health, Reducing risks & coping with chronic conditions, Management of chronic illness for Quality of life, Health & Wellness of youth :a challenge for upcoming future, Measuring of health & wealth status. **03 Hrs**

Activity Based Learning (Suggested Activities in Class)/ Practical Based learning

- Contents related activities (Activity-based discussions)
- For active participation of students instruct the students to prepare Flowcharts and Handouts
- Organizing Group wise discussions Connecting to placement activities
- Quizzes and Discussions, Seminars and assignments

TEXT BOOKS:

1.	"Scientific Foundations of Health" – Study Material Prepared by Dr. L Thimmesha, Published in VTU- University Website.
2.	"Scientific Foundations of Health", (ISBN-978-81-955465-6-5) published by Infinite Learning Solutions, Bangalore – 2022.
3.	Health Psychology - A Textbook, FOURTH EDITION by Jane Ogden McGraw Hill Education (India) Private Limited - Open University Press.

REFERENCE BOOKS:

1.	Charles Abraham, Mark Conner, Fiona Jones and Daryl O'Connor	Health Psychology (Second edition) , Routledge 711 Third Avenue, New York, NY 10017.
2.	SHELLEY E. TAYLOR	HEALTH PSYCHOLOGY (Ninth Edition) , McGraw Hill Education (India) Private Limited - Open University Press
3.		SWAYAM / NPTEL/ MOOCS/ We blinks/ Internet sources/ YouTube videos and other materials / notes.
4.		Scientific Foundations of Health (Health & Wellness) - General Books published for university and colleges references by popular authors and published by the reputed publisher.

Course Outcomes: Students will be able to:

1. **Understand** and analyze about Health and wellness (and its Beliefs) & its balance for positive mindset.
2. **Develop** the healthy lifestyles for good health for their better future.
3. **Build** a Healthy and caring relationships to meet the requirements of good/social/positive life.
4. **Learn** about Avoiding risks and harmful habits in their campus and outside the campus for their bright future.
5. **Prevent** and fight against harmful diseases for good health through positive mindset.

Mapping of Course Outcomes (COs) to Program Specific Outcomes (PSOs)

Mapping of Course Outcomes (COs) to Program Specific Outcomes (PSOs)																	
	POs												PSOs				
		1	2	3	4	5	6	7	8	9	10	11 1	12	1	2	3	4
COs	CO1												3				3
	CO2												3				3
	CO3												3				3
	CO4												3				3
	CO5												3				3