MAPPING OF COs WITH POs

Sr No	Sem	Course Code	Course title	Course Outcomes (COs)		Programme Outcomes (POs)
	SEM I	B. ARCH			At the end of the programme students will have	
1	I	101	Architecture Design Studio	CO1	Remembered and identified the basic concepts of the human body's interaction within a space or enclosure.	PO1
				CO2	Explained the human body's relationship to spaces, with emphasis on scales and proportions.	PO1, PO2 & PO8
				CO3	Applied and used developed language vocabulary to effectively communicate and visualized form and volume through drawings and represented it with the help of software.	PO1, PO2, PO3 & PO5
				CO4	Analyzed and evaluated architectural works through exposure to architecture, including buildings, practices, site visits, and interactions with practicing architects.	PO4, PO6, PO7 & PO8
2	I	102	Allied Design Studio (Basic Design)	CO1	Understanding of the composition fundamentals and acquired knowledge of the Elements and Principles of design.	PO1, PO2 & PO3
				CO2	Creatively exploring and using different digital media.	PO5
				CO3	Applying the knowledge of design principals in compositions	PO1
				CO4	Analyzing and comparing the design problem to solve it	PO3, PO8
				CO5	Exploring individual and group work.	PO4
3	I	103	Architectural Building Construction & Materials	CO1	Analyzed the various elements of a structure to understand their application and construction techniques	PO2

				CO2	Comprehended and classified materials based on their properties and appropriate applications.	PO1 & PO2
				CO3	Evaluated and created forms in three dimensions considering stability, aesthetics, and the optimum use of materials.	PO2, PO3 & PO6
4	I	104	Theory & Design of Structures	CO1	Understanding of force with its unit and types.	PO2
				CO2	Understanding of resolution of forces along different directions and its need.	PO2 & PO3
				CO3	To compare the reactions for various combination of forces.	PO2 & PO8
5	I	105	Humanities	CO1	Understood the areas of humanities, culture, and tradition in the field of design and its connection to Architecture.	PO1 & PO8
				CO2	Analyzed information in humanities studio work through various modes like group discussions, debates, presentations, and individual narratives.	PO4, PO7
				CO3	Understood civilizations through the verticals of community development, culture, tradition, religion, gender, and socio-political environments and reviewing their transition	PO3, PO7 & PO8
				CO4	Identified the common connects – creative output driven exercises and creating illustrative analogies between ancient habitats and their ways of living to our current systems.	PO3 & PO8
6	I	106	Environmental Studies	CO1	Evaluated and synthesized knowledge to understand the intricate relationship between the natural and built environments, with a focus on forests, water, energy, minerals, land, and food resources, as well	PO1, PO3 & PO4

					as ecology, ecosystems, biodiversity, and their co-existence.	
				CO2	Analyzed and compared various building types across different geographic and climatic zones to gain insights into their design and functionality.	PO1, PO3 & PO8
7	I	107	Architectural Representation & Detailing	CO1	Learned the skill of technical drafting for representation of architectural drawings.	PO2 & PO3
				CO2	Understood the use of different drafting tools used to prepare technical drawings	PO2 & PO3
				CO3	Understood the essential hand movements and pressure intensity for pencil drafting required to indicate different architectural elements.	PO2 & PO3
				CO4	Learned the skill of freehand architectural representation.	PO2 & PO3
				CO5	Developed sketching with different mediums and forms of stationery.	PO2 & PO3
				CO6	Learned the essential hand movements and pressure intensity for mediums. Making quick sketches with understanding architectural elements.	PO2, PO3 & PO6
8	I	120	College Projects	CO1	Explored different significant places in Mumbai through site visits and documentation.	PO2, PO4, PO5, PO7 & PO8
				CO2	Enhanced model making skills	PO2 & PO3
				CO3	Developed reading habits and comprehension skills through book review.	PO2 & PO3
9	I	121	Elective	CO1	Understanding hand – eye co-ordination and building levels of manual dexterity.	PO2, PO3, PO4, PO6
				CO2	Developing knowledge and skills in architecture, and contributing to others' development, through active participation in classes and bedside teaching.	PO2 & PO4
				CO3	Understanding of model making techniques like cutting, folding,	PO2 & PO3

					and molding with different materials and implementing them in other subjects.	
				CO4	Analyzing a comprehensive learning process as a response to other team building activities.	PO2 & PO3
				CO5	Applying entrepreneurship skills in profession to handle varied scales of project.	PO2 & PO8
	SEM II					
1	II	201	Architecture Design Studio	CO1	Analyzed the objectives and context of the program to synthesize an informed perspective on its goals and applications.	PO1, PO3 & PO8
				CO2	Designed environmentally sensitive solutions by integrating knowledge of the context and surroundings into the creative process.	PO1, PO2, PO7 & PO8
				CO3	Applied the documentation process effectively through site visits, demonstrated proficiency in capturing details via text and photography.	PO3, PO4, PO6 & PO8
				CO4	Utilized software tools to create accurate representation drawings and supporting materials that reflect the design intent.	PO5
2	II	202	Allied Design Studio (Basic Design)	CO1	Exploring different digital and other physical media.	PO5
				CO2	Exploring individual and group work.	PO4
				CO3	Analyzing & critically evaluating design problem to solving solve and create	PO3, PO8
				CO4	Creating newer designs and compositions using analysis & evaluation of art & craft learnt so far	PO1, PO2 & PO3
3	II	203	Architectural Building Construction & Materials	CO1	Analyzed timber joinery details in the context of vernacular architecture.	PO1 & PO2
				CO2	Created detailed drafts of various types of doors, door	PO2 & PO3

					details, and joinery, including casement windows.	
				CO3	Evaluated different types of fenestration and shading devices to determine their suitability for various architectural applications.	PO2 & PO3
				CO4	Explained the functions and construction of sills and lintels	PO2
				CO5	Applied knowledge of wooden partitions, timber floors, joinery techniques, different types of roofs, staircases, and structural components like the king post truss and queen post truss in architectural design projects.	PO2, PO3 & PO6
4	II	204	Theory & Design of Structures	CO1	Understanding of the concept of centroid and moment of inertia and its significance.	PO2 & PO4
				CO2	Understanding of stress and strain and how to evaluate them.	PO2 & PO4
				CO3	Analysed the effect of stress & strain in a structural member	PO2, PO4 & PO8
				CO4	Evaluated shear force and bending moment in a structural member under different combination of loads and to understand its significance.	PO2 & PO4
5	II	205	Humanities	CO1	Understood the areas of humanities, culture, and tradition in the field of design and its connection to Architecture.	PO1 & PO8
				CO2	Analyzed information in humanities studio work through various modes like group discussions, debates, presentations, and individual narratives.	PO4, PO7
				CO3	Understood civilizations through the verticals of community development, culture, tradition, religion, gender, and socio-political environments and reviewing their transition	PO3, PO7 & PO8

