SSR (2019-20 TO 2023-24)

Criterion 2 – Teaching Learning and Evaluation

2.6.1: Programme Outcomes (POs) and Course Outcomes (COs) for all Programmes offered by the institution are stated and displayed on website



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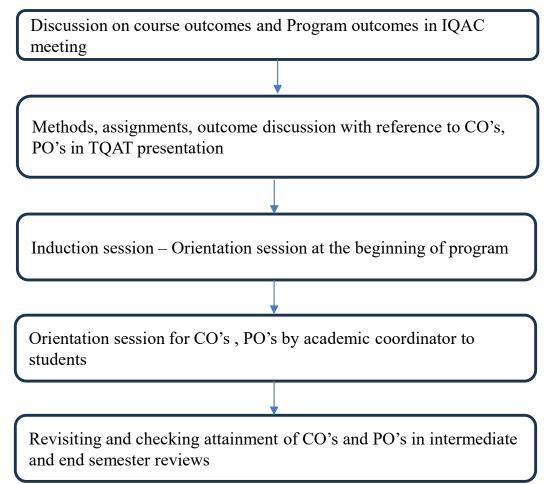
Criterion 2 – Teaching Learning and Evaluation



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Introduction

The institute adopts Outcome based education and has clearly stated learning outcomes of the Programs and Courses. The faculties and students are aware of outcomes by a robust mechanism designed by IQAC committee. The importance of the learning outcomes has been communicated to the teachers in every IQAC meeting and weekly college staff meeting. The institute describes Program outcomes (PO's), course outcomes (CO's) and program specific outcomes (PSO's) to the first-year students along with parents at the commencement of the degree program in induction activity. Faculties prepare and present Teaching-Learning Quality Assurance Tool (TQAT) plan including intent, methodologies, assignment structure, assessment criteria in consideration with all CO's, PO's and PEOs as per the university's course structure and syllabus in front of the academic and professional expert. After getting valuable comments, Faculty introduces revised TQAT to students. Learning Outcomes of the Programs and Courses are observed and measured periodically. Hard Copy of syllabi, course structure and Learning Outcomes are available in the staff room, admin office and library for ready reference. There are quarterly reviews with faculties are planned to evaluate and revisit the process and the expected Program and course outcomes as defined at the beginning of the semester.







SSR (2019-20 TO 2023-24)

Criterion 2 – Teaching Learning and Evaluation

2.6.1: Programme Outcomes (POs) and Course Outcomes (COs) for all Programmes offered by the institution are stated and displayed on website



The institute follows Savitribai Phule Pune University syllabus. The program outcomes have been defined at a broader level by the university, whereas the course outcomes are decoded by the course faculty. This process includes interpretation of the syllabus given by the university and aligning it with the philosophy of the institute.

The university has set the Program Educational Objective as below.

"At the end of the course the graduating student shall be able to methodically approach a problem of creating a built environment be it a small house or a township by employing knowledge from various domains and at the same time making it safe, equitable, feasible and environment friendly.1"

The university has defined the program educational objectives in terms of development of **Theoretical Base**, **Knowledge and Skills**, inculcating the **Values**, venturing into **Research** based approach, practices with **Ethical base** and adapting to the **Changes and Diversification**.

The expected program outcomes as per the university are:

- 1. **Knowledge** -Understanding about role of various knowledge domains such as humanities, technology, and environment in design of built environment.
- 2. Principles & Theory- Knowledge of principles of architecture & theoretical knowledge and its application in design.
- **3.** Creativity Creative and design thinking ability.
- 4. **Practice** Ability to understand the real life situation of Architectural Practice and to work with ethical and professional responsibilities.
- 5. **Collaborative Working** -Ability to communicate effectively and work in interdisciplinary groups.
- 6. **Inclusivity** -Sensitivity in design for inclusivity, equity, environment, diverse cultures, and heritage.
- 7. **Technological Knowhow** Ability to review, comprehend and report technological developments in the profession of architecture and construction.
- 8. **Ability to choose Area of Specialization or Practice** Able to judge one's area of interest and accordingly choose the field of practice.

The program outcome is considered as the complete cycle of the teaching and learning process. At the time of admission of students, the new batch of the institute along with their parents are given a detailed induction on the program outcomes and orientation of the courses offered. This induction program aims to communicate the intent of the program, institute's philosophy, pedagogy, and **expected outcomes**.

SR. NO.	SUBJECT NAME	COURSE CODE	CO CODE		COURSE OUTCOMES
SK. NO.	30BJECT NAME	COURSE CODE		AR B. A	RCH SEM I
					To discuss the importance of the sources of inspiration and elements of basic
			1201901-1	CO1	design for creativity in design.
			1201901-2	CO2	To identify instances where sensitivity to surroundings influences design decisions.
1	BASIC DESIGN	1201901 (SS)	1201901-3	CO3	To estimate the impact of sensory experiences on user perception of space.
•	Briolo Beoloit	1201001 (00)	1201901-4	CO4	To combine different design elements to create cohesive compositions.
			1201901-5	CO5	To assess the impact of sensory design on user experiences and well-being.
					To design various elements to communicate specific messages or evoke certa
			1201901-6 1201902 - 1	CO6 CO1	emotions. To discuss & understand the importance of the subject matter.
			1201902 - 1	CO2	To explain how building elements are organized and integrated.
	BUILDING	1201902 [THEORY] &	1201902 - 3	CO3	To examine the structural requirements based on specific considerations.
2	CONSTRUCTION AND MATERIALS I	1201903 [SV]	1201902 - 4	CO4	To combine theoretical knowledge with practical application in structures.
	AND WATERIALS I		1201902 - 5	CO5	To assess the structural integrity of elements in designs.
			1201902 - 6	CO6	To create detailed drawings and specifications for project components.
			1201904 - 1	CO1	To remember and recall essential concepts and their importance.
			1201904 - 2	CO2	To understand and explain different systems and their conditions.
3	THEORY OF	1201904 [THEORY]	1201904 - 3	CO3	To apply techniques for calculating pertinent parameters.
	STUCTURES I		1201904 - 4	CO4	To analyze relationships and behaviors under various scenarios.
			1201904 - 5	CO5	To evaluate different mechanisms and principles of stability.
			1201904 - 6	CO6	To create diagrams illustrating critical points under diverse conditions.
			1201905 - 1	CO1	To remember basic architectural graphic symbols and conventions used in technical drawings and use various drawing instruments.
		1201905 [SS]	1201905 - 2	CO2	To understand the purpose of different line types, scales, dimensions a annotations in architectural drawings.
4	ARCHITECTURAL GRAPHICS AND DRAWING- I		1201905 - 3	CO3	To apply understanding in basic architectural drawings, such as floor plans an elevations, using manual drawing tools.
·			1201905 - 4	CO4	To analyse simple architectural drawings to identify spatial relationships and details.
			1201905 - 5	CO5	To Review and assess basic architectural drawings for accuracy and adherence standard graphic language.
			1201905 - 6	CO6	To Produce architectural drawings and sketches that clearly convey architectudesign ideas and concepts
			1201906 V[SS]- 1	CO1	To introduce and define the inception of architecture developments.
			1201906 V[SS]- 2	CO2	To discuss and compare the developments in ancient civilizations across the globe.
	HISTORY OF	4004000 \ (700)	1201906 V[SS]- 3	CO3	To classify and learn the details of architectural development in respect to variaspects of Indian tribal and nomadic architecture.
5	ARCHITECTURE AND CULTURE I	1201906 V[SS]	1201906 V[SS]- 4	CO4	To study and analyse the cultural manifestation and evolution in architecture development.
			1201906 V[SS]- 5	CO5	To appraise the understandings about the temples, forts, step-wellis, palaces India.
			1201906 V[SS]- 6	CO6	To organize the analysis and create an integrated understanding for developm and evolution of ancient civilizations and architecture developments, that can useful to design considerations in the present scenario.
			1201007 1	004	To identify, describe, and discuss methods to enhance the skills necessary for
			1201907 -1 1201907 -2	CO1	effective communication in architectural education and practice. To reorganize and translate the various modes of communication along with the significance, and identify their importance.
6	COMMUNICATION	1201007 (55)	1201907 -2	CO2	To calculate the effectiveness of written communication while analyzing and building vocabulary related to architecture and design.
6	SKILLS	1201907 (SS)	1201907 -4	CO4	To combine verbal communication techniques with the nonverbal aspects.
			1201907 -5	CO5	To appraise the various forms of graphical communication and supporting thei integration into the communication process.
			1201907 -6	CO6	To compose a comprehensive understanding of digital tools for communication developing skills to design and prepare impactful communication materials.
			1201908 - 1	CO1	Recall the significance of model making in architecture and its role in exploring and representing the massing and form of buildings and spaces.
			1201908 - 2	CO2	Understand the importance of model making in the process and communication of architectural design.
			1201908 - 3	CO3	Apply various basic model making techniques and materials, such as paper, boards, foam board, and wood, to construct simple three-dimensional objects building models.

