

# **ANNA UNIVERSITY, CHENNAI**

# POST GRADUATE CURRICULUM (NON.AUTONOMOUS AFFILIATED INSTITUTIONS)

Programme: M. Arch. Regulations: 2025

# Abbreviations:

Category Course Type
PC – Professional Core S - Studio

PE – Professional Elective T – Theory

BS & AE – Basic Sciences & Applied Engineering

TS – Theory cum Studio

PAE – Professional Ability Enhancement

IT – Internship Training

SD – Skill Development LIT – Laboratory Integrated Theory

SL – Self Learning

HUM – Humanities (including Languages and others) TCP – Total Contact Period(s)

L – Lecture P – Practical
T – Tutorials S - Studio

#### Semester I

S.	Course	Course Title	Туре	Periods per week			ТСР	Credits	Category
No.	Code			L	Т	P/S			
1.	MH25C01	Research Methodologies for Built Environment	Т	3	0	0	3	3	PC
2.	MH25101	Process Driven Design	Т	3	0	0	3	3	PC
3.	MH25102	Contemporary Architectural Practices	Т	3	0	0	3	3	PC
4.	MH25103	Emerging Practices in Housing	Т	3	0	0	3	3	PC
5.	MH25104	Sociology in Architecture	Т	3	0	0	3	3	PC
6.	MH25105	Process Based Design Studio	S	0	0	10	10	10	PC
	Total						25	25	

# Semester II (Prerequisite- Pass in Process Based Design Studio)

S.	Course			P	erio	ds			
No.	Code	Course Title	Type	р	er w		TCP	Credits	Category
140.	Jour			L	Т	P/S			
		Sustainable Architecture-							
1.		Historic and Community	Т	3	0	0	3	3	PC
		Perspective							
		Climate Change Adaptation							
2.		and Resilience in	Т	3	0	0	3	3	PC
		Architecture							
		Geographical Information							
3.		Systems for Built	TS	1	0	3	4	4	PAEC
		Environment							
4.		Professional Elective I		Х	Х	Х	3	3	PE
5.		Professional Elective II		Х	Х	Х	3	3	PE
6.		Industry Oriented Course		Х	Х	Х		1	SD
7.		Sustainable Design Studio	S	0	0	10	10	10	PC
/.		Sustamable Design Studio	3	U	U	10	10	10	FC
	Total 26 27								

# Semester III (Prerequisite- Pass in Sustainable Design Studio)

S.	Course		Туре	Periods per week			ТСР	Credits	Category	
No.	Code			L	Т	P/S				
1.		Urban Design: Theory and Practice	Т	3	0	0	3	3	PC	
2.		Architectural Conservation: Policies and Practice	Т	3	0	0	3	3	PC	
3.		Urban Infrastructure and Advance Technology	Т	3	0	0	3	3	PC	
4.		Professional Elective III		X	Χ	Χ	3	3	PE	
5.		Dissertation	Т	0	0	4	4	4	PC	
6.		Urban Environment Design Studio	S	0	0	10	10	10	PC	
7.		Internship Training						2	SD	
	Total						26	28		

# Semester IV (Prerequisite- Pass in Urban Environment Design Studio)

S.	Course	Course Title	Туре	Periods per week		ТСР	Credits	Category	
No.	Code			L	Т	P/S			<b>3</b>
1.		Thesis Project	S	0	0	20	20	20	SD
2.		Professional Elective IV		Х	Х	Х	3	3	PE
	•					Γotal	23	23	

# **Professional Elective Courses (PEC)**

S.	Course	Course Title		Period er we		Total Contact	Credits
No.	Code	Course Title	L	Т	P/S	Periods	Orealts
1.		Explorations in Architectural Form	2	0	1	3	3
2.		Environmental Psychology	3	0	0	3	3
3.		Architectural Lighting	3	0	0	3	3
4.		Performance Evaluation of Buildings	2	0	1	3	3
5.		Soft Skills	2	0	1	3	3
6.		Architectural Journalism and Photography	2	0	1	3	3
7.		Retrofitting and Adaptive Reuse	3	0	0	3	3
8.		Building Skins and Smart Materials	3	0	0	3	3
9.		Anthropology and Architecture	3	0	0	3	3
10.		Urban Cultural Landscapes	3	0	0	3	3
11.		Sustainable Building Services and Water Management	3	0	0	3	3
12.		Psychology of Learning and Development	3	0	0	3	3
13.		Facilities Programming and Management for Architecture	3	0	0	3	3
14.		Architecture and Critical Theory	3	0	0	3	3
15.		Landscape Urbanism	3	0	0	3	3
16.		Appropriate Technologies and Sustainable Construction	3	0	0	3	3
17.		Theory of Architectural Education	3	0	0	3	3
18.		Advanced Professional Practice	3	0	0	3	3

