Pimpri Chinchwad Education Trust's
S.B. Patil college of Architecture & Design

Year & Div.: First Year - A, B & C AY: 2020-21 _2019 Pattern

Subject	Course Outcome		
	CO No.		Statement
ARC101 Basic Design 1201901[SS]	CO 1	ARC101.1	Students will be able to comprehend the visual elements of design such as points, lines, planes, shapes, forms, space, color and texture
	CO 2	ARC101.2	Students will be able to understand the principles of design such as balance, contrast, scale, proportion, pattern, rhythm and emphasis
	CO 3	ARC101.3	Students will be acquainting with the multi-sensory aspects of space.
	CO 4	ARC101.4	Students will learn how to improve their creativity through brainstorming, idea matrices, random combinations, the use of manipulative verbs, abstraction, transformation, a list of mental associations, and the use of the ridiculous.
	CO 5	ARC101.5	Students will learn about space making through the basic elements of design and principles of composition.
	CO 6	ARC101.6	Students will be able to understand the role of experience, memory, fantasy, reality, and imagination in design
	CO 7	ARC101.7	Students will get exposure to sources of inspiration such as nature, history, materials, climate, geometry, paradox, etc. for creativity.
ARC102 BCM I 1201902 [THEORY] & 1201903 [SV]	CO 1	ARC102.1	Students will understand the fundamentals of basic building elements.
	CO 2	ARC102.2	Students will understand the building elements function
	CO 3	ARC102.3	Students will understand of basic behavior of building elements with reference to Load bearing structures
	CO 4	ARC102.4	Students will understand the principles of designing components of load bearing structures – foundation & plinth
	CO 5	ARC102.5	Students will understand the principles of designing components of load bearing structures – wall
	CO 6	ARC102.6	Students will understand the principles of designing components of load bearing structures – foundation, plinth, wall, openings etc.
	CO 7	ARC102.7	Students will understand the suitable materials required for load bearing construction
ARC103 TOS I 1201904 [THEORY]	CO 1	ARC103.1	Classify force system and perform resolution and composition of forces for coplanar force system.
	CO 2	ARC103.2	Compute Dead loads and Live loads.
	CO 3	ARC103.3	Understand and calculate simple stresses, strains elastic constants and relation between them
	CO 4	ARC103.4	Compute Dead loads and Live loads.

	CO 5	ARC103.5	Determine centroid and moment of inertia of plane laminate
	CO 6	ARC103.6	Calculate indeterminacy of given beam.
	CO 7	ARC103.7	Apply equilibrium equations to calculate the internal forces namely shear forces and bending moments for determinate beams and draw SFD and BMD.
ARC104 AGD I 1201905 [SS]	CO 1	ARC104.1	Students will learn about fundamental drawing elements like Point, Line & Plane.
	CO 2	ARC104.2	Students will learn about drawing and presentation techniques like scale, lettering & annotations etc.
	CO 3	ARC104.3	Students will learn to draw three dimensional objects by using orthographic projection techniques
	CO 4	ARC104.4	Students will learn to draw three dimensional objects by using isometric and axonometric projection techniques
	CO 5	ARC104.5	Students will learn to draw cut sections of three dimensional objects by using projection techniques.
	CO 6	ARC104.6	Students will learn about scale and proportions of building components with the help of various projection techniques
	CO 7	ARC104.7	Students will be able to represent their ideas in design by using architectural sketching techniques
ARC105 HOAC I 1201906 V[SS]	CO 1	ARC105.1	Student will able to understand the prehistoric architecture of settlements, their structure in context with cultural background, climatic, material, etc.
	CO 2	ARC105.2	Students will gain the understanding the style of tribal and nomadic architecture of India.
	CO 3	ARC105.3	Students will gain the knowledge regarding Architecture of the Buddhist structure development of stupas, chaityas, and viharas including rock cut architecture
	CO 4	ARC105.4	Students will understand Architecture of the Hindu temples during the Maurya, Gupta, and Chalukya period.
	CO 5	ARC105.5	Students will gain the knowledge of architecture of Northern India, Gujarat, Orissa, Madhya Pradesh, and Rajasthan.
	CO 6	ARC105.6	Student will understand the architectural development of temples and temple towns under the Pal lavas, Cholas, Pandyas, Nayaks, Hoysalas, and the Vijay agar kingdom.
	CO 7	ARC105.7	Student will know the traditional Architecture of India with a focus on Maharashtra.
ARC106 CS 1201907 [SS]	CO 1	ARC106.1	Students will understand various modes of communication and their significance
	CO 2	ARC106.2	Students will understand varied methods & forms of written communication
	CO 3	ARC106.3	Students will be introduced to technical writing & forms of writing in architectural discipline
	CO 4	ARC106.4	Students will understand varied methods of verbal communications & its usage in day to day working