7	WORKSHOP- I	1201908 [SS]	1201908 - 4	CO4	Analyse the relationship between different model making materials, tools, and techniques in architectural model construction, considering their limitations and advantages.
			1201908 - 5	CO5	Evaluate the advantages and limitations of different materials and techniques used in architectural model making, considering factors such as durability, aesthetics, and ease of manipulation.
			1201908 - 6	CO6	Create architectural models using both traditional and digital methods, demonstrating proficiency in expressing design ideas through physical and digital representations."

CD NO	CUD IFCT NAME	COURSE CORE	CO CODE		COURSE OUTCOMES
SR. NO.	SUBJECT NAME	COURSE CODE		EAD D A	COURSE OUTCOMES RCH SEM II
			FIRST TE	AK B. A	
			1201909 - 1	CO1	To discuss how various factors such as anthropometry, climate, form, and function influence design decisions.
			1201909 - 2	CO2	To explain the relationship between decision-making processes and the creation of meaningful architectural spaces.
1	ARCHITECTURAL	1201909 [SV]	1201909 - 3	CO3	To examine different experiential qualities of space and their impact on user experience.
	DESIGN I		1201909 - 4	CO4	To combine various decision-making factors to develop holistic design solutions.
			1201909 - 5	CO5	To estimate the impact of design decisions on the functionality and usability of architectural spaces.
			1201909 - 6	CO6	To create design proposals that reflect sensitivity to socio-cultural and geographical contexts.
			1201910 - 1	CO1	To discuss and understand importanceof topic
			1201910 - 2	CO2	To describe the principles governing the components of structures with material specifications
2	BUILDING CONSTRUCTION	1201910 [THEORY] & 1201911 [SV]	1201910 - 3	CO3	To examine the structural requirements for various elements based on load and span considerations
	AND MATERIALS II		1201910 - 4	CO4	To combine theoretical knowledge with practical application in designing structures.
			1201910 - 5	CO5	To assess the structural integrity of building elements in architectural designs.
			1201910 - 6	CO6	To create detailed drawings and specifications forvarious components of building.
			1201912 - 1	CO1	To remember and recall key concepts and their significance.
			1201913 - 2	CO2	To understand and describe various terms, systems and their conditions.
	THEORY OF STUCTURES II	1201912 [THEORY]	1201914 - 3	CO3	To apply methods for calculating relevant parameters.
3			1201915 - 4	CO4	To analyze relationships and behavior under different conditions.
			1201916 - 5	CO5	To evaluate different mechanisms and principles.
			1201917 - 6	CO6	To create diagrams illustrating key points under various conditions.
			1201913 - 1	CO1	To remember basic architectural graphic symbols and conventions used in technical drawings and use various drawing instruments.
			1201913 - 2	CO2	To understand the purpose of different line types, scales, dimensions and annotations in architectural drawings.
	ARCHITECTURAL		1201913 - 3	CO3	To apply understanding in basic architectural drawings, such as floor plans and elevations, using manual drawing tools.
4	GRAPHICS AND DRAWING II	1201913 [SS]	1201913 - 4	CO4	To analyse simple architectural drawings to identify spatial relationships and details.
			1201913 - 5	CO5	To Review and assess basic architectural drawings for accuracy and adherence to standard graphic language.
			1201913 - 6	CO6	To Produce architectural drawings and sketches that clearly convey architectural design ideas and concepts
			1201914 [SS] -1	CO1	To describe and introduce students to principles of Islamic architecture.
			1201914 [SS] -2	CO2	To discuss and compare the developments in Early Islamic architecture and its evolution.
	HISTORY OF		1201914 [SS] -3	CO3	To classify and learn the details of architectural development focusing on form, technology, and ornamentation from Islamic, Mughal & urban architecture.
5	ARCHITECTURE AND CULTURE II	1201914 [SS]	1201914 [SS]- 4	CO4	To study and analyse the cultural manifestation, focusing Post Mughal architecture.
			1201914 [SS]- 5	CO5	To appraise the understandings about historical developments since 12th century AD.
			1201914 [SS]- 6	CO6	To organize the analysis and create an integrated understanding for culatural manifestation, useful to design considerations in the present scenario.
			1201915 [SS] -1	CO1	To define the profession of architecture, outlining its unique attributes in comparison to other professions, trades, and businesses.
			1201915 [SS] -2	CO2	To explain and develop an understanding of the Fundamentals of architecture.

	FUNDAMENTALS		1201915 [SS] -3	CO3	To classify and illustrate the fundamentals of architecture into an architectural design and develop a plan to utilize these fundamentals effectively in architectural practice.
6	OF ARCHITECTURE	1201915 [SS]	1201915 [SS]- 4	CO4	To combine the factors influencing architectural design into a comprehensive framework and examine and compare how each factor contributes to the overall design process.
			1201915 [SS]- 5	CO5	To appraise the Concept of Shelter and qualify the various building typologies.
			1201915 [SS]- 6	CO6	To assemble learnings and prepare a comprehensive understanding of the importance and breadth of Fundamentals of Architecture, composing a detailed overview for students.
			1201916 - 1	CO1	Recall the significance of model making in architecture and its role in exploring and representing the massing and form of buildings and spaces.
			1201916 - 2	CO2	Understand the importance of model making in the process and communication of architectural design.
			1201916 - 3	СОЗ	Apply various basic model making techniques and materials, such as paper, boards, foam board, and wood, to construct simple three-dimensional objects and building models.
7	WORKSHOP II	1201916 [SS]	1201916 - 4	CO4	Analyse the relationship between different model making materials, tools, and techniques in architectural model construction, considering their limitations and advantages.
			1201916 - 5	CO5	Evaluate the advantages and limitations of different materials and techniques used in architectural model making, considering factors such as durability, aesthetics, and ease of manipulation.
			1201916 - 6	CO6	Create architectural models using both traditional and digital methods, demonstrating proficiency in expressing design ideas through physical and digital representations."





