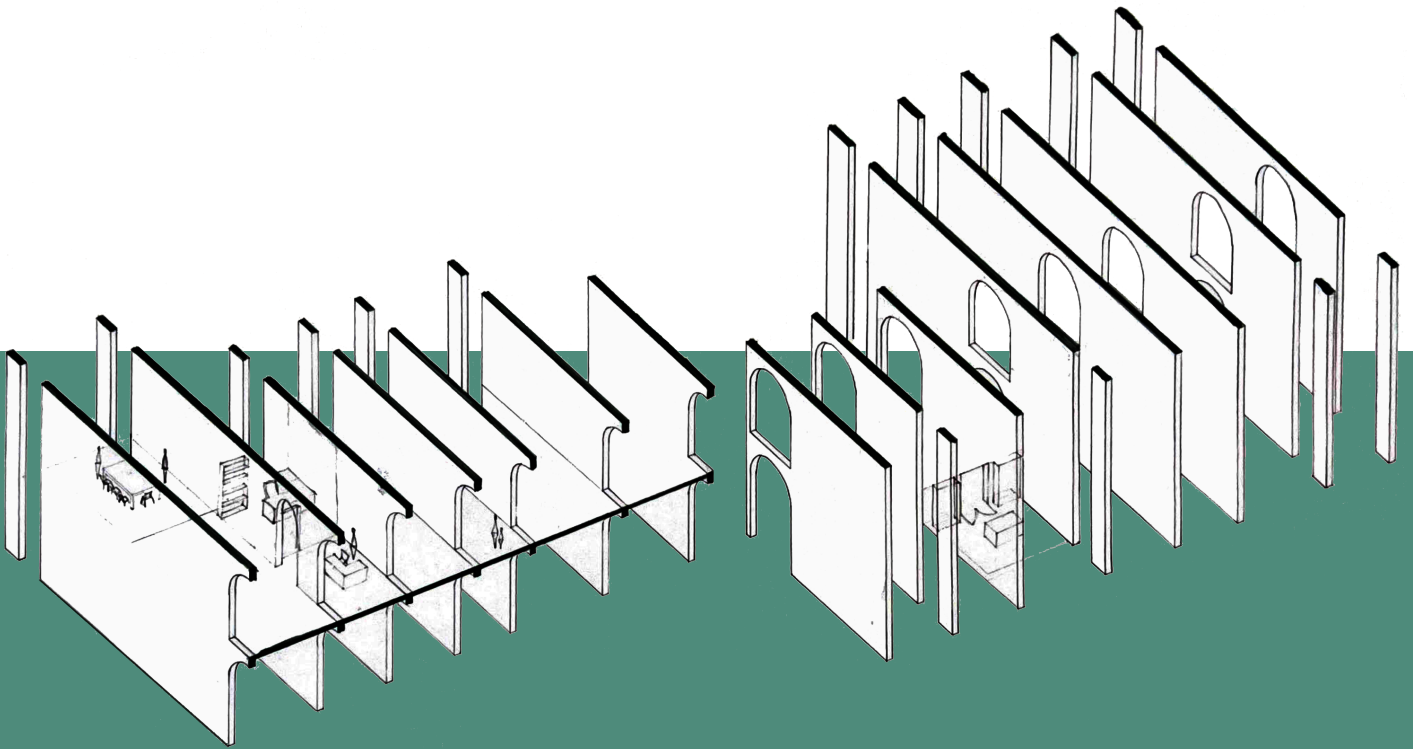


**USM's**  
**Kamla Raheja Vidyaniidhi Institute for Architecture & Environmental Studies**

# K R V I A



**Course Structure Compilation**  
**M. Arch (Post Graduate Course)**  
**URBAN DESIGN**  
**2021-22**

Approved by  
Council of Architecture

Affiliated to  
University of Mumbai

USM's  
Kamla Raheja Vidyanidhi Institute for  
Architecture & Environmental Studies

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CO-PO sStructure

#### SEM IV

Course Components and Structure

CO-PO sStructure

2021-22



# The Program Outcomes

- 1. To acquire the ability to critically understand the context**
- 2. To be able to recommend real and speculative urban propositions**
- 3. To be able to validate urban interventions with theoretical positions.**
- 4. To be able to achieve technical competency for the respective streams.**
- 5. To undertake research for the production of new knowledge.**