				CO4	Identified the common connects – creative output driven exercises and creating illustrative analogies between ancient habitats and their ways of living to our current systems.	PO3 & PO8
6	II	206	Environmental Studies	CO1	Interpreted the characteristics of different climatic zones and illustrate this understanding with a case-specific example.	PO1, PO3 & PO8
				CO2	Evaluated various construction methods and techniques and justify their application in relation to specific climatic zones in groups.	PO1, PO3, PO4 & PO8
7	II	207	Architectural Representation & Detailing.	CO1	Synthesized the understanding of architectural forms by effectively presenting 3D forms in isometric and axonometric views.	PO2 & PO3
				CO2	Understood the process of preparing a holistic portfolio comprising documentation of a building complex with architectural drawings and details of the structure.	PO2 & PO3
				CO3	Developed skillset for representing work in architectural design studio.	PO2, PO3 & PO6
8	II	220	College Projects	CO1	Explored different significant places in MUMBAI, visit and document them.	PO4 & PO8
				CO2	Developed reading habits and comprehension skills through book review.	PO2, PO5, PO7 & PO8
9	II	221	Elective	CO1	Analyzing problem solving attitudes towards varied situations through widened perspective and efficient methods like teamwork and collaborative abilities.	PO2, PO3, PO4 & PO6
				CO2	Understanding of the use of basic tools for drawing, sketching, and drafting.	PO3, PO4 & PO6
				CO3	Developed quick sketching skills.	PO3, PO4 & PO6

				CO4	Understanding of the basic need of a model.	PO3, PO4 & PO6
				CO5	Developed verbal communication and to be able to express oneself freely.	PO3, PO4 & PO6, PO8
	SEM III					
1	III	301	Architecture Design Studio	CO1	Understood built and un-built spaces for multiple activities for a small group of people and relatively larger groups	PO1
				CO2	Evaluated space requirements for various activities - indoor and outdoor – case studies analysis and discussions	PO4, PO6
				CO3	Applied design knowledge to an architectural problem by understanding and documenting the site, architecture, and materials and responding to the same.	PO1 & PO2
				CO4	Developed, Design and detailed out built form and required infrastructure with reference to methods of construction, and materials.	PO3, PO7
				CO5	Explored and comprehended subtle and spatial connections through a process driven methodology and created representative drafted drawings.	PO5, PO7 & PO8
2	III	302	Allied Design Studio (Interior Design)	CO1	Understanding of space and anthropometry.	PO2
				CO2	Analyzing context responsive interiors through various case studies.	PO1, PO2 & PO4
				CO3	Evaluating and Incorporating design requirements of a residential premise	PO3 & PO8
				CO4	Exploring different materials, textures, colors, patterns, and precise representation of the same.	PO2
				CO5	Integrating with architectural representation studio for	PO1, PO2 & PO5

					creating different representation styles.	
3	III	303	Architectural Building Construction	CO1	Understanding of structural systems - load bearing and framed structures. Understanding of RCC as a material.	PO2, PO3
				CO2	Application of RCC to develop different components like footings, columns, slabs, beams, roofs and staircase.	PO2, PO3
				CO3	Plan structural design for a building with all the details required.	PO2, PO3 & PO6
				CO4	Analyzing the workability and stability of RCC Components.	PO2, PO3, PO6
4	III	304	Theory & Design of Structures	CO1	Understanding of the concept of simple bending.	PO2 & PO3
				CO2	Understanding of the concept of direct and bending stress.	PO2 & PO3
				CO3	Evaluated deflection of structural member subjected to loading.	PO2 & PO3
				CO4	Understanding of basics of reinforced cement concrete and to evaluate sizes of different structural members by using thumb rule or relevant IS code.	PO2, PO3 & PO8
5	III	305	Humanities 3	CO1	Analyzed the different phases of architectural development throughout the medieval ages in Europe.	PO2, PO3,
				CO2	Evaluated the reliability of their synthesized knowledge of architectural history and critiquing various interpretations.	PO2 & PO3
				CO3	Formulated a coherent discourse on the evolution of architectural styles from the Early Christian period to the Baroque era.	PO2, PO3, PO4
				CO4	Expressed an appreciation for the tangible and intangible heritage connected to historical architectural developments.	PO2 & PO8

6	III	306	Environmental Studies	CO1	Understanding to build climate responsive structures.	PO1, PO2
				CO2	Understanding of sun path both in 2D & 3D to design accordingly.	PO1, PO2, PO3 & PO4
				CO3	Learned and developed various passive design strategies for different climatic zones.	PO3 & PO4
				CO4	Understanding of natural ventilation and various techniques to achieve it.	PO1, PO3, PO4
				CO5	Understanding the role of water as an element in function, design, and natural cooling.	PO1, PO3 & PO8
7	III	307	Architectural Representation & Detailing	CO1	Synthesized their understanding of architectural forms by effectively presenting 3D forms in exploded isometric and axonometric views.	PO2
				CO2	Applied principles of perspective drawing to prepare and present architectural elements and buildings in 1-point and 2-point perspective views.	PO2
				CO3	Analyzed architectural designs by creating plans, elevations, and sections for various architectural elements and buildings.	PO2 & PO3
				CO4	Composed a portfolio that effectively communicates their architectural design concepts through drawings and explanations.	PO2 & PO3
8	III	308	Architectural Building Services1	CO1	Understanding of basic plumbing services required for a building and interior spaces.	PO1, PO2
				CO2	Learning various types of fixtures required for water supply and drainage system.	PO1 & PO2
				CO3	Application of water requirement calculations for residential & commercial use.	PO2 & PO3
				CO4	Analyze standard space requirements for a toilet and ideal positions of various	PO2