		COU	RSE OUTCOMES	FOR B.	ARCH 2019 PATTERN
SR. NO.	SUBJECT NAME	COURSE CODE	CO CODE		COURSE OUTCOMES
			SECOND YE	AR B. AF	RCH SEM III
			2201917 - 1	CO1	To recall the key steps involved in iterative design, fostering a foundational understanding of the process. (Recall learnings from last year)
			2201917 - 2	CO2	To transform the progression from concept to construction, demonstrating the evolution of initial ideas into physical structures. (Vision board)
			2201917 - 3	CO3	To classify & analyse differences and similarities in architectural styles influenced by different materials & technologies (Case studies)
1	Architectural Design II	2201917	2201917 - 4	CO4	To inspect & compare various possible outcomes of conceptual mood boards through digital simulation with specific set of materials & spaces
			2201917 - 5	CO5	To assess spatial characters of spaces for evoking emotions, fostering a deeper understanding of the relationship between design and human experience.
			2201917 - 6	CO6	To design a single family residence with appropriate materials and technology which stimulates innovation and practical application of sustainable and context-sensitive design principles.
			2201919- 1	CO1	To recall fundamental concepts and terminologies relevant to architectural studies.
			2201919- 2	CO2	To understand and describe the principles and applications related to building and construction materials.
	Building Construction & Materials III[P]	2201918	2201919- 3	CO3	To apply knowledge of RCC construction techniques and materials to practical construction scenarios.
2	Building Construction & Materials	2201919	2201919- 4	CO4	To analyse architectural designs and construction methods critically, considering technical and contextual factors.
	III[SV]		2201919- 5	CO5	To evaluate the effectiveness of different construction materials and methods in achieving structural integrity and quality.
			2201919- 6	CO6	To create innovative RCC construction plans and designs incorporating modern materials and techniques for enhanced performance and sustainability.
	Theory of Structures		2201920-1	CO1	To understand the fundamental concepts and behavior of fixed and continuous beams under various loading conditions
			2201920-2	CO2	To identify and analyze various loads on buildings, applying appropriate design methodologies to ensure structural integrity.
3		2201920	2201920-3	CO3	To Understand the properties, applications, and design considerations for wood and concrete as structural materials.
			2201920-4	CO4	Apply design principles to effectively create reinforced concrete slabs, beams, and columns to meet structural and safety requirements.
			2201920-5	CO5	To Assess the design details based on solved examples for parameters as above are essential and sufficient for construction.
			2201920-6	CO6	To prepare detailed construction sketches and technical models
			2201921- 1	CO1	To recall various architectural presentation techniques to effectively communicate design ideas
			2201921- 2	CO2	To understand the technique of Computer Aided Drawing to generate simple architectural drawings
4	Computer Aided Drawing and	2201921	2201921- 3	CO3	To apply Computer Aided Drawing tools to produce architectural drawings demonstrating technical proficiency
	Graphics		2201921- 4	CO4	To discover various drafting and rendering styles to figure out their effectiveness in conveying architectural ideas
			2201921- 5	CO5	To evaluate architectural presentations and renderings based on their legibility and effectiveness in communication
			2201921- 6	CO6	To create unique presentation style to communicate design ideas
			2201922-1	CO1	To recall and comprehend the previous architectural developments in the world
			2201922-2	CO2	To understand the evolution of architecture, focusing on relationship of religion, social & cultural reforms, building materials & technology, and ornamentation
5	History of Arch & Culture III	2201922	2201922-3	CO3	To classify knowledge of historical precedents to analyze drivers of change, revival, and evolution of architecture
	Culture III		2201922-4	CO4	To comapare the interplay of cultural, socio- political movements and economic factors in shaping architectural developments
			2201922-5	CO5	To critique the significance of form, technology, and ornamentation in the evolution of architecture
			2201922-6	CO6	To create a studio outcome based on crtical analysis of historical architectural trends to propose insights into future architectural directions.
			2201924- 1	CO1	To recall, discuss & define the fundamentals of the topic

			2201924- 2	CO2	To illustrate & describe the components involved in the topic & explain their working
6	Building Services I [P] Building Services I	2201923 [P] &	2201924- 3	CO3	To examine through case studies & drawings how various processes are applied in building service systems & how their components work
O	[SS]	2201924 [SS]	2201924- 4	CO4	To analyse various cases or products for their working in various buildig service systems & to compare the findings
			2201924- 5	CO5	To assess working of various buildig service systems & their integration with architectural building design
			2201924- 6	CO6	To formulate strategic solutions for various building service systems & develop building service layouts of the same
			2201925- 1	CO1	To recall and distinguish climate & comfort in order to design climate responsive architecture by their own personal experience.
			2201925-2	CO2	To discuss Earth Sun Relationship & Context what shapes climate + Elements of Climate + Climatic zones of Earth, Ocean currents, climate at different scales & Introduction to classification of Global Climatic Zones
7	Climatology	2201925 [SS]	2201925-3	CO3	To interpret climate as a determinant of architectural design and to enable the students to evolve climate responsive design.
			2201925-4	CO4	To devise a comprehensive understanding of climatology by introducing various tools like the sun path, bioclimatic chart, and site analysis matrix, which are used to study sun movement, wind, and comfort in buildings.
			2201925-5	CO5	To assess and formulate passive design strategies at various scales, including urban, building, and building component levels.
			2201925-6	CO6	To develop climate-responsive designs by using the appropriate passive design strategies for their Architectural design Project.

SR. NO.	R. NO. SUBJECT NAME COURS		CO CODE		COURSE OUTCOMES
Ort. NO.	00002011011112	000N02 0022	SECOND YE	AR B. AF	
			2201926 - 1	CO1	To discuss the principles of designing a small-scale campus with multiple structures and multifunctional activities.
			2201926 - 2	CO2	To Explain the correlation between built and unbuilt spaces in a campus environment.
			2201926 - 3	CO3	To analyse the importance of socio-cultural and climatological aspects to architectural expressions, using Pondicherry as a case study.
1	Architectural Design III	2201926 [SV]	2201926 - 4	CO4	To appraise the differences and similarities in architectural scales, which helps in understanding the diverse tangibles and intangibles in campus planning
			2201926 - 5	CO5	To Assess how socio-cultural and climatological factors inform the architectural design and planning of a campus.
			2201926 - 6	CO6	To Design a small-scale campus that integrates multifunctional activities, considering both built and unbuilt spaces and the socio-cultural and climatological context of Pondicherry.
	Building Construction & Materials	2201927 [P]	2201928- 1	CO1	To recall fundamental concepts and terminologies relevant to architectural studies.
			2201928- 2	CO2	To understand and describe the principles and applications related to building and construction materials.
			2201928- 3	CO3	To apply knowledge of RCC construction techniques and materials to practical construction scenarios.
2	IV[P] Building Construction & Materials	2201928 [SV]	2201928- 4	CO4	To analyse architectural designs and construction methods critically, considering technical and contextual factors.
	IV[SV]		2201928- 5	CO5	To evaluate the effectiveness of different construction materials and methods in achieving structural integrity and quality.
			2201928- 6	CO6	To create innovative RCC construction plans and designs incorporating modern materials and techniques for enhanced performance and sustainability.
			2201933- 1	CO1	To recall, discuss & define the fundamentals of the topic
			2201933- 2	CO2	To illustrate & describe the components involved in the topic & explain their working
	Building Services II	2201932 [P] &	2201933- 3	CO3	To examine through case studies & drawings how various processes are applied in building service systems & how their components work
3	[P] Building Services	2201932 [P] & 2201933 [SS]	2201933- 4	CO4	To analyse various cases or products for their working in various buildig service systems & to compare the findings
			2201933- 5	CO5	To assess working of various buildig service systems & their integration with architectural building design