# Semester 1

## Scheme of Teaching and Examinations

### SCHEME OF TEACHING AND EXAMINATIONS MASTER OF ARCHITECTURE (M.ARCH) URBAN DESIGN SEM I

	EXAM CONDUCTED BY COLLEGE	TEACHING SCHEME			
		Lecture	Studio	Total	Credits
	Semester I				
<b>MUDC101</b>	Urban Design history	2		2	2
<b>MUDC102</b>	Theory and Methods of Urban Design	2		2	2
<b>MUDC103</b>	Planning Techniques and Procedure-I	3		3	3
<b>MUDE101</b>	Compulsory Electives-1	3		3	3
<b>MUDE102</b>	Compulsory Electives-2	2		2	2
<b>MUDS101</b>	Landscape Design and Urban Ecology	2	2	4	4
<b>MUDS102</b>	Design Studio I		12	12	12
		14	14	28	28

SCHEME OF EXAMINATION SEMESTER I					
		EXAM SCHEME			
		Theory (Paper)	Sessional Work		Credits
	Semester I		Internal	External Viva	
<b>MUDC101</b>	Urban Design history	50	50		100
<b>MUDC102</b>	Theory and Methods of Urban Design		100		100
<b>MUDC103</b>	Planning Techniques and Procedure-I	50	50		100
<b>MUDE101</b>	Compulsory Electives-1		100		100
<b>MUDE102</b>	Compulsory Electives-2		50		100
<b>MUDS101</b>	Landscape Design and Urban Ecology		100		50
<b>MUDS102</b>	Design Studio I		450		450
	<b>TOTAL</b>	<b>100</b>	<b>900</b>		<b>1000</b>

**URBAN DESIGN**

**2021-22**

**Semester 1**

		MONDAY	TUESDAY	WEDNESDAY
PG 1	8.00 - 8.50	<b>Studio I</b> (UD +UC)	<b>Urban History</b> (UD)  Sanaeya Vandrewala	<b>Academic</b> (UD+)
	8.50 - 9.40			<b>Sarah George</b> Aditya S
	9.40 - 10.30			
	10.30 - 11.20	<b>Rohan Ainsley</b> Aaradhana Sanaeya Apoorva	<b>Conservation Tech + Procedures (UC)</b> Apoorva Iyengar	<b>Conservation of M</b> UD+ Sanaeya V
	11.20 - 12.00			
	12.00-12.50	<b>Studio:I (UD+UC)</b> (Working Studio)	<b>Cons. Tech + Procedures</b> (UC)	<b>Conservation of M</b> UD+
	12.50 - 1.20	L U I		
	1.20 - 2.10	<b>Studio:I (UD+UC)</b> (Working Studio)	<b>Urban Sociology</b> UD Binti Singh Aaradhana	<b>Data Ur</b> UD+
	2.10 - 3.00			Paul A

# Semester I

## Time-Table

WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
<b>Academic Writing (UC)</b> Binti Singh Sawant	<b>Studio I (UD + UC)</b> Rohan Aaradhana, Ainsley Sanaeya, Apoorva	<b>Urban Ecology &amp; Landscape (UD + UC)</b> Shweta Wagh	
<b>Modern Heritage (UC)</b> Vandrewala		<b>Conservation Theory (UC)</b> Sanaeya Vandrewala	<b>Archaeology (UC)</b> Andrea Baptista
B R E A K			
<b>Modern Heritage (UC)</b>	<b>Studio: I (UD+UC) (Working Studio)</b>	<b>Conservation Theory (UC)</b>	
M O R N I N G B R E A K			
<b>Urbanism (UC)</b> Ankush	<b>Theory &amp; Methods of Urban Design (UD+UC)</b> Manoj Parmar, Aaradhana	<b>Planning Technique &amp; Procedure - I (UD+UC)</b> Aditya Sawant, Binti Singh	