					fixtures and location of supply pipes suitable to services layout.	
				CO5	Creating layout of distribution of water to individual toilets through terrace looping	PO2, PO6
9	III	309	Architectural Theory 1	CO1	Explained architectural concepts by studying relevant architectural literature.	PO1
				CO2	Analyzed the evolution of dynamic architectural ideas throughout history, considering the spirit and context of their respective eras and sequenced these ideas chronologically.	PO1, PO2, PO8
				CO3	Interpreted theoretical texts and architectural criticism to improve their comprehension of architecture.	PO1, PO2
				CO4	Applied engaging techniques such as sketching, quizzes, debates, review writing, and storyboarding to enhance their architectural vocabulary and synthesized their understanding of the subject.	PO2, PO8, PO3
				CO5	Fostered active learning, critical thinking, and creative expression, leading to a more comprehensive grasp of architectural concepts and principles.	PO3
10	III	320	College Projects 3	CO1	Learned computer skills to develop various representation techniques and drawings.	PO5
				CO2	Explored different significant places in Mumbai through site visits and documentation.	PO4, PO8,PO7
				CO3	Developed reading habits and comprehension skills through book review.	PO2 & PO3
11	III	321	Electives 3	CO1	Understanding the process of making and articulating in architecture through the study of different regions and concepts.	PO1, PO2, PO3 & PO8
				CO2	Exploring their knowledge of documenting structures and understanding the photographic	PO1,PO2, PO3 & PO4

					aspects with techniques and theories.	
				CO3	Understanding the meaning of space and its response to the light.	PO2, PO3, PO4 & PO8
				CO4	Understanding traditional approaches to built forms responding to the culture.	PO6 & PO8
	SEM IV					
1	IV	401	Architecture Design Studio	CO1	Understood the built and unbuilt spaces for cluster, communities and developed research skills for survey research and case study.	PO1
				CO2	Comprehended the functioning of community spaces in rural areas/semi urban areas and study principles of design, construction, and technology based on tradition and Experience – case studies, analysis, and discussions	PO4, PO6
				CO3	Assessed community requirements and evolved a design that includes the community in the entire process.	PO1 & PO2
				CO4	Demonstrate and articulate design skills through an iterative process towards conserving the natural surroundings and social fabric suitable for communities	PO3, PO7
				CO5	Appled design knowledge to an architectural problem by understanding and documenting the site, local vernacular architecture, and traditional methods of construction.	PO5, PO7 & PO8
2	IV	402	Allied Design Studio (Interior Design)	CO1	Understanding of circulation of spaces and evolved anthropometry for a commercial space.	PO2
				CO2	Incorporated design requirements of a commercial space.	PO3

				CO3	Explored different materials, textures, colors, patterns, mood board, and precise representation based on the theme of the same.	PO1, PO2 & PO3
				CO4	Understanding the impact of the brand and its association with large group of users.	PO8
				CO5	Sensitivity towards the understanding of psychological requirement of user for the space.	PO1 & PO8
3	IV	403	Architectural Building Construction	CO1	Understanding of the concepts of framed structures in steel for low rise medium span building.	PO3
				CO2	Application of steel in different methods of construction of various components of steel structures along with emphasis on aesthetics and building technology.	PO2 & PO6
				CO3	Planning of a building in steel with the design of different steel components like columns, beams, deck slabs, staircase, roofs with trusses with the necessary details required	PO2, PO3
				CO4	Analyzing the workability and stability of all the steel components in the designed structure.	PO3 & PO6
4	IV	404	Theory & Design of Structures	CO1	Understanding of the type of column and evaluated load carrying capacity of column.	PO2
				CO2	Evaluated shear force and bending moment for fixed and continuous beams and to understand its significance.	PO2
				CO3	Understanding of the basics of steel structure.	PO2
				CO4	Understanding of the suitability of foundation for different types of soils.	PO2

5	IV	405	Humanities	CO1	Explained the diverse phases of architectural development from the Vedic to the medieval period of Indian history.	PO1 & PO2
				CO2	Evaluated and synthesized their understanding of the subject matter related to Indian architecture, considering various historical contexts.	PO1, PO2 & PO3
				CO3	Constructed a well-organized discourse on Temple, Indian rock-cut, Buddhist, Indo-Islamic, and Mughal architecture, integrating relevant information.	PO2 & PO4
				CO4	Appreciation for both tangible (physical structures) and intangible (cultural and historical significance) heritage connected to architectural history.	PO1 & PO8
6	IV	407	Architectural Representation & Detailing	CO1	Understanding of various methods of land surveying and documentation.	PO1 & PO2
				CO2	Learned application of various tools and equipment required for land surveying.	PO2
				CO3	Brief understanding of modern methods of surveying.	PO1 & PO2
				CO4	Developed ability to read survey maps, land features and undulation of ground.	PO1 & PO2
				CO5	Learned application of chain survey and triangulation, transverse survey, and theodolite.	PO1 & PO2
7	IV	408	Architectural Building Services	CO1	Understanding of the basics of plumbing services, especially drainage, required for a building and interior spaces.	PO1 & PO2
				CO2	Learning about various components of sewage systems, different types of W.C, traps, pipe sizes and slopes.	PO2
				CO3	Analyzing sewage treatment systems, their working, and components.	PO2 & PO3

				CO4	Applying learning and Creating drainage layout, stormwater layout and sewage treatment systems.	PO2, PO6
8	IV	409	Architectural Theory	CO1	Developed ways to express architectural concepts with precision and clarity and used accurate architectural terminology to explain the intricate relationship between design principles and ideas.	PO1
				CO2	Effectively articulated the thought process behind one's own designs, which are being executed across multiple studios.	PO1, PO2, PO8
				CO3	Developed understanding of using references and citation as an essential tool of writing and to clearly understand the issues and consequences of plagiarism.	PO1, PO2
				CO4	Enhanced presentation skills, communication skills and enabling students to work in groups, fostering effective group collaboration.	PO2, PO8, PO3
9	IV	420	College Projects	CO1	Learned computer skills to develop various representation techniques and drawings.	PO5
				CO2	Explored different significant places in Mumbai through site visits and documentation.	PO8
				CO3	Developed reading habits and comprehension skills through book review.	PO2 & PO3
10	IV	421	Elective	CO1	Understanding of the process of making and articulating in architecture through the study of different regions and concepts.	PO1, PO2, PO3, PO4 & PO6
				CO2	Expanded their knowledge of documenting structures and understood the photographic aspects with techniques and theories.	PO1, PO2, PO3, PO4 & PO6
				CO3	Understanding of the meaning of space and its response to light.	PO2, PO3, PO4 & PO6