1	1				To formulate strategic colutions for various building consists systems ?
			2201933- 6	CO6	To formulate strategic solutions for various building service systems & develop building service layouts of the same
			2201934- 1	CO1	To recall and identify fundamental concepts and terminologies relevant to site survey and analysis in architecture.
			2201934- 2	CO2	To understand and explain the principles and techniques used in architectural site planning and survey
4	Site Survey and	2201934 [SS]	2201934- 3	CO3	To apply knowledge of site survey methods and tools to practical architectural site planning scenarios
7	Analysis [SS]	2201904 [00]	2201934- 4	CO4	To analyze site conditions and survey data critically, considering various physical and contextual factors.
			2201934- 5	CO5	To evaluate the effectiveness of different site survey methods and planning strategies in achieving optimal site development.
			2201934- 6	CO6	To create innovative site plans and designs incorporating comprehensive survey data and analysis for enhanced site development and sustainability
			2201930 - 1	CO1	To recall and articulate key concepts and principles learned in the Climatology course, through the study of natural resources
			2201930 - 2	CO2	To understand the concept of Eco Systems and Biodiversity with structure and functions, focussing on interrelatability of biogeochemical cycles; and to recognise the importance of Environmental Legislation and Social aspects of environment
5	Environmental Science	2201930 [SS]	2201930 - 3	CO3	To develop skills in research and analysis to illustrate the issue of environmental pollution through causes, effects and control measures
			2201930 - 4	CO4	To analyze and assess the response of selected architects to environmental concerns through case studies of their buildings.
			2201930 - 5	CO5	To appraise their architectural design projects with respect to green green building rating system criteria
			2201930 - 6	CO6	To construct and encourage critical thinking and creative expression in the representation of architectural concepts and ideas.
			2201931-1	CO1	To recall and comprehend the previous architectural developments in the world
			2201931-2	CO2	To understand the evolution of architecture, focusing on various social & cultural reforms, building materials & technology, and ornamentation
	History of		2201931-3	CO3	To classify knowledge of historical precedents to analyze and interpret contemporary architecture worldwide
6	Architecture and Culture IV	2201931 [SS]	2201931-4	CO4	To compare the interplay of cultural, socio- political movements and economic factors in shaping architectural developments
			2201931-5	CO5	To critique the significance of form, technology, and ornamentation in the evolution of architecture
			2201931-6	CO6	To create a studio outcome based on critical analysis of historical and contemporary architectural trends to propose insights into future architectural directions
			2201929-1	CO1	To learn various methods and systems for supporting structural elements, focusing on their applications and implications.
			2201929-2	CO2	To apply theoretical concepts to practical problems,ensuring accurate and effective analysis and design of reinforced concrete beams
7	Theory of Structures IV	2201929	2201929-3	CO3	To develop the ability to evaluate the integrity and safety of load bearing structures through systematic auditing techniques
			2201929-4	CO4	To develop basic understanding of steel structures,including their design principles, materials, and applications in construction.
			2201929-5	CO5	To learn the principles and methods for designing stanchions and girders to ensure structural stability and efficiency.
			2201929-6	CO6	To prepare detailed construction sketches and technical models





SR. NO.	SUBJECT NAME	COURSE CODE	CO CODE		COURSE OUTCOMES
0.1	00000011011111	000.02.0022		RD YEAR	B. ARCH SEM V
			3201943-1	CO1	To define the meaning of working drawings as a construction document
			3201943-2	CO2	To identify all elements of a load bearing structure that are required in a working drawing
1	WORKING DRAWING	3201943 (SS)	3201943-3	CO3	To develop drawings for a load bearing structure including all general arrangement plans, sections, elevations and details
'	I	3201943 (33)	3201943-4	CO4	To further devise a set of working drawings based on all the teachings, with correct graphical presentation of all the building components, along with correct annotations a per internationally accepted norms
			3201943-5	CO5	To critique own set of drawings to iron out any errors and ommissions
			3201943-6	CO6	To assemble and create a full and final set of working drawings for the project
			3201937-1	CO1	To identify and discuss Concept of shallow and deep foundations with respect to basement construction, high rise buildings and different soil conditions and also application of retaining wall
			3201937-2	CO2	To discuss and interpret the purpose of basement structures, need of architectural facilitation
2	BUILDING CONSTRUCTION & MATERIALS V	3201936(P) 3201937(SV)	3201937-3	CO3	To examine and analyse the application of RCC flooring systems with reference to RC drawing
	IVIATERIALS V		3201937-4	CO4	To analyse the timber details and to sketch furniture related illustrations
			3201937-5	CO5	To perceive materials and technology of assembling interior elements like partitions, suspended ceiling, furniture units etc.
			3201937-6	CO6	To prepare detailed drawings of interior work and research report including market surveys
			3201942 - 1	CO1	To recall, discuss & define the key elements of the topic
	Building Services III	3201941 [P] & 3201942 [SS]	3201942 - 2	CO2	To understand and describe components of ventilation systems
			3201942 - 3	CO3	To apply strategies and illustrate schematic designs for systems
3			3201942 - 4	CO4	To analyse the effectiveness of various strategies and compare & assess the same
			3201942 - 5	CO5	To evaluate various systems based on efficiency
			3201942 - 6	CO6	To design ventaliation systems, create layouts and propose solutions based on schematic calculations
			13201935-1	CO1	To remember and recollect the knowledge of Architectural design.
			13201935-2	CO2	To discuss and understand importance of topic and context of the project.
			13201935-3	соз	To develop and explain the logic involved in space planning, volumetric explorations and construction technologies and building materials & services.
4	Architectural Design IV	3201935 [SV]	13201935-4	CO4	To analyze the case studies and inspect the parameters for Architectural design which includes interior design, selection of building materials & services, construction technology, landscape design.
			13201935-5	CO5	To evaluate the Architectural details based on analysed parameters through illsustrations/sketches, pinups discussions
			13201935-6	CO6	To prepare detailed Architectural drawings and technical models
			3201938-1	CO1	To recollect and relate the knowledge of the topic, it's relevance and correlation with further topics
			3201938-2	CO2	To describe and understand the importance of the topic
5	Theory of Structures V		3201938-3	CO3	To Apprise and explain the logic involved in input data, design parameters and requirements of structures.
-	,		3201938-4	CO4	To solve the examples and inspect the parameters like design input data, design parameters to meet the requirements, calculations and check the results.
			3201938-5	CO5	To Assess the design details based on solved examples for parameters as above are essential and sufficient for construction.
			3201938-6	CO6	To prepare detailed construction sketches and technical models

			COURSE OUT	COMES	FOR B.ARCH 2019 PATTERN
SR. NO.	SUBJECT NAME	COURSE CODE	CO CODE		COURSE OUTCOMES
Ort. NO.	GOBOLOT HAME	COUNCE CODE		RD YEAR	B. ARCH SEM VI
			3201952-1	CO1	To recall the teachings about working drawings as a construction document
		•	3201952-2	CO2	To identify all elements of an RCC framed structure that are required in a working drawing
1	WORKING DRAWING	3201952 (SS)	3201952-3	CO3	To develop drawings for an RCC framed structure including all general arrangeme plans, sections, elevations and details
,	II II	3201952 (55)	3201952-4	CO4	To further devise a set of working drawings based on all the teachings, with correct graphical presentation of all the building components, along with correct annotation per internationally accepted norms
			3201952-5	CO5	To critique own set of drawings to iron out any errors and ommissions
			3201952-6	CO6	To assemble and create a full and final set of working drawings for the project
			3201946-1	CO1	To define and identify the concept and strategies of modular coordination, industric building construction along with precast technology and issues and construction cearthquake resistant frame structures.
2	BUILDING CONSTRUCTION &	3201946 (SV)	3201946-2	CO2	To introduce the design potential of steel as a material in building construction and inherent structural benefits.
-	MATERIALS VI	0201010 (01)	3201946-3	CO3	To analyse the application of steel structure
			3201946-4	CO4	To examine the innovative details and assembly of steel construction
			3201946-5	CO5	To assess the evaluated details with architectural and structural logic
			3201946-6	CO6	To prepare detailed drawings of steel construction
			3201951- 1	CO1	To recall and identify fundamental concepts and terminologies relevant to architec building services and safety.