# Semester I

MH25C01	Research Methodologies for Built Environment	L	Т	P/S	O
	<b>U</b>	3	0	0	3

- To give introduction to the importance of critical inquiry as a way of gaining knowledge and adding to it through research.
- To give exposure to the various forms of research and research methodologies/ processes.
- To understand research in the specific domain of built environment research.

**Introduction:** Basic research issues and concepts. Orientation to research process. Types of research: historical, qualitative, co-relational, experimental, simulation and modelling, logical argumentation, case study and mixed methods. Illustration using research samples including research in the domain of built environment.

**Research Process:** Elements of Research process: finding a topic, writing an introduction, stating a purpose of study, identifying key research questions and hypotheses, reviewing literature, using theory, defining, delimiting and stating the significance of the study, advanced methods and procedures for data collection and analysis. Illustration using research samples including research in the domain of built environment.

**Researching and Data Collection:** Library and archives. Internet: New information and the role of internet. Finding and evaluating sources. Misuse. Test for reliability. Ethics.

Methods of data collection, Primary sources: observation and recording, interviews structured and unstructured, questionnaire, open ended and close ended questions and the advantages, sampling. Collecting data from secondary sources. Socio-economic research techniques such as focused group discussions, participant observation.

**Methods and Tools in Urban Research:** Space syntax: key concepts of space syntax and their development, spatial properties - connectivity, integration, intelligibility, etc. - of the built environment and explore their impact on user behavior, visual field/isovist characteristics - compactness, occlusivity, clustering coefficient, etc., of the built environment and explore their impact on user behavior, analyse architectural and urban layouts using space syntax methods - convex analysis, justified graph, axial analysis and visibility graph analysis. Use of excel software for analyzing data; applications of features of excel- basic and selected advanced features. Data analysis: Advanced Excel, SPSS. Impact of 'Big Data' or statistics on interpretation of urban phenomena

**Report Writing & Case Studies:** Research writing in general and its components. Developing the outline, referencing, writing the bibliography, presentation, etc,. Case studies of competent research, from project inception to completion with a focus on research in the domain of built environment. Review of research publications.

Weightage: Continuous Internal Assessment: 40%, End Semester Examinations: 60%.

**Assessment Methodology:** Two Assessments with equal weightage.

One Assessment as Internal written Test /Examination (50%), second as Assignment (50%) of any mode such as study, seminar, and or a combination of modes, etc.

#### References:

- 1. Groat, L., & Wang, D. (2013). *Architectural research methods* (2nd ed.). John Wiley & Sons Inc.
- 2. Booth, W. C., Williams, J. M., & Colomb, G. G. (2008). *The craft of research* (3rd ed.). University of Chicago Press.
- 3. Borden, I., & Ruedi, K. (2005). *The dissertation: An architecture student's handbook* (2nd ed.). Architectural Press.
- 4. Kumar, R. (2014). Research methodology: A step-by-step guide for beginners (4th ed.). Sage Publications.
- 5. Creswell, J. W. (2013). Research design: Qualitative, quantitative, and mixed methods approaches. Sage Publications.
- 6. Smith, J. A., Flowers, P., & Larkin, M. (2009). *Interpretative phenomenological analysis: Theory, method and research* (1st ed.). Sage Publications.
- 7. Ward, K. (2013). Researching the city. Sage Publications Ltd.
- 8. Gaur, A. S. (2011). Statistical methods for practice and research: A guide to data analysis using SPSS. Response Books.