				CO4	Understanding of the traditional approaches to built forms responding to the culture.	PO2, PO3 & PO8
	SEM V					
1	V	501	Architecture Design Studio	CO1	Understand the value and potential of urban land and thus optimize space utilization.	PO1 & PO2
				CO2	Learned to design medium size, storied, and apply large span buildings of urban functions.	PO2
				CO3	Learned about related services & infrastructure requirements.	PO2
				CO4	Applied passive sustainability measures on their designs and represent it digitally & communicate	PO1, PO4 & PO5
				CO5	Critically appraise the site conditions to arrive at design solution	PO3, PO6
				CO6	Create (Design) & develop suitable architectural forms, and composition in response to culture and society	PO1, PO3, PO7 & PO8
2	V	502	Allied Design Studio (Landscape Design)	CO1	Understanding of landscape design to design unbuilt spaces of the project.	PO1 & PO2
				CO2	Understanding of the elements and principles of landscape design and their application at various scales.	PO2
				CO3	Learning ways of integrating built and unbuilt environments with various design elements & principles.	PO2, PO6, PO8
				CO4	Learning various modes of representation of design of unbuilt spaces to convey design ideas.	P02, PO5
				CO5	Critical analysis of case studies with respect to built and unbuilt spaces.	PO2
				CO6	Developing the landscape project with elements & principles of Landscape design & integration of built and un-built spaces.	PO1 , P02, & PO3

3	V	503	Architectural Building Construction	CO1	Learned theories of different types of foundation design.	PO2
				CO2	Understanding canopies and building skin for frame structure like curtain wall glazing.	PO2 & PO3
				CO3	Application of the learning on a case study project	PO2 & PO3
				CO4	Creating drafted sheets of the construction elements and techniques learnt in class.	PO2, PO3 & PO6
4	V	504	Theory & Design of Structures	CO1	Understanding of the steel table and readily available steel sections in the market.	PO2
				CO2	Understanding of the design of structural members using steel table.	PO2
				CO3	Understanding of the various types of joints.	PO2
5	V	505	Humanities 5	CO1	Understanding the key characteristics of modern movements in art and architecture up to the first decade of the 21st century in both the West and India.	PO2, PO3 & PO4
				CO2	Demonstrated how architectural evolution has been influenced by developments in technology and structural systems.	PO2
				CO3	Analyzed the critical and philosophical influences on architecture post-1980s and evaluate their significance in contemporary practice.	PO3 & PO4
				CO4	Summarized art trends up to the first decade of the 21st century in both the West and India, and related them to architectural styles.	PO2 & PO3
				CO5	Assessed the impact of regional factors on architecture and formulated responses to these influences in their designs.	PO1, PO2 & PO3

6	V	507	Architectural Representation & Detailing	CO1	Estimated the quantities of load bearing and RCC structures using their own design.	PO2
				CO2	Assessed their own design with respect to the project's financial viability.	PO3 & PO6
				CO3	Completed the rate analysis and understood the method of arriving at rates.	PO2
				CO4	Written the specifications.	PO2
				CO5	Articulated the material and construction techniques used in their own project while writing the specifications.	PO3 & PO6
7	V	508	Architectural Building Services	CO1	Understanding of the fundamentals of electricity, sources, generation, and distribution.	PO1, PO3 & PO4
				CO2	Studied various artificial lighting systems and their lux levels.	PO1, PO3 & PO4
				CO3	Learned the concepts and terms of acoustics.	PO1, PO3 & PO4
				CO4	Studied different types of auditoriums and learned to design one using ray diagrams and calculate the reverberation time.	PO1, PO3 & PO4
8	V	509	Architectural Theory 3	CO1	Understood the fundamentals of theoretical architectural research, its objectives, and its essential methodologies.	PO2 & PO4
				CO2	Developed the attitude of critical thinking.	PO3
				CO3	Developed reflective reasoning, analysis, assessment, dispositions, skills and abilities and obstacles or barriers to critical thoughts.	PO3 & PO4
				CO4	Written pieces that are argumentative to be able to demonstrate with clarity and effectiveness alternative and individualistic thinking about architecture.	PO8
9	V	520	College Projects	CO1	Acquired computer skills to produce diverse	PO5

					representational techniques and drawings.	
				CO2	Analyzed and documented the architectural significance of various locations in Mumbai through exploration and visitation.	PO8, PO4, PO7
				CO3	Evaluated and enhanced reading and comprehension abilities by conducting book reviews.	PO2
10	V	521	Elective	CO1	Learned and developed different ways of building temporary buildings along with the materials and details used for the same.	PO1,PO2, PO3 & PO8
				CO2	Understanding of the process of documentation, distress mapping and proposed drawings.	PO2, PO3, PO4 & PO6
				CO3	Understanding of the use of plantation in different design scenarios.	PO2, PO3 & PO8
	SEM VI					
1	VI	601	Architecture Design Studio	CO1	Understand the value and potential of urban land and thus optimize space utilization.	PO1 & PO2
				CO2	Learned to design medium size, storied, and apply large span buildings of urban functions.	PO2
				CO3	Learned about related services & infrastructure requirements.	PO2
				CO4	Applied passive sustainability measures on their designs and represent it digitally & communicate	PO1, PO4 & PO5
				CO5	Critically appraise the site conditions to arrive at design solution	PO3, PO6
				CO6	Create (Design) & develop suitable architectural forms, and composition in response to culture and society	PO1, PO3, PO7 & PO8

2	VI	602	Allied Design Studio (Landscape Design)	CO1	Understanding of various climatic zones, natural layers, and their impact on design strategies	PO1, PO2, PO3, & PO8
				CO2	Investigated and demonstrated the principles of site analysis & planning in landscape design.	PO1, PO3 & PO5
				CO3	Applied the elements & principles of Landscape on ongoing architectural Design.	PO1, PO3 & PO5
				CO4	Understanding construction working details in landscape with respect to materials, foundations, irrigation, drainage, and lighting.	PO2 & PO3
				CO5	Developing landscape design keeping in mind sustainable practices and materials.	PO5, PO6 & PO8
3	VI	603	Architectural Building Construction	CO1	Comprehended the intricacies of advanced floor systems in RCC framed structures.	PO2
				CO2	Applied knowledge of flat slabs, ribbed slabs, diagrid, and waffle slabs in practical scenarios.	PO2 & PO3
				CO3	Analyzed the characteristics and benefits of precast and prefabricated building elements.	PO2 & PO3
				CO4	Created detailed drafted sheets that reflect the construction elements and techniques acquired in class.	PO2 & PO6
4	VI	604	Theory & Design of Structures	CO1	Understanding of the various constituents of concrete.	PO2
				CO2	Understanding of the various operations in concrete.	PO2
				CO3	To design structural members of a steel building.	PO2
5	VI	605	Humanities	CO1	Understanding of architecture with reference to social issues related to urbanization.	PO3 & PO8