			3201951- 2	CO2	To understand and explain the principles and applications related to building services, including fire safety and acoustics in architectural design.
3	BUILDING SERVICES IV [P & SS]	3201950[P] &	3201951- 3	CO3	To apply knowledge of building services and safety provisions in practical architectural design scenarios.
3	17 [1 0 00]	3201951 [SS]	3201951- 4	CO4	To analyze architectural designs and construction methods critically, considering technical and contextual factors related to building services and safety.
			3201951- 5	CO5	To evaluate the effectiveness of different building services and safety methods in achieving structural integrity and quality.
			3201951- 6	CO6	To create innovative architectural designs incorporating advanced building services and safety techniques for enhanced performance and sustainability.
			3201949 - 1	CO1	To discuss the significance of the selected elective within the broader field of architecture.
			3201949 - 2	CO2	To explain how the selected elective relates to current trends and challenges in architecture
4	ELECTIVE II	3201949 [SS]	3201949 - 3	CO3	To plan and develop solutions to practical problems informed by elective knowledge.
			3201949 - 4	CO4	To combine theoretical insights learned with practical applications in the selected elective field.
			3201949 - 5	CO5	To estimate the potential impact of elective knowledge on future architectural practice.
			3201949 - 6	CO6	To devise innovative solutions or design proposals informed by elective knowledge.
			3201948 - 1	CO1	To underline the significance of research in architecture and its importance in informing design decisions.
			3201948 - 2	CO2	To understand the process of research methodology in architecture and its application to solve design challenges.
			3201948 - 3	CO3	To develop a research proposal outlining a specific architectural research question, methodology, and ethical considerations.
5	RESEARCH IN ARCHITECTURE I	3201948 [SS]	3201948 - 4	CO4	To examine the different methods of research used in architecture, such as surveys, observations, experiments, and secondary sources, and critique their strengths and limitations.
			3201948 - 5	CO5	To appraise the effectiveness of various research methodologies in addressing architectural research questions and recommend appropriate methods based on the research objectives.
			3201948 - 6	CO6	To design and organize a comprehensive research plan for investigating a particular architectural problem, preparing to produce original research outputs that contribute to the field.
			3201944 - 1	CO1	To remember and recollect the knowledge of Building sevices and Architectural design.
			3201944 - 2	CO2	To discuss and understand importance of topic and context of the project.
		3201944[SV]+32	3201944 - 3	CO3	To develop and explain the logic involved in space planning, volumetric explorations and construction technologies and building materials & services.
6	Architectural Design V	01945[P]	3201944 - 4	CO4	To analyze the case studies and inspect the parameters for Architectural design which includes interior design, selection of building materials & services, construction technology, landscape design.
			3201944 - 5	CO5	To evaluate the Architectural details based on analysed parameters through illsustrations/sketches, pinups discussions
			3201944 - 6	CO6	To prepare detailed Architectural drawings and technical models
			3201947-1	CO1	To recollect and relate the knowledge of the topic, it's relevance and correlation with further topics
			3201947-2	CO2	To develop in students the feel for structural principles and their relates to building design
7	Theory of Structures VI	3201947	3201947-3	CO3	To develop in students the mathematical logic that would enable him to design the structural system of RCC structures.
	,		3201947-4	CO4	To learn the principles and methods for designing steel structures to ensure structural stability and efficiency.
			3201947-5	CO5	To integrate theoretical knowledge with practical considerations to create efficient and effective designs for complex structural systems.
			3201947-6	CO6	To prepare detailed construction sketches and technical models





SR. NO.	SUBJECT NAME	COURSE CODE	CO CODE		COURSE OUTCOMES
				FOL	JRTH YEAR B. ARCH SEM VII
			4201953-1	CO1	To describe challenges in multi-family residential development, recall complex architectural issues, and relate concepts of urban context and site setting.
		İ	4201953-2	CO2	To interpret socio-cultural aspects, restate economic considerations, and relate precedent studies in housing design.
1	Architectural Design	4204052 (5)()	4201953-3	CO3	To evaluate site context, calculate suitable housing typologies, and utilize building materials and construction technologies for desired architectural forms and spaces.
'	VI	4201953 (SV)	4201953-4	CO4	To survey and compare housing typologies, and assess the spatial implications of building services in housing design.
			4201953-5	CO5	To appraise aesthetics, estimate compliance, and judge the integration of sustainability and landscaping in holdesigns.
			4201953-6	CO6	To design complex housing spaces, compose responsive building programs, and construct architectural narral integrating considerations.
			4201954-1	CO1	To remember and recall the knowledge of the topic, its relevance, and its connections with other topics.
			4201954-2	CO2	To understand and interpret the significance of the topic.
2	Advanced Building Construction &	4201954 [SV]	4201954-3	CO3	To apply and demonstrate the logic involved in planning, assembly, and execution.
-	Services I	4201004[01]	4201954-4 4201954-5	CO4	To analyze case studies and assess parameters such as design, on-site execution, ergonomics, assembly, anthropometry, ambience, and material selection. To evaluate construction details through illustrations and sketches based on analyzed parameters.
		ŀ	4201954-6	CO6	To create detailed construction drawings and technical models.
			4201958-1	CO1	To remember and recollect the knowledge of Building Materials and Technologies, services and working drav
			4201958-2	CO2	To discuss and understand importance of quantitative and qualitative aspects of construction works in profes
	Quantity Surveying	•	4201958-3	CO3	To develop understanding about logics of professional and standardized practices of contract documents
3	and Specification	4201958 [THEORY]	4201958-4	CO4	To give exposure to standard methods of specification writing and quantity survey
	Writing I		4201958-5	CO5	To percieve and reflect the shared knowledge by means of specification writing and quantity survey
		}	4201958-6	CO6	To prepare detailed estimate and specifications of a constuction project
			4201959-1	CO1	To remember and recollect the knowledge of the topic, its relevance and its correlation with further topics.
			4201959-2	CO2	to discuss and understand the importance of the topic.
		İ		CO3	To develop sensitivity for civil and social issues, the avenues, ethics, and code of conduct involved in the
4	Profesional Practice	4201959 [THEORY]	4201959-3	003	architecture profession.
1 11000	i reresional i rasiles		4201959-4	CO4	To appraise the changing nature of architecture practice, by connecting with the firm.
			4201959-5	CO5	To perceive and reflect the learning through project presentations, peer reviews, and assessments covering a units.
			4201959-6	CO6	To develop team, organization, and branding strategies to set up own partnership firm.
			4201955-1	CO1	To recall and summarize the observations regarding urban matters
			4201955-2	CO2	To discuss and understand importance of theories and applications related to urban environment
5	URBAN STUDIES I	4201955 (SS)	4201955-3	CO3	To interpret and analyse the principles involved in case studies of urban developments
			4201955-4	CO4	To criticise the existing development and devise solutions/strategies/design of urban environment
			4201955-5	CO5	To recommend design solutions for urban environments
			4201955-6	CO6	To prepare detailed design drawings/proposals
			5201970 - 1	CO1	To list the fundamental concepts and terminologies related to the chosen elective in architecture.
			5201971 - 2 5201972 - 3	CO2	To illustrate key principles and techniques of the elective through hands-on workshops, fieldwork, or practical assignments.
6	ELECTIVE III	5201970 [SS]	5201972 - 3	CO4	To examine and compare different approaches and methodologies relevant to the elective, identifying their strengths and weaknesses.
			5201974 - 5	CO5	To assess the outcomes of practical assignments or projects, such as field study reports, mapping, or measur drawings, in terms of their accuracy and relevance.
			5201975 - 6	CO6	To develop comprehensive documentation or presentations, such as video graphic documentation or computer-based assignments, showcasing the integration of theoretical knowledge and practical skills.
SR. NO.	SUBJECT NAME	COURSE CODE	CO CODE		COLIDEE OLITCOMES
JR. NU.	GODDECT NAME	COUNSE CODE	OO CODE	FOI	COURSE OUTCOMES JRTH YEAR B. ARCH SEM VIII
			4201960-1	CO1	To state and recall key urban elements from the observations and experiences of the urban environments.
			4201960-2	CO2	To describe and discuss the factors that influence urban design decisions and outcomes.
ı	Architectural Design	4004000 (0) 0	4201960-3	CO3	To examine and interpret the study area using various layers of site context, traffic patterns, building materials regulatory frameworks
1	VII	4201960 (SV)	4201960-4	CO4	To analyse site data to identify urban issues and opportunities related to various studied factors.
			4201960-5	CO5	To assess the tangible and intangible aspects of analyzed issues to formulate an appropriate vision statement guidelines appropriate for the study area.
			4201960-6	CO6	To assemble insights from the study to design effective and innovative urban interventions addressing comple issues.
			4201961-1	CO1	To remember and recall the knowledge of the topic, its relevance, and its connections with other topics.
	ADVANCED	[4201961-2	CO2	To understand and interpret the significance of the topic.
_	ADVANCED BUILDING	400.000.5=	4201961-3	CO3	To apply and demonstrate the logic involved in planning, assembly, and execution.
2	BUILDING CONSTRUCTION AND SERVICES II	4201961 [SV]	4201961-4	CO4	To analyze case studies and assess parameters such as design, on-site execution, ergonomics, assembly, anthropometry, ambience, and material selection.
			4201961-5	CO5	To evaluate construction details through illustrations and sketches based on analyzed parameters.
			4201961-6	CO6	To create detailed construction drawings and technical models.
			4201965-1	CO1	To remember and recollect the knowledge of Building Materials and Technologies, services and working draw