Urban Design

Choice Elective I: Academic Writing

Choice Elective II: Urban Sociology

## **MODULE: CONSERVATION THEORY**

**THEORY COURSE FORMAT: SESSIONS 16| STUDENT ASSIGNMENTS 2 |  
STUDIO FORMAT: STUDENTS PRESENTATION | FACULTY PRESENTATION**

### **Aim**

Creating awareness about the different approaches towards conservation over time and the modern theories /strategies of conservation

### **Course Objectives**

- To introduce the philosophy of conservation
- To introduce the history, main concepts/ideas, principles, and theories of conservation

### **Methodology and Method of Instruction**

Learning & attempting evolution of various conservation approaches. Understanding History of Conservation Movement Internationally and in India. Studying various Philosophy & Discourses; Differing schools of thought within the practice.

### **Learning Outcomes**

Instilling the ability of the students to understand What and Why to conserve. Understanding functioning of various International Bodies, Charters & changing Trends: ICOMOS/ICCROM / INTACH. To be able to comprehend scope of conservation in the Indian context.

<b>SESSIONS</b>	<b>TOPICS TO BE COVERED</b>
Session 1 17-12-21	Introduction to Conservation Theory. Every student expresses their understanding of Conservation and how they view it in the current scenario in the country.
Session 2 07-01-22	Understanding various Conservation methods such Restoration, Adaptive Re-use, Revitalization, anastylosis, Re-construction etc. and its application in case studies
Session 3 14-01-22	International bodies ICOMOS, ICCROM and various charters such as Venice, Athens, Nara, Washington etc.
Session 4 21-01-22	Charters Part 2
Session 5 28-01-22	Conservation in Indian context. Specifically discussing ancient conservation practices, foundation and role of ASI in colonial India, ASI after independence, INTACH, heritage conservation committees in cities post 1995
Session 6 04-02-22	Working session
Session 7 11-02-22	Assignment 1 – Review of the INTACH charter while comparing its pros and cons to various international charters
Session 8 18-02-22	Assignment 1 – Review of the INTACH charter while comparing its pros and cons to various international charters
Session 9 25-02-22	Alois Riegl conservation theory
Session 10 04-03-22	Heritage Discourse -western and eastern philosophies (SPAB manifesto), LauraJane Smith
Session 11 04-03-22	Venice charter revisited

Session 12 18-03-22	Patina Discourse – How aging is viewed in different conservation approaches around the world. Is it acceptable and to what extent? Understanding how patina is developed on various building materials its impact and whether it can be considered as part of a historic fabric.
Session 13 25-03-22	Working session
Session 14 01-04-22	Assignment 2- Conservation theory for 21 <sup>st</sup> Century in context with Indian Heritage
Session 15 08-04-22	Assignment 2- Conservation theory for 21 <sup>st</sup> Century in context with Indian Heritage
Session 16 22-04-22	Exam prep

<b>Assignment</b>	
Assignment 1	Review of the INTACH charter while comparing its pros and cons to various international charters
Assignment 2	Conservation theory for 21 <sup>st</sup> Century in context with Indian Heritage

## **CO-PO mapped syllabi of Master's in Architectural & Urban Conservation 2021-2022 – Conservation Theory**

### **Program Educational Objective (PEOs): M.Arch**

1. To nurture individuals towards a better understanding of learning methods to bridge the gap between theory and practice.
2. To respond to innovative needs and environmental and social responsibility one should acquire excellence in the field both in academics and practice.
3. To develop a culture of enquiry, a thirst to excel in a particular field of knowledge and an ability to have a broad-minded perspective on things.
4. To nurture an intent to unlearn and reinterpreted learning through the change, proceeding towards efficient and sustainable responses to varied situations.
5. To be able to assimilate knowledge to enhance spatial exploration, theorise and conceptualise ideas with respect to time and space. To define boundaries and regions to collaborate and meet the constantly changing world of climate change.

### **Programme outcomes:**

1. To acquire the ability to critically understand the context.
2. To be able to recommend real and speculative urban propositions.
3. To be able to validate urban interventions with theoretical positions.
4. To be able to achieve technical competency for the respective streams.
5. To undertake research for production of new knowledge.