	CO 5	ARC106.5	Students will understand varied methods of graphical communications & its usage in day to day working
	CO 6	ARC106.6	Student will be able to communicate fluently in English language and also use tools of communication such as written and graphical for effective communication
	CO 7	ARC106.7	
ARC107 WS I 1201908 [SS]	CO 1	ARC107.1	Understanding of different architectural forms, massing in buildings spaces.
	CO 2	ARC107.2	Understanding of different types of materials and its feasibility in model making.
	CO 3	ARC107.3	Understanding the architectural scale and proportions from physical models
	CO 4	ARC107.4	Understanding various building materials & tools used for cutting, joining and extensions etc.
	CO 5	ARC107.5	Designing and executing prototype of simple objects &finishing of selected material.
	CO 6	ARC107.6	Getting hands on experience while handling materials like papers, wood etc.
	CO 7	ARC107.7	
	CO 5	ARC108.5	Students will understand the climatic factors in context with design.
	CO 6	ARC108.6	Students will gain knowledge of building materials application and techniques in context with design.
	CO 7	ARC108.7	Student will understand the role of socio cultural and geographical factors in shaping of rural settlements and architecture.
ARC108 AD I 1201909 [SV]	CO 1	ARC108.1	Student will understand experiential quality of space
	CO2	ARC108.2	Students will gain the understanding of design space by analyzing, identifying factors which affect design.
	CO 3	ARC108.3	Students will gain the knowledge regarding aspects of anthropometry of different activities while designing.
	CO4	ARC108.4	Students will understand the design space methodology with the process of decision making.
	CO 5	ARC108.5	Students will understand the climatic factors in context with design.
	CO 6	ARC108.6	Students will gain knowledge of building materials application and techniques in context with design.
	CO 7	ARC108.7	Student will understand the role of socio cultural and geographical factors in shaping of rural settlements and architecture.
ARC109 BCM II 1201910 [THEORY] & 1201911 [SV]	CO 1	ARC109.1	Students will understand the fundamentals of basic building elements.
	CO 2	ARC109.2	Students will understand the building elements function
	CO 3	ARC109.3	Students will understand of basic behavior of building elements with reference to Timber construction
	CO 4	ARC109.4	Students will understand the principles of designing components of Timber Structure – Floor
	CO 5	ARC109.5	Students will understand the principles of designing components of Timber Structure – Roofs

	CO 6	ARC109.6	Students will understand the principles of designing components of Timber Structure – Door & Window
	CO 7	ARC109.7	Students will understand the materials and joinery required for Floor, Roofs, Doors & Windows
ARC110 TOS II 1201912 [THEORY]	CO 1	ARC110.1	Understand concept of point of Contra flexure, Negative B.M. and draw S.F.D. and B.M.D for Overhanging Beam with combination of loads.
	CO 2	ARC110.2	Understand basic concepts of frames and trusses.
	CO 3	ARC110.3	Analyze the determinate trusses by using numerical method.
	CO 4	ARC110.4	Apply flexural formula to determine bending stress distribution in determinate beams.
	CO 5	ARC110.5	Apply shear formula to determine shear stress distribution in determinate beams.
	CO 6	ARC110.6	Determine slope and deflection of determinate beams by Integration Method for standard cases
	CO 7	ARC110.7	Determine direct and bending/buckling stresses for columns.
ARC111 AGD II 1201913 [SS]	CO 1	ARC111.1	Students will be able to Understand and draw the composite and complex three dimensional objects including building components formed by addition and/or interpenetration of various objects.
	CO 2	ARC111.2	Students will learn the Surface Development of various three dimensional objects.
	CO 3	ARC111.3	Students will learn Orthographic projections of true shapes of sectional planes
	CO 4	ARC111.4	Students will be able to Draw one-point and two-point perspective of objects and buildings/ building components using various methods including grid method.
	CO 5	ARC111.5	Students will learn to draw the bird's eye view, worm's eye view etc
	CO 6	ARC111.6	Students will learn the Principles of Sciography (shades and shadows) for 3-Dimensional objects and buildings on plans, elevation, isometric and perspective
	CO 7	ARC111.7	Students will be able to communicate various ideas through Architectural Graphic representations including building plans and sections
ARC112 HOAC II 1201914 [SS]	CO 1	ARC112.1	Students will understand the developments of Islamic architecture of the Indian subcontinent as a result of the social, political, and geographical contexts.
	CO 2	ARC112.2	Student will understand the early development of architecture and its evolution.
	CO 3	ARC112.3	Student will understand the development of architecture with specific reference to form, technology, and ornament.
	CO 4	ARC112.4	Student will gain an integrated understanding of settlements and landscape.
	CO 5	ARC112.5	Student will understand architecture as a manifestation of culture.

	CO 6	ARC112.6	Student will understand the Mughal architecture and urbanism.
	CO 7	ARC112.7	Student will understand the traditional architecture of India with focus on climatic aspect and material used.
ARC113 FOA 1201915 [SS]	CO 1	ARC113.1	Students will understand general definition of Architecture, architecture as profession and how it is different from other professions
	CO 2	ARC113.2	Students will understand the Architecture discipline and scope of the profession
	CO 3	ARC113.3	Students will understand the importance of function, structure of building with respect to culture and environment and its integration in architectural form.
	CO 4	ARC113.4	Students will understand importance of study of site its context, availability of material, circulation, structural system, sustainability and aesthetics while designing any structure.
	CO 5	ARC113.5	Students will understand the importance and evolution of shelter. regarding typologies they will understands the contextual ,material and structure wise use of it.
	CO 6	ARC113.6	Students will understand the scope of the subject and its application throughout the curriculum of architecture with respect to its discipline, factors affecting for the study of particular architectural design.
	CO 7	ARC113.7	
ARC114 WS II 1201916 [SS]	CO 1	ARC114.1	Understanding of different types of materials and its feasibility in model making.
	CO 2	ARC114.2	Understanding of various finishing techniques & processes received by different material like wood, steel, aluminum, stone etc.
	CO 3	ARC114.3	Understanding the architectural scale and proportions from physical mode
	CO 4	ARC114.4	Understanding various building materials & tools used for cutting, joining and extension etc.
	CO 5	ARC114.5	Designing and executing prototype of simple objects &finishing of selected material.
	CO 6	ARC114.6	Getting hands on experience while handling materials like stones , bricks wood,, POP, Aluminum etc.
	CO 7	ARC114.7	

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