	QUANTITY		4201965-2	CO2	To discuss and understand importance of quantitative and qualitative aspects of construction works in profession			
3	SURVEYING &	4201965 [THEORY]	4201965-3	CO3	To develop understanding about logics of professional and standardized practices of contract documents			
3	SPECIFICATION		4201965-4	CO4	To give exposure to standard methods of specification writing and quantity survey			
	WRITING II		4201965-5	CO5	To percieve and reflect the shared knowledge by means of specification writing and quantity survey			
			4201965-6	CO6	To prepare detailed estimate and specifications of a constuction project			
			4201966-1	CO1	To remember and recollect the knowledge of the topic, its relevance and its correlation with further topics.			
			4201966-2	CO2	to discuss and understand the importance of the topic.			
	PROJECT		4201966-3	CO3	To develop the understanding for PMBOK.			
4	MANAGEMENT	4201966 [THEORY]	4201966-4	CO4	To appraise the various knowlegde areas involved in project management.			
			4201966-5	CO5	To perceive and reflect the learning through project presentations, peer reviews, and assessments covering all units.			
			4201966-6	CO6	To develop project management strategy through stakeholder identification and project charter.			
		4201963 [SS]	4201963 - 1	CO1	To identify the essential concepts and terminology pertinent to the chosen elective in architecture.			
			4201964 - 2	CO2	To explain the theoretical principles and practical applications of the selected elective topic and how they relate to architectural practices.			
			4201965 - 3	CO3	To demonstrate the techniques and methods of the elective through practical activities such as workshops, fieldwork, or seminars.			
6	ELECTIVE IV		4201966 - 4	CO4	To investigate various methodologies and strategies within the elective, highlighting their advantages and limitations.			
			4201967 - 5	CO5	To critique the effectiveness and precision of practical submissions, including field study reports, measured drawings, or digital assignments.			
			4201968 - 6	CO6	To produce detailed documentation or presentations, such as photographic or video-based projects, that integrate theoretical insights with practical expertise.			
		4201964 [SS]	4201964 - 1	CO1	To identify the essential concepts and terminology pertinent to the chosen elective in architecture.			
			4201965 - 2	CO2	To interpret the theoretical underpinnings and practical uses of the selected elective topic, connecting them to architectural contexts.			
_	ELECTIVE V		4201966 - 3	CO3	To execute the techniques and procedures of the elective through hands-on activities like workshops, field studies, or tutorials.			
7			4201967 - 4	CO4	To dissect various approaches and methods within the elective, emphasizing their benefits and drawbacks.			
			4201968 - 5	CO5	To appraise the accuracy and effectiveness of practical assignments, including field reports, measured drawings, or computer-generated projects.			
			4201969 - 6	CO6	To formulate comprehensive documentation or presentations, such as photographic or video projects, that blend theoretical knowledge with practical skills.			





COURSE OUTCOMES FOR B.ARCH 2019 PATTERN								
SR. NO.	SUBJECT NAME	COURSE CODE	CO CODE		COURSE OUTCOMES			
FIFTH YEAR B. ARCH SEM IX								
	PRACTICAL TRAINING	5201967 [SV]	5201967 - 1	CO1	To define the roles and responsibilities within an architect's office and the fundamental principles of office management.			
			5201968 - 2	CO2	To describe the processes involved in the design, execution, and management of architectural projects.			
			5201969 - 3	CO3	To calculate the time and resources required for different phases of an architectural project under the guidance of a professional.			
1			5201970 - 4	CO4	To examine the workflow and collaboration dynamics in an architect's office, identifying key factors that influence project success.			
			5201971 - 5	CO5	To assess the effectiveness of project management strategies used in architectural practices, based on periodic evaluations and reports.			
			5201972 - 6	CO6	To develop a comprehensive report on the practical training experience, including detailed observations and recommendations for best practices in office management and project execution.			

SR. NO.	SUBJECT NAME	COURSE CODE	CO CODE	COURSE OUTCOMES			
FIFTH YEAR B. ARCH SEM X							
	Enterpreneurship	cO1 enterprenrurs, mindiconnic development and disconnic development. To illustrate and disconnic development. To illustrate and disconnic development. To examine and analysite and analysite and activities. CO3 allied activities. To survey and access anlysis& risk assessing an analysis& risk assessing an analysis& enterpreneur. To develop and manathe financial, Uman risks.		CO1	To discuss the concept of enterpreneurship, examples of enterprenrurs, mindset of an enterpreneur and its role in economic development		
				CO2	To illustrate and discuss fundamentals of business management , finance and IPR		
1				CO3	To examine and analyse the changing face of eh Architectural practice and the scope of diversification into allied activities .		
	Development		To survey and access efficiency and productivity, market anlysis& risk assessment for developing a business plan				
				CO5	To formulate and assess a business proposal as an enterpreneur		
				CO6	To develop and manage the proposed business based on the financial, Uman resourse,and skill development required for the business		