**Course:** Conservation Approaches

**University Course Code:** C1A

Sem- 1

Year - First

**KRVIA Course Code:** UCTH-633

### **Course Objectives:**

1. Creating awareness about the different approaches towards conservation over time and the modern theories /strategies of conservation.
2. To introduce the philosophy of conservation.
3. To introduce the history, main concepts/ideas, principles, and theories of conservation

### **Course Outcomes:**

1. Instilling the ability of the students to understand the premise for conservation.
2. Understanding functioning of various International Bodies, Charters & changing trends
3. Able to comprehend scope of conservation in the Indian context.



USM's Kamla Raheja Vidyaniidhi Institute for Architecture and Environmental Studies / Masters of Architecture									
Year of Assessment:	Subject:	Subject Code:	University Subject Code:	Sessional Marks:	Exercise 01: Marks out of 50	Credits	Date of submission		
<b>Exercise: Title</b>									
<b>Exercise Note / Task</b>									
<b>Assessment</b>									
<b>Grade</b>									
<b>Percentage</b>									
<b>Equivalent out of 10.0</b>									
	O++	O+	O	A	B	C	D	E	F
	90% and above	80%	79% - 75%	74% - 70%	69% - 65%	64% - 60%	59% - 55%	54% - 50%	49% - 40%
	9.0	8.0	7.9 - 7.5	7.5 - 7.0	6.9 - 6.5	6.4 - 6.0	5.9 - 5.5	5.4 - 5.0	4.9 - 3.0
<b>Area of Evaluation</b>									
<b>Nature of Inquiry/ Interpretation</b>	Exceptional	Impressive	Explored many options. Clear, complete & curious. Covered width + depth both.	Innovative. Experimental and Bold Clarity. Expressive of relevance.	Confident. More than average. Easily acceptable.	Obvious. Safe / undisputed.	Fair Based on biased hypothesis.	Weak. Based on biased hypothesis.	Not acceptable
<b>Rigour of data collection/collation/ and curation. for assignments</b>	Exceptional	Impressive	Meticulous, authentic and methodical organization of data	Distilled, well competed and organized	Lot of data and well organized	Just enough and not continuously linked	Just adequate	Not enough to support	Not acceptable
<b>Understanding/ analysis or interpretation of reading, text/ map/ drawing/ case study</b>	Exceptional	Impressive	Breakthrough interpretation and understanding of subject	Highly demonstrative. Beyond expected	Clarity of thought and accurate synthesis	Good. Consistently seen.	Average. Obvious methods used.	Arbitrary. Ad-hoc.	Not acceptable
<b>Presentation/ representation or articulation, coherence and clarity of argument in the form of power-point, paper, map, drawing or report</b>	Exceptional	Impressive	Highly structured, persuasive argument with advanced technical skills	Potential beyond expectation. Few added attributes.	Logical argument, legible narrative and representation	Almost complete.	Just adequate.	Inadequate for the purpose	Not acceptable
<b>Attendance, time management and participation in class</b>	Exceptional	Impressive	Positive and clear. Innovative and Worth appreciating.	High quality. High precision. Good range with good ability.	Eloquent, suggestive, well organised and resourceful	Above average. Demonstrative. High potential	Average.	Poor.	Not acceptable

**CO-PO Mapping:**

	CO	PO1: Critical understanding of context	PO2: Urban propositioning	PO3: urban interventions with theoretical positions	PO4: Technical Competency	PO5: Creation of new knowledge
CO1	Instilling the ability of the students to understand the premise for conservation.	3	3	3	2	3
CO2	Understanding functioning of various International Bodies, Charters & changing trends	3	3	2	2	2
CO3	Able to comprehend scope of conservation in the Indian context.	3	1	3	2	1

1 – Slight (Low) Correlation    2- Moderate (Medium) Correlation    3- Substantial (high) Correlation  
0 – No Correlation