				CO2	Understanding of globalization & its effect on urban life.	PO2 & PO3
				CO3	Learned about major trends and pace of urbanization in different urban areas of India.	PO3 & PO4
				CO4	Learned and analyzed problems arising out of rapid urbanization.	PO4 & PO8
				CO5	Understanding of urban issues like transport, heritage, public health, public housing, with respect to Mumbai Metropolitan Region (MMR).	PO1 & PO8
6	VI	607	Architectural Representation & Detailing	CO1	Understanding of the process & sequence of construction and the importance and detail requirements of "Good for Construction" drawings.	PO2 & PO3
				CO2	Analyzing the role of materials and detailing keeping in mind, climatic conditions, building aesthetics and its users.	PO2, PO3
				CO3	Application of detailing taught through lectures to create working drawings showing details and dimensions of a given project	PO2, PO3, PO5, PO6
7	VI	608	Architectural Building Services	CO1	Understanding of the process of water supply for high rise buildings.	PO2 & PO3
				CO2	Studied high rise electricity.	PO2 & PO3
				CO3	Understanding of the vertical transportation system – Lifts carrying capacity and travel time, grouping of lifts.	PO2 & PO3
				CO4	Understanding of the fire protection study of fire regulations, code of safety combustibility and fire resistance of building materials along with design consideration for fire safety.	PO2 & PO3
8	VI	620	College Projects	CO1	Learned computer skills to develop various representation techniques and drawings.	PO5
				CO2	Explored different significant places in Mumbai through site visits and documentation.	PO8, PO7 , PO4

				CO3	Developed reading habits and comprehension skills through book review.	PO2 & PO3
9	VI	621	Elective **(MI)**	CO1	Learned and developed different ways of building temporary buildings and the materials and details used for the same.	PO2, PO3 & PO6
				CO2	Understanding of the process of documentation, distress mapping and proposed drawings.	PO1,PO2, PO3 & PO4
				CO3	Understanding of the use of plantation in different design scenarios.	PO2, PO3 ,PO4,PO6 & PO8
	SEM VII					
1	VII	701	Architecture Design Studio	CO1	Understanding Design of housing schemes in urban area, along with necessary infrastructure, services, and amenities.	PO1, PO2 & PO3
				CO2	Understanding of the typologies of housing in Urban Areas.	PO2
				CO3	Analyzing quantitative and qualitative aspects of mass housing.	PO3 & PO8
				CO4	Analyzing user aspirations and user affordability.	PO7 & PO8
				CO5	Application and creation of design ideas effectively as per the current professional system.	PO4, PO5 & PO6
2	VII	702	Allied Design Studio (Urban Design)	CO1	Understanding of a range of factors involved in the evolution of cities encompassing cities from ancient to the modern period.	PO1
				CO2	Understanding of the different allied disciplines which contribute to shaping cities. Studied contributors not only from planning /designing background but also from sociologists, environmentalist, writers, etc. background.	PO1 & PO2

				CO3	Explored various methods to map cities, delayer, and analyze various aspects in City design.	PO3 , PO2 & PO5, PO6
				CO4	Understanding of the basic hierarchy and framework for policies and schemes related to urban planning.	PO8
	VII	703	Architectural Building Construction 7	CO1	Analyzed the application and execution process of deep foundations.	PO1 & PO2
				CO2	Applied knowledge to utilize different types of pile foundations.	PO1 & PO2
				CO3	Synthesized design elements to create a pile cap, incorporating reinforcement details and calculations to determine its size and specifics.	PO2 & PO3
				CO4	Understood the purpose, functions, and challenges associated with constructing multiple basements and parking structures.	PO1 & PO2
				CO5	Evaluated techniques for controlling and monitoring groundwater and soil conditions during construction.	PO1
				CO6	Comprehend the principles behind designing earthquake-resistant buildings.	PO1, PO2 & PO3
				CO7	Analyzed the development of high-rise structural systems, building elements, and the evolution of construction materials.	PO1 & PO2
4	VII	704	Theory & Design of Structures 7	CO1	Understanding of the different types of deep and shallow foundations.	PO2
				CO2	Understanding of the necessity of retaining wall and to evaluate size of different components of retaining wall.	PO2

				CO3	Understanding of the theory and principles of structural design of tall buildings.	PO2
5	VII	707	Architectural Representation & Detailing	CO1	Understanding of the specifications with relation to the process, detailing and quality of a particular work item. Understanding the need to implement building byelaws during planning and design.	PO2
				CO2	Understanding of the development plan in terms of the various land uses, existing natural heritage, infrastructure with respect to the needs of the society.	PO2 & PO3
				CO3	Evaluating the building development rules for designing buildings keeping in mind the basic and fundamental needs and comfort of the user.	PO2 & PO7
				CO4	Analyzing the process and requirements of making approval drawings.	PO2, PO5
				CO5	Creating municipal drawings applying the regulations on a designed project	PO2, PO5& PO6
6	VII	708	Architectural Building Services	CO1	Assessment of the need for comfortable conditions in buildings and basics of mechanical ventilation systems.	PO2 & PO6
				CO2	Demonstrating the working of the refrigeration cycle system and variant refrigerant volume and variant refrigerant flow system.	PO2, PO6 & PO8
				CO3	Explaining the mechanism for chilled water system and ducting for designing space for entire packaging unit system.	PO2, PO3, PO5 & PO6
				CO4	Comparing AC filter, fans & propellors types and working mechanism and its importance in HVAC System.	PO2 & PO6
				CO5	Applying techniques of heating system in few regions in design , its types and working of different kind of heating systems.	PO1, PO2, PO3 & PO6