COURSE OUTCOMES FOR B.ARCH 2019 PATTERN

SR. NO.	SUBJECT NAME	COURSE CODE	CO CODE		COURSE OUTCOMES				
	FIFTH YEAR B. ARCH SEM IX								
	Architectural Design Project	5201968 [SV]	5201968 - 1	CO1	To identify, define,and explore differnt fileds for developing ideas for own architectural design project as aculmination of knowledge received for five years of the course.				
			5201969 - 2	CO2	To organize research, literature, case study analysis done				
			5201970 - 3	CO3	To plan for Architetcural design project				
1			5201971 - 4	CO4	To modify design options and organization of spaces and device architectural design model				
			5201972 - 5	CO5	To formulate final design option as appropriate design solution for the concerns related to Architectural Design Project				
			5201973 - 6	CO6	To create a and develope a holistic design for Architectural Design Project				





COURSE OUTCOMES FOR M.ARCH- DESIGN & PROJECT MANAGEMENT- 2019 PATTERN SR. NO. **COURSE NAME** COURSE CODE CO CODE **COURSE OUTCOMES** FIRST YEAR M. ARCH DPM SEM I Explain the concept of Project Management, Project lifecycle, PM Process groups 2019DPM101.1 and Knowledge areas as per PMBOK Define the scope of work for any real estate project, from the perspective of the 2019DPM101.2 Promoter, PMC or Contractor of the project. 2019DPM101 Project Budget Planning and Determine the deliverables of the project, identify the activities involved and 2019DPM101.3 1 Time Scheduling Studio estimate their attributes such as duration, resources & cost. (SV) Develop baseline schedule with resources, duration and cost, using Project 2019DPM101.4 Management tools such as MS Project. Discuss Earned Value of a Project, based on the progress monitored during 2019DPM101.5 execution phase Crticially appraise the Design/Engineering and Construction details of a building 2019DPM102.1 2019DPM102 project. 2 Elective I (SS) Understand and identify the design and construction requirements to meet the 2019DPM102.2 functional performance requirement of a project. 2019DPM103.1 Discuss the project management framework as applicable to real estate projects Discuss project development lifecycle, process groups and knowledge areas for a 2019DPM103.2 project as per PMBOK 6th Edition. 2019DPM103 Project Management I -3 Identify processes where management frameowrk is required and Prepare PMBOK Framework (SS) 2019DPM103.3 documents/protocols for managing processes as per given template. Understand the role of a project manager and the leadership of the organization in 2019DPM103.4 managing a project. 2019DPM104.1 Understand the Structural aspects and Construction aspects of a real estate project Compare alternate structure systems and construction technology and justify their 2019DPM104.2 Advanced Building selection considering lifecycle impact. 2019DPM104 Construction Technology & 4 Understand the coordination between building services and structure system and (PP) 2019DPM104 3 Structure Systems Infer its impact on the construction details Discuss structural performance of buildings and compare the provisions of codes 2019DPM104.4 and standards for achieving it. 2019DPM105.1 Discuss the fuctional requirement of a building for its optimum performance Explain optimization of building services to meet the fuctional performance of 2019DPM105.2 Functional Performance of 2019DPM105 5 Analyse and Compare alternate technologies for efficiency in performance of (PP) **Building Services** 2019DPM105.3 buildings Compare the practices as prescribed in national/international codes & standards 2019DPM105.4 and Justify decisions taken to enhance functional performance 2019DPM106 1 Select a tool for management of design processes Understand the concept of Building Information Modelling and its apply it for a 2019DPM106.2 Softlab - Design Management 2019DPM106 6 & FRP (SS) 2019DPM106.3 Develop Architectural Model of a Project using BIM tool such as Revit 2019DPM106.4 Coordinate and review BIM models through use of tools such as Navisworks SR. NO. COURSE NAME COURSE CODE CO CODE **COURSE OUTCOMES** FIRST YEAR M. ARCH DPM SEM II Discuss the Pre-construction Processes and their management, for a large scale 2019DPM201.1 real estate project Appraise the integration of design aspects and engineering aspects of a large scale 2019DPM201.2 real estate project Realize the importance of stakeholder integration and Develop communication Design & Engineering 2019DPM201.3 2019DPM201 protocols for stakeholders involved in designing and engineering of a large scale Integration Studio for (SV) Complex Projects Discuss the value of sustainability and energy efficiency in a project, Identify and 2019DPM201.4 Support project specific requirements through relevant codes and standards Select appropriate techniques for evaluating/assessing scenarios during entire 2019DPM201.5 project lifecycle 2019DPM201.6 Identify risks and evaluate their impact during the Pre-Construction Processes Discuss the concepts, technological developments and latest trends in the Building 2019DPM202.1 Engineering related elective topic selected by the students. 2019DPM202 2019DPM202.2 2 Flective II Identify and summarize codes and standards relevant to the elected topic (SS) Express opinion on the elected topic regarding its importance, relevance,

2019DPM202.3



applicability and implementation for any real estate project



3	Project Management II - PMBOK Framework	2019DPM203 (SS)	2019DPM203.1	Discuss the knowledge area related to Procurement Management, Stakeholder Engagement and Project Governance as per PMI's PMBOK
			2019DPM203.2	Compare and Select appropriate project development lifecylce for a real estate project.
			2019DPM203.3	Understand the Ethical and Professional responsibility of a Manager in Governing Projects
	Project Procurement Management	2019DPM204 (PP)	2019DPM204.1	Understand project procurement routes for different project delivery systems that are applicable to real estate projects
4			2019DPM204.2	Understand contracts for procurement of professional services (Consulting, Construction contracting, Manufacturing/supplying etc.) for real estate projects
			2019DPM204.3	Understand material management of a project and propose strategies for purchasing materials and managing inventory.
	Research-I	2019DPM205 (PP)	2019DPM205.1	Define types of research and develop research proposal to address the gap in existing research in a domain related to AEC sector
			2019DPM205.2	Formulate methodology relevant to a proposed reseach.
5			2019DPM205.3	Identify relevant and reliable secondary data source and Analyse the collected data.
			2019DPM205.4	Design surveys/studies to collect primary data and analyse the collected data
			2019DPM205.5	Compile the research and findings in a format that complies with academic research standards.
6	Softlab II- Building Simulation	2019DPM206 (SS)	2019DPM206.1	Understand the significance of software application/tools in simulating the Evacuation process under fire event, Visual performance and Thermal Performance of a Project.
			2019DPM206.2	Analyze the simulation result and Propose appropriate stategies to enhance the design and engineering of an project
			2019DPM206.3	Identify relevant codes and standards to support the simulation based design alternatives