## **MODULE: SEM I 2021-22 – PLANNING TECHNIQUES**

**THEORY COURSE FORMAT: 16 WEEKS | STUDENT ASSIGNMENTS 1**

**STUDIO FORMAT: STUDENTS PRESENTATION | CASE STUDIES | FACULTY PRESENTATION**

**UNIVERSITY CODE: MUDC 103**

**KRVIA CODE: UDP 633.1**

### **COURSE OBJECTIVES**

The course will try to understand planning and its institutional framework in the Indian context, focusing on the city of Mumbai. India is rapidly going through the process of urbanization with the expected 40-45% of population residing in urban areas. The intent of the course is to understand various ways the urban planning strategies are conducted at government level. Urban planning in India is based on development plans, regional plans, zonal plans, zoning regulations, urban byelaws and various policies set up by the state government. Various past planning approaches are studied and critiqued as most of the methods adopted in India are parochial and unable to meet pace with the rapidly changing dynamics of eco-socio-cultural aspects of the urban areas. To address these various changing facets of urban planning such as social, economic, cultural, legal, political, ecological, technological, aesthetic, geographical, and so forth, new tools and techniques need to be understood and incorporated to understand, analyse, and influence the above-mentioned variety of forces and shaping of the built environment.

- (CO1) Critical evaluation of history and principles of planning in the international and national context
- (CO2) Understanding of institutional and legal framework of planning at the national, state and city level
- (CO3) Analyzing the application of planning techniques and approaches within different contexts and issues

### **Programme outcomes:**

- To acquire the ability to critically understand the context (PO1)
- To be able to recommend real and speculative urban propositions (PO2)
- To be able to validate urban interventions with theoretical positions (PO3)
- To be able to achieve technical competency for the respective streams (PO4)
- To undertake research for production of new knowledge (PO5)

FACULTY: ADITYA SAWANT , BINTI SINGH
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SUBJECT: PLANNING TECHNIQUES 16 weeks
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<b>SESSIONS</b>	<b>TOPICS TO BE COVERED</b>
8-07-21	Introduction and overview share readings

15-07-21	<p><b>Ancient, classical and medieval, Renaissance and Baroque antecedents</b>  Kostov, Spiro, 1991. "Chapter 1: Organic Patterns," in Kostof, Spiro, <i>The City Shaped</i>, Boston: Bulfinch Press, 43-93.</p>
22-07-21	<p><b>Planning the 19th-century industrial city: Suburbs, new towns, parks</b>  Ch. 3, in Peter Hall, <i>Cities Of Tomorrow</i></p>
29-07-21	<p><b>Replanning the 19th-century industrial city: Haussmannism, the City Beautiful, social reform</b>  Ch. 6, in Peter Hall, <i>Cities Of Tomorrow</i>  Boyer, Christine. 1983. <i>Dreaming the Rational City</i>. Cambridge, MA: MIT Press p. 59-82</p>
5-08-21	<p><b>The 19th century Industrial city in the colony</b>  McFarlane, Colin. 2008. <i>Governing the Contaminated City: Infrastructure and Sanitation in Colonial and Post-Colonial Bombay</i>. <i>International Journal of Urban and Regional Research</i> 32 (2): 415–435</p> <p><b>The world wars</b></p> <ul style="list-style-type: none"> <li>• Kosambi, Meera. 1986. Chapters 3-4 <i>Bombay in Transition : The Growth and Social Ecology of a Colonial City, 1880-1980</i>, Stockholm, Sweden: Almqvist &amp; Wiksell International</li> <li>• Cunningham, Susan. 1980. Brazilian cities old and new: Growth and Planning experiences in <i>Shaping an Urban World</i> eds. Gordon Cherry. Manseel, London</li> </ul>
12-08-21	<p><b>Early 20th-Century founding blocks: The Garden City Movement</b>  Ch. 4, in Peter Hall, <i>Cities Of Tomorrow</i>  Fishman, Robert. <i>Urban Utopias: Ebenezer Howard, Frank Lloyd Wright and Le Corbusier</i> in Scott Campbell &amp; Susan S. Fainstein, ed., <i>Readings in Planning Theory</i></p>
19-08-21	<p><b>Early 20th-Century founding blocks: The Regional Planning Movement</b>  Meller, Helen. 1990. Chapter 7 &amp; 8 in Patrick Geddes: <i>Social Evolutionist and City Planner</i>  Ch. 5, in Peter Hall, <i>Cities Of Tomorrow</i>  <b>Early 20th-Century founding blocks</b>  Ch. 7, in Peter Hall, <i>Cities Of Tomorrow</i></p>
02-09-21	<p><b>Establishment of urban and regional planning as a profession</b>  Benjamin, Gerald and Nathan, Richard. <i>Regionalism and Realism: A Study of Governments in the New York Metropolitan Area</i></p>
9-09-21	<p>History of Planning /– Post Independence (focus on Mumbai, various acts and institutions etc.)  This lecture will look at the post-independence planning frameworks at the state level as well as the urban local body level. It will look at all the planning acts like the</p>