- 1. Bell, J., & Waters, S. (2018). Doing your research project: A guide for first-time researchers (7th ed.). McGraw-Hill Education. ISBN 9780335243396
- Sheppard, V. (2020). Research methods for the social sciences: An introduction. BCcampus & Open Textbook Library. https://open.umn.edu/opentextbooks/textbooks/1589
- 3. Schulman, J. S. (2024, March 28). An exploration of research methods (ResearchMethod.net). Manteio Company.https://researchmethod.net.
- 4. Phelps, J. (2021). Engaging Research Communities in Writing Studies: Ethics, Public Policy, and Research Design (1st ed.). Routledge. <a href="https://doi.org/10.4324/9781003082002">https://doi.org/10.4324/9781003082002</a>
- Joore, P., Stompff, G., & van den Eijnde, J. (Eds.). (2022). Applied Design Research: A Mosaic of 22 Examples, Experiences and Interpretations Focussing on Bridging the Gap between Practice and Academics (1st ed.). CRC Press. https://doi.org/10.1201/9781003265924

	Description of CO	РО
	Description of GO	Mapping
CO1	Identify, decipher and interpret issues relating to architecture	PO1 (3)
	based on research enquiry methods.	PO2 (2)
CO2	Exemplify different methods of conducting research and	PO1 (3)
	research writing	PO2 (2)
CO3	Interpret specific research related to built environment.	PO1 (3)
		PO2 (2)

MH25101	Process Driven Design	L	Т	P/S	С
		3	0	0	3

- To impart knowledge about the history of process in the discipline of design.
- To give familiarity to different processes in design-analytical, social, computational, etc..
- To provide an overview of various contemporary design processes and its relation to computation.

**Introduction:** History of design process across time. Types of Design- unselfconscious Design/ self-conscious design, design through craft/ design through craft, etc., Design Methodology movement. Different models of the design process.

Aspects of Digital Architecture: Investigation of contemporary theories of media and their influence on the perception of space and architecture. Technology and Art. Technology and Architecture. Technology as Rhetoric. Digital Technology and Architecture. Aspects of Digital Architecture. Design and Computation. Difference between Digital Process and Non-Digital Process. Architecture and Cyber Space. Qualities of the new space. Issues of Aesthetics and Authorship of Design. Increased Automatism and its influence on Architectural Form and Space

**Contemporary Process** Overview of various Contemporary processes to understand existing situations such as mapping, etc., Design process and its relation to computation. Diagrams. Diagrammatic Reasoning. Diagrams and Design Process. Animation and Design. Digital Hybrid Design Protocols. Concept of Emergence. Introduction to Cellular Automata and Architectural applications. Genetic algorithms and Design Computation.

**Geometries and Surfaces:** Fractal Geometry and their properties. Architectural applications. Works of ZviHecker. Shape Grammar. Shapes, rules and Label. Shape Grammar as analytical and synthetic tools. Combining Shape grammar and Genetic algorithm to optimize architectural solutions. Hyper Surface. Introduction to Hyper surface and concepts of Liquid architecture.

**Process and People:** Overview of different methods related to study and design in the context of people. User behavior studies, post occupancy studies, participatory approach to design, collaborative processes, computational processes related to people.

Weightage: Continuous Internal Assessment: 40%, End Semester Examinations: 60%.

**Assessment Methodology:** Two Assessments with equal weightage.

One Assessment as Internal written Test /Examination (50%), second as Assignment (50%) of any mode such as study, seminar, and or a combination of modes, etc.

#### References:

- 1. Broadbent, G. (1988). *Design in architecture: Architecture and the human sciences*. D. Fulton.
- 2. Alexander, C. (2015). A pattern language. Oxford University Press.
- 3. Jones, C. (1980). Design methods. John Wiley & Sons.
- 4. Eisenman, P. (1999). *Diagram diaries*. Thames & Hudson Ltd.
- 5. van Berkel, B., & Bos, C. (2008). MOVE. UN Studio.
- 6. Lynn, G. (1993). Architecture curvilinearity: The folded, the pliant, and the supple. In *Architectural design, 63: Folding architecture*. Academy Editions.
- 7. Lynn, G. (2018). *Animate form*. American Academic Research.
- 8. Rahim, A. (2000). Contemporary process in architecture. John Wiley & Sons.
- 9. Benjamin, W. (2008). Work of art in the age of mechanical reproduction. Penguin.
- 10. Mitchell, W. J. (1998). *The logic of architecture: Design, computation and cognition*. MIT Press.
- 11. Novak, M. (2000). *Invisible architecture: An installation for the Greek Pavilion*. Venice Biennale.