7	VII	710	Professional Practice 1	CO1	Understanding of the role of an Architect as a professional along with the responsibilities, duties, and liabilities of the architect.	PO6, PO7 & PO8
				CO2	Understanding and appreciation of the ethical, legal, and technical standards of practice and registration procedures.	PO6, PO7 & PO8
				CO3	Understanding of the office structure, set up, administration and task allocation within the profession of Architecture.	PO4 & PO7
8	VII	620	College Projects	CO1	Understood the basic concepts and significance of research in architecture and develop critical thinking skills	PO3, PO4
				CO2	Understood and analyzed various research methodologies (qualitative, quantitative, mixed methods) and their application to architectural studies.	PO2 & PO3
				CO3	Identified and Conducted comprehensive Data collection and literature reviews to analyze existing knowledge and identify research gaps	PO3, PO4, PO5, PO7
				CO4	Developed the skill of academic writing and presentation skills and applied research insights to practical architectural problems, promoting an evidence-based approach to design	PO3, PO5, PO7
				CO5	Formulated innovative thinking by exploring emerging trends and integrated research into creative architectural solutions.	PO3, PO5, PO7
9	VII	621	Elective	CO1	Evaluated and understood the process of documentation of heritage structures.	PO1,PO2, PO3 & PO6
				CO2	Acquired the importance of cultural heritage in policy rating in various government and semi-government sectors.	PO2, PO3 & PO6
				CO3	Understanding of the need of management and its importance in construction projects.	PO2, PO3 & PO4

				CO4	Basic understanding of sustainability, importance of green buildings and need for green buildings.	PO1, PO2, PO3, PO6 & PO8
				CO5	Explored and learned climate consultant software's like Andrew marsh.	PO2, PO3 & PO8
	SEM VIII					
1	**VIII**	811	Professional Training	CO1	Opportunity to work alongside experienced professionals and learn from them while working on real-world projects and tasks.	PO4, PO5, PO6 & PO7
				CO2	A focus and sensitivity needed towards providing comfortable and safe spaces, developed model making skill and developed understanding of the different types of sites (topography).	PO1 & PO8
				CO3	Comprehended the various stages of evolution in architecture to analyze, coordinate, and compile their understandings.	PO4, PO5, PO6 & PO7
				CO4	Deciphered and constructed a discourse in understanding of architecture.	PO7
				CO5	Gained practical experience in the field and learn about the day-to-day work of an architect.	PO6 & PO7
	SEM IX					
1	IX	901	Architecture Design Studio 8	CO1	Established human connectivity in transit-oriented development /Commercial/Recreation and strategically located and bifurcated the pedestrian and vehicular entry and exit and have also identified various circulation patterns and connectivity.	PO1, PO2 PO3 & PO4
				CO2	Facilitated sustainable development in the designs.	PO1 & PO8
				CO3	Learned team spirit by working in groups and at individual level.	PO4, PO5 & PO6

				CO4	Analyzed various layers of site and incorporated inferences of site analysis in site planning and design strategies.	PO1, PO2, PO3, PO4 & PO8
				CO5	Incorporated appropriate construction details and services to understand the technicalities of the project.	PO3 & PO2
2	IX	902	Allied Design Studio 8 (Urban Design)	CO1	Observed, documented, and analyzed physical characteristics of urban fabric.	PO1, PO2 & PO3
				CO2	Understood co-relationship between land-use, building-use and building condition patterns.	PO2 & PO3
				CO3	Introspected micro-level planning through the lenses of walkability, eyes on the street and infrastructure.	PO2 & PO3
				CO4	Studied and examined urban theories of Kevin Lynch, Gordon Cullen, etc. also planning strategies adopted by various cities.	PO2 & PO3
				CO5	Read a city through mapping and surveying techniques.	PO1, PO2 & PO3
3	IX	903	Architectural Building Construction 8	CO1	Understanding of long span structures and its application.	PO1 & PO2
				CO2	Understanding of cables structures and its application.	PO1 & PO2
				CO3	Understanding of folded plates and its application.	PO1, PO2 & PO4
				CO4	Understanding of shell structures and its application.	PO1, PO2 & PO4
				CO5	Understanding of tensile and tensegrity structure and its application.	PO1 & PO2
				CO6	Explored materiality and advantages of various materials to span larger structures.	PO1 & PO2
4	IX	904	Theory & Design of Structures 8	CO1	Understood behavior of long span structures.	PO2
				CO2	Comprehended the concepts of portal frames and space frames.	PO2
				CO3	To understood types of prestress concrete and its	PO2

					applications.	
5	IX	906	Environmental Studies	CO1	Analyzed the concepts of the environment and applied the practical aspects of environmental studies.	PO1, PO2 & PO3
				CO2	Evaluated different green rating certifications and assessed their criteria.	PO2 & PO4
				CO3	Understood the provisions of the National Building Code (NBC), specifically chapter 11.	PO2
				CO4	Examined the Energy Conservation Building Code (ECBC) and its implications for commercial and residential projects.	PO2
				CO5	Comprehended the Indian Green Building Council (IGBC) and Green Rating for Integrated Habitat Assessment (GRIHA) standards, as well as identified materials that are rated as green.	PO2 & PO4
6	IX	908	Architectural Building Services	CO1	Knowledge of advanced services for specific functions / building types, specialized requirements and / or climatic conditions.	PO2, PO1 & PO3
				CO2	Knowledge of building services, information systems, security systems and its integrated management.	PO2, PO1 & PO3
				CO3	Understood services, infrastructure, and amenities for public spaces.	PO1 & PO2, PO6
				CO4	Ability to apply complex building services to appropriate building types.	PO6
7	IX	910	Professional Practice 3	CO1	Understood the various tools and methodologies used during design, approval,	PO1, PO6, PO7

					documentation, and construction phases of a project.	
				CO2	Understood the legal and legislative underpinnings of the profession.	PO7
				CO3	Understood and appreciate the ethical, legal, and technical standards of practice, the principles, and procedures for the management of projects and the ability to apply cost control techniques.	PO2, PO6, PO7
8	IX	911	Design Dissertation 1	CO1	Comprehensive research on the topic selected by students	PO1, PO4 & PO8
				CO2	Identified a topic of choice and developed a research methodology framework	PO1, PO4
				CO3	Assessment of Qualitative and Quantitative data, case studies and data carried out for summarization of topic	PO2, PO3, PO6
				CO4	Compiled research study into a book.	PO5 & PO7
9	IX	921	Elective 8	CO1	Applied the standards of academic writing and dissertation book formatting as per university guidelines.	PO1, PO2 & PO6
				CO2	Understood the foundational concepts of Geographic Information Systems (GIS).	PO3
				CO3	Analyzed the representation philosophies of various renowned architects.	PO1 & PO2
				CO4	Created panel formats for design dissertations.	PO4, PO6 & PO8
				CO5	Comprehended the basic functions of InDesign software for designing dissertation books.	PO6