	MRTP Act, Slum Act, institutions evolved for supplying affordable housing as well as the post liberalization institutions like RERA.
16-09-21	<b>Development Plan</b> Iterations: This lecture will focus on the Mumbai Development Plan as a Case Study, looking at the evolution of the three iterations of the Development Plan and the institutional framework in which they were created.
23-09-21	<b>FSI, Transfer of Development Rights:</b> This lecture will try to understand the various planning tools and techniques used in the Development Plan and the DCR to guide development of Mumbai. For eg: FSI, TDR, Zoning, CRZ, No Development Zone etc. There will also be a focus on the TDR tool used in the conservation of heritage structures.
30-09-21	Reading/Working session
7-10-21	<b>Town Planning Schemes:</b> This class will do a comparative analysis of the Town Planning Schemes implemented in Ahmedabad, Gujarat and Pune, Maharashtra
14-10-21	<b>Transit Oriented Development:</b> This class will look at the idea of the Transit Oriented Development and issues concerning its implementation in Mumbai along the Metro Corridor
21-10-21	Reading/Working session
28-10-21	Exam Study/Preparation
Reading & Discussion sessions	Students will be introduced to the readings pertaining to the next day lecture/class. Mandatory readings will be done in class and optional readings will be assigned for additional readings outside the class. Last 15 mins for discussion.

<b>Assignment</b>	
Assignment	An open book test will be conducted at the end of the course.

### Optional Readings

- Kosambi, Meera. 1986. Chapters Introduction, 1-2 in *Bombay in Transition : The Growth and Social Ecology of a Colonial City, 1880-1980*, Stockholm, Sweden: Almqvist & Wiksell International (for Xerox)
- Krueckerberg, Donald A. 1983. The Culture of Planning in Krueckerberg D.A., ed., Introduction to Planning History in the United States given
- Mehrotra, Rahul and Dwivedi, 2010. Sharada. *Bombay: Cities Within*, Chapters 1-4
- Richard Le Gates and Frederic Stout, eds. 2011. Frederick Law Olmstead, 'Public Parks and the Enlargement of Towns in The City Reader: Fifth Edition
- A.E.J. Morris, History of Urban Form Before the Industrial City  
p. 30-34; 59-70; 92-103; 157-168
- J.J.P. Oud: A Poetic Functionalist 1890-1963 - The Complete Works Hardcover by Dolf Broekhuizen
- Singh, Binti (2018) *The Divided City: Ideological and Policy Contestations in Contemporary Urban India*, World Scientific Publishers, Singapore, Chapters 1 and 2
- Friedrich Engels, 1872 (1975 edition) "How the Bourgeoisie Solves the Housing Question" in *The Housing Question*, p. 40-74.
- Mike Davis. 2004. "Planet of Slums: Urban Involution and the Informal Proletariat" *New Left Review* 26, 5-34.
- King, Anthony. 1991. Chapter 3 in *Urbanism, Colonialism, and the World Economy, Cultural and Spatial Foundations of the World Urban System*. Routledge
- Ch. 1, in Anthony Sutcliffe, *Towards the planned city*

- Home, Robert. 1997. Miracle-worker to the people: The Idea of Town Planning (1910-1935) in *Of Planting and Planning: The Making of British Colonial Cities*.
- Ch. 4 (D. Rebutisch), in Gordon E. Cherry, ed., *Shaping an Urban World*
- Richard Le Gates and Frederic Stout, eds. 2011. Part 5, Chapters 2, 3 & 4 in *The City Reader: Fifth Edition*
- Meller, Helen. 1990. Introduction in Patrick Geddes: Social Evolutionist and City Planner
- Calthorpe, Peter and Fulton, William. Designing the Region and Designing the Region is Designing the Neighbourhood in Richard Le Gates and Frederic Stout. 2011. *The City Reader: Fifth Edition*.
- Perry, Clarence. The Neighbourhood Units in Richard Le Gates and Frederic Stout. 2011. *The City Reader: Fifth Edition*.
- Copenhagen <http://www.scribd.com/doc/99318840/Copenhagen-Regional-Plan-1947-Fingerplan-English-summary>