- 1. Kumar, V. (2012). 101 design methods: A structured approach for driving innovation in your organization (Illustrated ed.). John Wiley & Sons. ISBN 978-1-118-08346-8. (https://books.google.co.in)
- 2. Shi, X. (2010). Performance-based and performance-driven architectural design and optimization. Frontiers of Architecture and Civil Engineering in China, 4(4), 512–518. https://doi.org/10.1007/s11709-010-0090-6
- 3. Phocas, M. C. (2022). Architecture and design of innovation processes: Applying architectural thinking and tools to the understanding and design of innovation processes in innovation management (Doctoral dissertation). Technical University of Munich. https://doi.org/10.14459/2025md1646995

	Description of CO	PO Mapping
CO1	Exemplify the importance of process in design across time	PO5 (1) PO6 (3)
CO2	Summarize the various tools to study the existing and processes to design future desirable situations.	PO5 (1) PO6 (3)

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MH25102	Contemporary Architectural Practices	3	0	0	3

- To impart knowledge about contemporary architectural practices/ practitioners along with stated ideas/ theoretical writings.
- To give an understanding about how architectural practices engage with issues/ conditions.
- To give an understanding of architecture as a product of the context that produces it as well as a way towards the future.
- To enable engagement in architectural interpretation and criticism

**Architecture and Ideas/ Intent:** Understanding and interpreting works of architects who explicitly state their ideas/ theories for example Bernard Tschumi, Peter Eisenman. Understanding and interpreting contemporary Iconic architecture/ Starchitecture through stated intent of architect and final form- for example Gehry, Zaha Hadid, Libeskind, BIG architects

**Architecture and Context:** Understanding and interpreting works of architects whose response to universals and particulars of context – social/ cultural/ environmental are considered exemplary- for example Zumthor, Murcutt, Siza, Barragan, Souto de Moura, Correa, Doshi, Aravena. Ken Yeang, William McDonough.

**Architectural Form in the Digital Age:** Understanding and interpreting works of architects who are considered exemplary in their engagement with the digital age and technology through contemporary processes- for example Greg Lynn, ZHA, UNstudio, NOX, Novak, FOA, Gehry,

**Architecture and the City:** Understanding and interpreting works of architects who include the city and its forces within the discourse of architecture - for example Rem Koolhaas, MVRDV.

**Emerging Architectural Practices in India:** Study and analysis of emerging practices in India along with their stated ideals/ approaches/ writings in the context of the diverse interests and concerns of the contemporary world.

Weightage: Continuous Internal Assessment: 40%, End Semester Examinations: 60%.

Assessment Methodology: Two Assessments with equal weightage.

One Assessment as Internal written Test /Examination (50%), second as Assignment (50%) of any mode such as study, seminar, and or a combination of modes, etc.

#### References:

- 1. Doshi, B. V. (n.d.). Paths uncharted.
- 2. Ingels, B. (n.d.). Yes is more.
- 3. Pauly, D. (2002). Barragan, space and shadow, walls and colour. Birkhäuser.
- 4. Mallgrave, H. F., & Goodman, D. (2011). An introduction to architectural theory: 1968 to the present. Wiley-Blackwell.

- 5. Nesbitt, K. (1996). Theorizing a new agenda for architecture. Princeton Architectural Press.
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- 7. Lynn, G. (1999). Animate form. Princeton Architectural Press.
- 8. Hays, M. (Ed.). (2000). Architectural theory since 1960. MIT Press.
- 9. MVRDV. (n.d.). FARMAX.
- 10. Mehrotra, R. (n.d.). Architecture in India since 1990.
- 11. Holl, S., Pallasmaa, J., & Pérez Gómez, A. (2007). Questions of perception: Phenomenology of architecture (2nd ed.). William Stout.
- 12. Tschumi, B. (1994). Architecture and disjunction. MIT Press.