10	IX	922	Elective 9	CO1	To introduce the Basic Fundamentals and Significance of Cultural Heritage.	PO1, PO2, PO3, PO6 & PO8
				CO2	Understanding the role played by human resource management considering people being the most important resource of any organization.	PO2, PO3, PO4 & PO8
				CO3	To achieve the basic understanding of sustainability, importance of green buildings and need for green buildings.	PO2, PO3 & PO8
	SEM X					
1	**X**	1006	Environmental studies	CO1	Applied the functionalities of Revit Green Building Studio to a design project.	PO1 & PO5
				CO2	Analyzed the impact of building orientation, material selection, energy consumption, life cycle, and post-occupancy through simulations.	PO1 & PO5
				CO3	Evaluated the climatic and site conditions to enhance the site analysis model for design development.	PO1, PO3 & PO5
				CO4	Implemented passive design strategies with calculated precision for structural efficiency.	PO3
2	**X**	1007	Architectural Representation & Detailing 8	CO1	Understanding of the requirements of site and site services with respect to student's design dissertation topic and site selected.	PO2 & PO3
				CO2	Evaluating the role of materials and detailing keeping in mind, climatic conditions, building aesthetics and building typology.	PO1, PO2 & PO3
				CO3	Application of research, construction detailing, infrastructural requirements and	PO2, PO3 & PO5

					Creating detailed construction drawings as per student's design.	
3	**X**	1009	Architectural theories 4	CO1	Understood the effects of contemporary thought in society and culture today, and its impact on architectural design as an academic discipline.	PO1, PO2 & PO3
				CO2	Analysed the significance of post-modern and post millennial discourses in architecture and developed a post-modern world view.	PO4
				CO3	Developed an understanding of ideas from outside architecture that have informed current architectural discourse - philosophy, sociology, psychology, feminism, art, cultural and critical theory, etc.	PO1 & PO2
				CO4	Learned and summarised from assignments focused on designing architectural/ urban solutions that evolve from a theoretical analysis.	PO3, PO5, PO7 & PO8
4	**X**	1010	Professional Practice 3	CO1	Understood the various tools and methodologies used during design, approval, documentation, and construction phases of a project.	PO6 & PO7
				CO2	Understood the legal and legislative underpinnings of the profession.	PO7
				CO3	Understood and appreciated the ethical, legal, and technical standards of practice, the principles, and procedures for the management of projects and the ability to apply cost control techniques.	PO2, PO6 & PO7
5	**X**	1012	Advance Building Construction & Structures	CO1	Understanding various Structural systems and methods of construction	PO1, PO2 & PO3
				CO2	Ability to analyze and select building material and construction technique for a specific type of building	PO1, PO2 & PO3

6	**X**	1011	Design Dissertation 2	CO1	Developed the design as per the design objectives and design brief outlines in the book	PO1, PO2 & PO3
				CO2	Executed the design process through progressive design development based on their research and identified programme interventions.	PO3, PO4, PO6 & PO8
				CO3	Formulated, developed and represented detailed drawings of their design through plans, sections, views, elevations, and architectural representative detailing – worked out by the student	PO2, PO3, PO5 & PO7
7	**X**	1021	Elective 10	CO1	Understanding of the advanced services for specific functions / building types, specialized requirements and / or climatic conditions.	PO1,PO2, PO3 & PO6
				CO2	Understanding of the building services, information systems, security systems and its integrated management.	PO2, PO3, PO4 & PO8
				CO3	Understanding of the services, infrastructure, and amenities for public spaces.	PO2, PO3 & PO8
				CO4	Explored and learned climate consultant softwares like Andrew marsh.	PO1 & PO8

MAPPING OF COs WITH POs PG PROGRAMME

	M. Arch SEM I	Course Code	Course Title	Course Code	Course Outcome	POs
1	I	TH-01	Management Theories - Principles & Practices	CO1	Understanding managerial practices and standards of organization	PO2, PO7 & PO8
				CO2	Learned management cycle of planning, organizing, controlling, and leading for completion of task.	PO2 & PO7
				CO3	Analyze types of management and different levels of organization.	PO2
				CO4	Application of theories on individual case studies.	PO2 & PO7
				CO5	Creating assignment reports for evaluation of understanding of various theories.	PO4
2	I	TH-02	Legal Framework for Construction	CO1	Summarizing the importance of the Architect's Act 1972 with its amendments for construction practices.	PO2 & PO8
				CO2	Practicing legal procedure for regulations in construction section by studying Maha RERA.	PO2 & PO8
				CO3	Analyzed different practices in and outside India in construction sector.	PO2 & PO8
				CO4	Comparing & judging various environmental laws and contracts in India.	PO2 & PO8
3	I	TH-02	Project Planning & Scheduling, Monitoring & Control	CO1	Learning different techniques for project planning and scheduling through software learnings.	PO5 & PO6

				CO2	Sketching effectiveness of project scheduling on cost and quality of the construction project.	PO6
				CO3	Evaluate different aspects of quality management and safety management.	PO7
				CO4	Projecting with scheduling tools to the given construction project & creating a report.	PO5
4	I	ST-01	Construction Materials And its Management	CO1	Learned different construction materials and techniques through case study of an ongoing project and analyzed the impact of delays on project time, cost, and quality in relation with materials as a team.	PO1, PO2, PO4 & PO6
				CO2	Understanding of material classification and logistics.	PO3
				CO3	Application on a case study project by Creating a documented panel presentation.	PO2 & PO3
5	I	ST-02	Computer Application in Construction Management	CO1	Learned different software commands of MSP for professional readiness.	PO5
				CO2	Understanding project estimating software with its application.	PO5
				CO3	Application of commands on case study project using Microsoft project to Create detailed analysis report.	PO2 & PO5
6	I	EL-01	Elective - 01	CO1	Learned about the causes of damage in different types of structures.	PO2 & PO3
				CO2	Analyze the materials used for maintenance	PO2 & PO3

					and repairs depending on the type of damage.	
				CO3	Application of the process of structural auditing and budgeting for a project & creating a report	PO2 & PO3
7	I	EL-02	Elective –02	CO1	Understanding of the various development control regulations pertaining to redevelopment projects.	PO2 & PO3
				CO2	Creation of a project feasibility report of redevelopment projects.	PO2 & PO3
	M.Arch SEM II					
1	II	TH-04	Project Accounts and Economics	CO1	Reviewing the role of accounting in project management.	PO2,
				CO2	Practice exercises on different types of accounting systems and preparation of financial statements for the company.	PO2 & PO5
				CO3	Discussing financial statement, balance sheet of the company and preparing report.	PO2 & PO5
				CO4	Evaluate different accounting practices in India.	PO2 & PO7
				CO5	Formulating product roadmap tool in sustainable practices of project management.	PO8
2	II	TH-05	Contract Management	CO1	Learning broad concept of law of contracts.	PO2
				CO2	Explaining different types of contracts, roles, and obligations of involved parties in the contract.	PO2 & PO8
				CO3	Categorizing contract formation and contract administrative work by using relevant software.	PO5