COURSE OUTCOMES FOR M.ARCH- DESIGN & PROJECT MANAGEMENT- 2019 PATTERN CO CODE COURSE OUTCOMES SR. NO. COURSE NAME COURSE CODE SECOND YEAR M. ARCH DPM SEM III Formulate specification and Analyse rate for items of work to be carried out under a 2019DPM301 1 Select appropriate estimation type for costing of a real estate/infrastructure project 2019DPM301.2 given the stage of project lifecyle Appraise and enhance cost performance of a project during its preconstruction and 2019DPM301.3 Project cost & contract 2019DPM301 construction phase Management Studio (SV) Select appropriate contract type, formulate contract clauses considering the 2019DPM301.4 strategies of promoting organization and project specific requirements Distinguish the laws and regulations to be abided by any organization involved in 2019DPM301.5 developing realestate projects 2019DPM301.6 Analyse the impact of statutory clearances & approvals on project timelines. 2019DPM302.1 Frame research on a topic in the field of Design & Project Management Demonstrate the ability to choose methods appropriate to research aims and 2019DPM302.2 objectives 2019DPM302 2019DPM302.3 Design research plan and questionnaire for their research work. 2 Research II (SS) 2019DPM302.4 Evaluate the various methods of sampling and data collection 2019DPM302.5 Develop skills in qualitative and quantitative data analysis and presentation 2019DPM302.6 Compile the research results in the form of report. 2019DPM303.1 Understand the complexities involved in developing large scale real estate project Demonstrate leadership and teamwork in managing projects 2019DPM303.2 Design and Project 2019DPM303 Management Framework and Identify Project Management Processes and compare them with PMI's PMBOK & (SV) 2019DPM303.3 Practical Training RIBA's POW Define activities undertaken during each of Design Management Stages 2019DPM303.4 Understand financial ratios, financial statements and terminologies used for Real 2019DPM304.1 Appraise projects based on financial projections within given discounting Project Financial 2019DPM304.2 2019DPM304 parameters 4 Management & Risk (PP) 2019DPM304.3 Justify project prioritization based on financial projections Management 2019DPM304.4 Compare investment options for availing finance for a project 2019DPM304.5 Identify risks involved in sourcing finance and Assess mitigation measures 2019DPM305.1 Understand the concepts of Quality Management for a Real Estate Project Relate the theoretical learnings with practical scenarios of quality failures, Analyse 2019DPM305.2 their underlying cause applying the QM tools Identify and Apply the standard framework such as ISO 9001:2015, suitable for 2019DPM305.3 assuring and controlling quality of products and processes Quality Management & Health 2019DPM305 Safety & Environment (HSE) 5 Understand the concepts of Health, Safety and Environment Management for a (PP) 2019DPM305.4 Management Real Estate Project Compare the provision of Safety frameworks/standards/guidelines with practical 2019DPM305.5 scenarios to provide critique on Safety failures Identify and Measure potential issues in attaining safety standards established for 2019DPM305.6 the project 2019DPM306.1 Identify Software/tools for enhancing management of any organizational processes Discuss construction project specific process modules that can be planned and Softlab III-Project 2019DPM306 2019DPM306.2 coordinated with Enterprise Resource Planning (ERP) Tools 6 Management & ERP (SS) Describe the need of data management for a real estate design/dvelopement firm 2019DPM306.3 and demonstrate data visualization skills SR. NO. **COURSE NAME** COURSE CODE CO CODE **COURSE OUTCOMES** SECOND YEAR M. ARCH DPM SEM IV Identify gaps in research and/or Identify need for researching a domain of interest through assessment of existing research or current practices Develop structure of research and propose methodology Project 401 (SV) 401.3 Collect Data and Analyse data relevant to the research undertaken Compose research work as per the standards of academic research publications Design proosals for meeting existing gaps or enhancing current practices based on 401.5

academic research

402.1

402 (SV)

2

Elective III - Industry Based



Understand the processes undertaken by organizations in AEC sector

Discuss the Industrial Process that was elected for study.



SAVITRIBAI PHULE PUNE UNIVERSITY

[Formerly the University of Pune]



COURSE STRUCTURE FIVE YEAR DEGREE COURSE IN ARCHITECTURE [B.ARCH.]

TO BE IMPLEMENTED FROM 2019-20

BOARD OF STUDIES IN ARCHITECTURE FACULTY OF SCIENCE AND TECHNOLOGY

BACHELOR OF ARCHITECTURE COURSE STRUCTURE AND RULES

PREAMBLE

The New Syllabus of the B.Arch. course hence forth to be referred as the 2019 Pattern, to be implemented from the year 2019-20, is designed to address the rising expectations of knowledge to be borne by an architect. The interdisciplinary nature of the field of architecture demands integration of knowledge domains from various disciplines such as humanities, art, and technology and so on. However, what distinguishes an architect is the design knowledge and ability to employ the knowledge from the various disciplines for arriving at a solution to a problem.

Hence the syllabus has been designed such that the professional core subjects are supported by building science and technology courses, professional ability enhancement courses and the elective courses. The professional ability enhancement courses and the practical training of one semester focus on connecting the students with the practice. The elective courses enable an exposure to some other domain or nurtures the students' proficiency or skill. The Audit courses are introduced to acknowledge the knowledge that the student seeks in his/her area of interest but not directly contribute to the CGPA.

At the end of the course the graduating student shall be able to methodically approach a problem of creating a built environment be it a small house or a township by employing knowledge from various domains and at the same time making it safe, equitable, feasible and environment friendly. Education needs to equip the student to face the challenges and demands in the field by imbibing first principles.

As per the University guidelines, the course is structured upon the Credit System Based Assessment. The syllabus is structured with the following objectives and expected outcomes

PROGRAM EDUCATIONAL OBJECTIVES[PEO]-

- 1. **Theoretical Base**—To establish strong theoretical base and understanding of Architecture and work of an architect.
- 2. **Knowledge and Skills**—To inculcate design sensitivity and ability, as well as knowledge in the domains of humanities, technology & art and impart skills so as to equip the graduate student to undertake work of an architect.
- Values Sensitize the students to the universal values of equity, environmental care, accessibility, and respect for heritage and equip them to address these through design.
- 4. **Research** -Train the students to methodically research a issue or a situation to find a creative solution to meet the contextual challenges in the realm of changing technologies, socio economic and cultural changes.
- 5. **Practice and Ethics** To enable the students to practice as architects and imbibe them with the knowledge of the professional practice and ethics.
- 6. **Changes and Diversification** To expose the students to the changes in architectural practice, diversifications and evolving role of an architect.

PROGRAM OUTCOMES [PO]

- 1. **Knowledge** -Understanding about role of various knowledge domains such as humanities, technology, and environment in design of built environment.
- 2. **Principles & Theory** Knowledge of principles of architecture & theoretical knowledge and its application in design.
- 3. **Creativity** Creative and design thinking ability.
- 4. **Practice** Ability to understand real life situation of Architectural Practice and to work with ethical and professional responsibilities.
- 5. **Collaborative Working** -Ability to communicate effectively and work in interdisciplinary groups.
- 6. **Inclusivity** -Sensitivity in design for inclusivity, equity, environment, diverse cultures, and heritage.
- 7. **Technological Knowhow**-Ability to review, comprehend and report technological developments in the profession of architecture and construction.
- 8. Ability to choose Area of Specialisation or Practise- Able to judge one's area of interest and accordingly choose the field of practice.

Rule no.1: ELIGIBILITY FOR ADMISSION.

Eligibility Criteria: Students seeking admission to First year of Bachelor's degree course in Architecture must fulfil the eligibility criteria laid down by Savitribai Phule Pune University / Govt. of Maharashtra / Council of Architecture as applicable from time to time.

Rule no.2: SCHEME OF ASSESSMENT.

A candidate to be eligible for the degree of Bachelor of Architecture will be required to appear for and pass examinations as under:

	Semester Numbers	Credits
1	Semester 1	28
2	Semester 2	28
	Total credits for First Year B.Arch.	56
3	Semester 3	28
4	Semester 4	28
	Total credits for Second Year B.Arch.	56
5	Semester 5	28
6	Semester 6	28
	Total credits for Third Year B.Arch.	56
7	Semester 7	28
8	Semester 8	28
	Total credits for Fourth Year B.Arch.	56
9	Semester 9	14
10	Semester 10	24
	Total credits for Fifth Year B.Arch.	38
	Total credits	262

Total Credits of the Course = 262

Colleges may offer the students audit courses one per semester [Sem I to Sem VIII]. The students may choose to opt these courses. The passing in audit courses is by clearance and they are non- credits courses and are not part of the SGPA / CGPA calculation.