- Salama, A. M. (2016). Spatial design education: New directions for pedagogy in architecture and beyond. Routledge. <a href="https://www.taylorfrancis.com/books/oa-mono/10.4324/9781315576603">https://www.taylorfrancis.com/books/oa-mono/10.4324/9781315576603</a>
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- 3. Till, J. (2009). Scarcity contra austerity: Architecture and creative practice in uncertain times. Architectural Theory Review, 14(1), 3–23. https://www.tandfonline.com/doi/full/10.1080/13264820802702847.
- 4. Rahim, A. (2007). Catalytic Formations: Architecture and Digital Design. Taylor & Francis. https://www.taylorfrancis.com/books/mono/10.4324/9780203934324
- 5. Leach, N. (2004). Swarm tectonics. Architectural Design, 74(3), 28–33.https://core.ac.uk/download/pdf/4174134.pdf

	Description of CO	РО
		Mapping
CO1	Identify the contemporary architectural practice that is	PO3 (1)
	influenced by or informed by specific conditions/ ideas/ situations and that is explicitly evident in the final work.	PO6 (3)
CO2	Summarize the role of architecture as built propositions	PO3 (1)
	towards future by interpreting the present	PO6 (3)

MH25103	Emerging Practices in Housing	L	Т	P/S	С
		ფ	0	0	3

- To give an outline of the evolution of housing to its present forms.
- To give familiarity with respect to redefinition of contemporary housing within the contexts of multicultural cities due to globalisation.

**Introduction:** Introduction to housing, from its industrial beginnings in London and Paris to New York City's Lower East Side and the 20<sup>th</sup> century designs of Le Corbusier, Antonio Sant'Elia, and Mies van der Rohe. Investigation of contemporary life and its influence on space and architecture. Globalisation and influences on economy. Alternate housing solutions: Commune, Co Housing, Cooperatives, etc. Housing and its importance in Architecture and its relationship with neighbourhood and city planning.

Single Family, Multi Family Housing & High Density Housing:: Review of latest developments in single family and multifamily housing by examining the works of WielArets, Shigeru Ban, Ben van Berkel, Kees Christiaanse, Philippe Gazeau, Frank O. Gehry, Steven Holl, Hans Kollhoff, Morger and Degelo,, Jean Nouvel, Kasoosterhuis, MVRDV. Issues and concerns of high density housing. Review of the current state of high density houses. Perspectives and future developments through a study of a few international projects. New trajectories in the development of sustainable urban housing - contemporary trends.

Housing demand and supply: Housing Markets Concepts and definitions, housing market, area, the purpose and nature of housing market studies; factors affecting housing prices, housing market behavior, estimation of housing need, housing demand and identification of housing stress, factors affecting local housing market, housing demand and supply market process, housing search residential mobility and filtering causes and consequences, policy influence on housing market, the formal and informal housing markets and their impact on urban poor, public, affordable housing, Co-operative and private sector housing market, process and supply institutional frame work.

**New Forms of Living and Housing In the Digital ERA:** Hyper Housing. Multi-cultural Housing. Lab rooms and cyber homes. Network housing. Hybrid buildings. Individual sheltered residences. Residence cities and bio homes for senior citizens. Works of UN Studio, FOA, OMA. Emerging trends that will shape the city - technologies to fulfil urban housing needs in emerging markets

Contemporary Housing In the Indian Context: Social and economic changes in India in the 21st century. Impact on housing form and its evolution. Housing policies today. Case studies of government, market oriented projects and innovations by architects for the current scenario. Housing for Sustainable Cities - Government policies and Government initiatives in Indian context - objectives and Functioning of agencies. Urban Poverty Alleviation Programme (BUPP) / NGO's / Self-help housing – AWAS, Public Private partnership model - HUDCO's innovative.

Weightage: Continuous Internal Assessment: 40%, End Semester Examinations: 60%.

**Assessment Methodology**: Two Assessments with equal weightage.

One Assessment as Internal written Test /Examination (50%), second as Assignment (50%) of any mode such as study, seminar, and or a combination of modes, etc.