				CO4	Defending contract process in construction project through case studies.	PO2 & PO7
3	II	TH-06	Construction Equipment and Personal Management	CO1	Reviewing different kinds of construction equipment to mobilize projects on the site.	PO2
				CO2	Analyzing theories and practices for hiring equipment, estimating cost for life cycle of equipment including its maintenance.	PO2
				CO3	Exercising through calculation of depreciation value, replacement and hiring cost to control cost of the project along with project schedule.	PO5 & PO6
				CO4	Assessing the importance of Human resources in the construction industry. It's role and responsibility, training, and recruitment process.	PO4 & PO6
				CO5	Illustrating human resources to resolve labour issues and to develop industrial relations for sustainable industrial practices.	PO4 & PO6
4	II	ST-03	Advance construction methods and techniques	CO1	Understanding of the concept of modular construction & Long span its manufacturing processes, construction detailing, and special equipment's required for its execution. Study the advantages & disadvantages of the system with reference to conventional construction technology.	PO2, PO3, PO4, PO5, PO6 7 PO7 & PO8

				CO2	Researched in depth and analyzed construction technique and other pertinent aspects of a chosen High-rise project, evaluate the progress of work intended for the students to acquire an in depth understanding of the various complexities and aspects of the major types of advanced construction techniques of high rise, prefab, and long span structure of a project during a project lifecycle.	PO2, PO4, PO5 & PO8
				CO3	Application on a case study project by Creating a documented panel presentation.	PO2, PO4, PO5 & PO8
5	II	ST-04	Research Methods in Constructions	CO1	Questing on methods to develop progress and sustainability and to know its benefits in practices	PO7 & PO8
				CO2	Organizing types and theories of research methodology.	PO2
				CO3	Analyzing relevant data collection and techniques to analyze by using different software.	PO2 & PO5
				CO4	Evaluation of presenting and reporting techniques for research methodology by using software.	PO2 & PO5
				CO5	Creating consolidated report for the research.	PO6, PO7 & PO8
6	II	EL-03	Elective – 01(Building Management Systems)	CO1	Learned the various building services in a high-rise project	PO2, PO3 & PO5
				CO2	Understanding of the basics of Building	PO2, PO3 & PO5

					Management Systems and its application	
				CO3	Understanding of integrating building services through BMS	PO2, PO3 & PO5
7	II	EL-04	Elective – 02(Primavera)	CO1	Understanding of work breakdown structure and organization structure.	PO2, PO3 & PO5
				CO2	Understanding of activity and resource planning and scheduling.	PO2, PO3 & PO5
				CO3	Application of the concept & software's of controlling and monitoring.	PO2, PO3 & PO5
	M. Arch SEM III					
1	III	TH-07	Project Appraisal and Finance Management	CO1	Formulation of project feasibility report with its analyses.	PO2
				CO2	Application of project cash flow, project estimating techniques and provisions to prepare annual projected report.	PO2 & PO5
				CO3	Classify project appraisal types and techniques to identify and resolve assessed risk in the project.	PO2, PO6 & PO7
				CO4	Debating on policies in project capital management to control cash and credit of the project.	PO7
				CO5	Make a application by learing relevant laws and their practical application through different case studies.	PO7 & PO8
2	III	TH-08	Construction Marketing Management	CO1	Understanding of marketing management, learning the basics of marketing and the marketing environment.	PO1, PO4, PO6, PO7 & PO8

				CO2	Understanding of real estate marketing, consumers, bidding, demand and supply and societal role in marketing.	PO4, PO6, PO7 & PO8
				CO3	Evaluation of different tools for market study and analysis, consumer behavior, customer relationship and different marketing products involved in Construction/Real estate industry.	PO1, PO2 PO4, PO6, PO7 & PO8
				CO4	Analyzing pricing strategies, financing, distribution, and promotion strategies involved in marketing.	PO4, PO6, PO7 & PO8
3	III	TH-09	Managerial Decision Making	CO1	Understanding of importance of Managerial decision making and approach of concepts management problem solving in industrial practices.	PO2 & PO6
				CO2	Preparing methods of management of resources and objective of maximizing profit within system.	PO2 & PO3
				CO3	Formulated and resolving problems on linear programming by graphical method and simplex method.	PO2 & PO3
				CO4	Evaluating network modelling to resolve maximum flow problems and to calculate waiting time of customers in queuing theory.	PO2 & PO3
				CO5	Developing knowledge of simulation theory and its application by using Monto Carlo method.	PO2, PO3 & PO6

4	III	ST-05	Construction Management Studio	CO1	Understanding of fundamentals of management in construction projects- project timelines, phases, progress and different materials and techniques involved focusing on modular systems.	PO2, PO3, PO4, PO5, PO6, PO7 & PO8
				CO2	Application of knowledge in the field by studying a live project- Township project with research and analysis focusing on modular systems and its impact on Time, cost, quality of the project by analyzing Project work breakdown structure, organization & responsibility matrix, Material & Machinery inventory, and allocation of resources with inferences	PO2, PO3, PO4, PO5, PO6, PO7 & PO8
				CO3	Application on a case study project by Creating a documented panel presentation.	PO2, PO4, PO5 & PO8
5	III	ST-06	Dissertation Stage - I	CO1	Identifying relevant project management research areas and study its background for further work.	PO2, PO8
				CO2	Producing relevant primary data, conducting surveys, interviews by using different techniques and methods.	PO2, PO4 & PO8
				CO3	Evaluate and check hypothesis as per individual research progress.	PO2 & PO3
				CO4	Created individual research work alternative hypothesis	PO2, PO4 & PO3

					work with approved case studies and surveys conducted.	
				CO5	Created presentation and report by using software techniques.	PO5
	M. Arch SEM IV					
1	IV	ST-07	Dissertation Stage - II	CO1	Analyzed work done in the research methodology by using different techniques.	PO2, PO3 & PO5
				CO2	Evaluate research materials, experimenting hypothesis, site work as studied for research project.	PO2, PO3 & PO8
				CO3	Create a report based on research data, literature reviews, case studies, surveys, and kind of application.	PO5, PO7 & PO8
				CO4	Create a final thesis black book with research, experiments and conclusion/suggestions.	PO3, PO5 & PO7