#### References:

- 1. Salazar, J., & Gausa, M. (2005). Single family housing. Birkhäuser Verlag AG.
- 2. Guallart, V. (2004). Sociopolis: Project for a city of the future. ACTAR.
- 3. Zhou, J. (2005). *Urban housing form*. Architectural Press.
- 4. Schmitz, A. (2000). *Multifamily housing development handbook*. Urban Land Institute.
- 5. Bronto, C. (2005). *Innovative public housing*. Links Internacional.
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- 4. Saini, P. (2020). Low-income housing strategies in India: Challenges and alternatives. CEPT University. https://repository.cept.ac.in/handle/123456789/2341
- 5.United Nations Economic Commission for Europe (UNECE). (2021). #Housing2030: Effective policies for affordable housing in the UNECE region. https://unece.org/housing/press/housing2030-launch

	Description of CO	РО	
		Mapping	
CO1	Correlate the sensitivity to the various forces that shape the form of housing today.	PO3 (1) PO5 (1)	
CO2	Summarize the latest development, issues and design strategies governing housing at national and international level.	PO3 (3) PO5 (3)	

MH25104	Sociology of Architecture	L	Т	P/S	С
		3	0	0	3

- To understand theoretical framework of designed spaces in relationship to inhabitants
- To understand digital media advancement and visual culture in Architecture.

**Technology, Society Interface:** Questioning of the traditional boundary between science (knowing) and technology (doing). How science and technology together shape the ways in which knowledge is constructed. Technological Determinism, Power and the Politics of Knowledge Production. Various perspectives on Technology in Science, Technology and Society (STS) studies; Social Shaping of Technology - Social Construction of Technology, Actor Network Theory, Transition in Socio-Technical Systems. Multi-Level Perspective, Critical Theory of Technology. Governance and ethical issues in the context of emerging technologies. Influence of local contexts, Democratization and 'up- stream' public engagement with technology.

**Urban Sociology:** Urbanisation is an important aspect of modern society. Key theoretical perspectives for understanding urban phenomena in historical and contemporary contexts. Changing nature of community, social inequality, political power, socio-spatial change, technological change, and the relationship between the built environment and human behavior. The key theoretical paradigms that have constituted the field since its founding, assess how and why they have changed over time, and discuss the implications of these paradigmatic shifts for urban scholarship, social policy and the planning practice.

Urban case studies as example

**Architectural Sociology:** Sociological and psychological aspects of interaction between the person and architectonic environment. Role of the built environment in providing harmonious human life. Principles of architectural sociology, its place in the modern environmental psychology theory and practice- based on sociological and psychological aspects of human and environmental interaction. Nature of urban social and architectural and spatial aspects. Best known principles of world.

**Architectural Digital Media:** The new communication paradigm brought about by digital technologies. Digitality (Digital versus Analogue Media), Interactivity, Extractive versus immersive navigation, Registrational Interactivity and Interactive communication, Hyper textuality - Networked Media, Virtuality

(The emergence of AI in architectural processes. The integration of AI. Paradigm shift that promises to reshape the aesthetics, sustainability, and personalization of architectural spaces for Architects)

**Architecture and Visual Culture:** Introduction and definitions of Visual Culture, Visual Cultural Perspectives, High and low culture, Images and Power, Images and Ideolog, Image and Meaning, The myth of the Image, Medium is the Message

To research and analyse cultures of art, photography, film and media production,

exchange and consumption across different societies and cultures, both contemporary and historical. Relevant Case studies

Weightage: Continuous Internal Assessment: 40%, End Semester Examinations: 60%.

**Assessment Methodology:** Two Assessments with equal weightage.

One Assessment as Internal written Test /Examination (50%), second as Assignment (50%) of any mode such as study, seminar, and or a combination of modes, etc.

#### References:

- 1. Wirth, L. (1938). Urbanism as a way of life. *The American Journal of Sociology, 44*(1), 1–24. (Also available in *The City Reader*, pp. 97–104)
- 2. Park, R. E. (1915). The city: Suggestions for the investigation of human behavior in the city environment. *The American Journal of Sociology, 20*(5), 577–612.
- 3. Park, R. E. (1936). Human ecology. The American Journal of Sociology, 42(1), 1-15.
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- 2. Jacobs, J. (1961). The uses of sidewalks: Safety. In The death and life of great American cities.
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- 3. Dovey, K. (2001). The virtual order of global capitalism: Culture–technology–architecture. Routledge, in Architectural Design, 71(5), 30–35. https://researchbank.rmit.edu.au/view/rmit:3434
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- 5. Hillier, B., & Hanson, J. (1984). *The social logic of space*. Cambridge University Press. https://archive.org/details/sociallogicofspa0000hill
- 6. Penn, A. (2003). Space syntax and spatial cognition: Or why the axial line? Environment and Behavior, 35(1), 30–65. https://core.ac.uk/download/pdf/94296.pdf

	Description of CO	PO Mapping
CO1	Interpret the trends that problematize production of scientific knowledge and the sociology of scientific knowledge	PO5 (3)
CO2	Identify the technology-society interface from a wide range of theoretical stand points such as social shaping of technology, social constructionist theoretical perspectives	PO5 (3)
CO3	Relate science and technology as socially and culturally embedded activities.	PO5 (3)

MH25105	Process Based Design Studio	L	Т	P/S	С	
		0	0	10	10	

- To enable understanding of complex situations through engaging appropriate tools that help analyse different aspects of the situations.
- To help incorporate appropriate processes into design- social, environmental, parametric/ contemporary process, computational process, etc., in order to get a holistic design/ address the most crucial aspects of a given design situation.

#### Content

The increasing complexity of the world today needs a richer analysis to understand interconnected layers. Also, this complexity is correspondingly reflected in the needs of buildings and the built environment. Appropriate design processes can help in study, analysis and integration of specific inputs and needs into the projects. The studio will focus on engaging processes for study/ analysis and for incorporating complex inputs/ data into design so that architecture can address human needs in a holistic manner. Processes such as diagramming, mapping, participatory approaches, collaboration, statistics, data, etc., would be used to understand situations such as macro environment, socio-cultural aspects, user behaviour, aspects of contemporary life, activity and movement, landform, urban form, etc., as required. The projects could be of macro scale involving large campus/ township oriented architectural projects and/ or architectural design interventions in the urban context. The idea of process in design can be deterministic/ generative/ innovative as appropriate for a particular studio project situation.

In the study and proposition stage, focus would be on how to study and analyse/ understand a situation through appropriate processes based on the design project and context given. At the end of this, the nature of the problem and the nature of the solution would be arrived at.

In the design stage, the aim is to project a solution from the process. The outcome will be a workable, ingenious, innovative solution of any scale based on the project. The emphasis would be on how the design solution is connected to the intent through the process and is generated through the process.

Weightage: Continuous Assessment: 50%, End Semester Examinations: 50%.

**Assessment Methodology: :** Three Assessments with equal weightage (approx.33.33% each).

Each assessment shall incorporate continuous marking of the work and performance during the particular assessment period.

- 1. Anthony, K. H. (1991). *Design juries on trial: The renaissance of the design studio*. Van Nostrand Reinhold.
  - https://archive.org/details/designjuriesontr0000anth
- 2. Salama, A. M. (2015). Spatial design education: New directions for pedagogy in architecture and beyond. Routledge. https://www.taylorfrancis.com/books/oamono/10.4324/9781315576603
- 3. Oxman, R. (2002). The thinking eye: Visual re-cognition in design emergence. Design Studies, 23(2), 135–164. https://doi.org/10.1016/S0142-694X(01)00028-5
- 4. Goldschmidt, G. (1991). *The dialectics of sketching. Creativity Research Journal*, 4(2), 123–143. https://www.tandfonline.com/doi/abs/10.1080/10400419109534381
- 5. Çalışır, H., & Utkutuğ, S. (2019). Design process and decision-making: An exploratory study of architectural design studios. ITU A|Z, 16(2), 29–42. https://www.journalagent.com/itujfa/pdfs/ITUJFA-24713-RESEARCH\_ARTICLE-CALISIR.pdf
- 6. Ozkan, S. (1993). Design knowledge: Towards a paradigm for design education. *METU Journal of the Faculty of Architecture*, 13(2), 5–15. https://www.jstor.org/stable/43947112

	Description of CO	PO Mapping
CO1	Identify, study the effects and connections of complex forces and project a desired scenario for a given situation through appropriate processes and tools	PO1 (3) PO3 (2) PO6 (1)
CO2	Identify innovative and workable transformations of the existing from the projections in an organic manner.	PO1 (2) PO3 (1) PO6 (3)