## **CO-PO mapped syllabi of Masters in Urban Design 2021-2022 – Planning Techniques and Procedures - I**

### **Program Educational Objective (PEOs): M.Arch**

1. To nurture individuals towards a better understanding of learning methods to bridge the gap between theory and practice.
2. To respond to innovative needs and environmental and social responsibility one should acquire excellence in the field both in academics and practice.
3. To develop a culture of enquiry, a thirst to excel in a particular field of knowledge and an ability to have a broad-minded perspective on things.
4. To nurture an intent to unlearn and reinterpret learning through the change, proceeding towards efficient and sustainable responses to varied situations.
5. To be able to assimilate knowledge to enhance spatial exploration, theorise and conceptualise ideas with respect to time and space. To define boundaries and regions to collaborate and meet the constantly changing world of climate change.

### **Programme outcomes:**

- To acquire the ability to critically understand the context
- To be able to recommend real and speculative urban propositions
- To be able to validate urban interventions with theoretical positions
- To be able to achieve technical competency for the respective streams
- To undertake research for production of new knowledge

### **Course: Planning Techniques and Procedures I**

**University Course Code:** MUDC 103

Sem- 1

Year - First

**KRVIA Course Code:** UDP 633.1

### Course Objectives:

- Critical evaluation of history and principles of planning in the international and national context
- Understanding of institutional and legal framework of planning at the national, state and city level
- Analyzing the application of planning techniques and approaches within different contexts and issues

### Course Outcomes:

- Instilling the ability of the students to critically understand the process of creating planning as a technical profession.
- Making students aware the possibilities as well as limitations of different planning approaches through case studies.
- Ability of students to use an appropriate planning technique/approach based on a particular vision or goal.



USM's Kamla Raheja Vidyandhi Institute for Architecture and Environmental Studies / Masters of Architecture									
Year of Assessment:	Subject:	Subject Code:	University Subject Code:	Sessional Marks:	Exercise 01: Marks out of 50	Credits	Date of submission		
Exercise: Title									
Exercise Note / Task									
Assessment Grade	O++	O+	O	Excellent A	Very Good B	Good C	Fair D	Satisfactory E	Fail F
Percentage Equivalent out of 10.0	90% and above 9.0	80% 8.0	79% - 75% 7.9 - 7.5	74% - 70% 7.5 - 7.0	69% - 65% 6.9 - 6.5	64% - 60% 6.4 - 6.0	59% - 55% 5.9 - 5.5	54% - 50% 5.4 - 5.0	49% - 40% 4.9 - 3.0
<b>Area of Evaluation</b>									
Nature of Inquiry/ Interpretation	Exceptional	Impressive	Explored many options. Clear, complete & curious. Covered width + depth both.	Innovative. Experimental and Bold Clarity. Expressive of relevance.	Confident. More than average. Easily acceptable.	Obvious. Safe/ un-disputed.	Fair Based on biased hypothesis.	Weak. Based on biased hypothesis.	Not acceptable
Rigour of data collection/collation/ and curation, for assignments	Exceptional	Impressive	Meticulous, authentic and methodical organization of data	Distilled, well competed and organized	Lot of data and well organized	Just enough and not continuously linked	Just adequate	Not enough to support	Not acceptable
Understanding/ analysis or interpretation of reading, text/ map/ drawing/ case study	Exceptional	Impressive	Breakthrough interpretation and understanding of subject	Highly demonstrative. Beyond expected.	Clarity of thought and accurate synthesis	Good Consistently seen.	Average. Obvious methods used.	Arbitrary. Ad-hoc.	Not acceptable
Presentation/ representation or articulation, coherence and clarity of argument in the form of power-point, paper, map , drawing or report	Exceptional	Impressive	Highly structured, persuasive argument with advanced technical skills	Potential beyond expectation. Few added attributes.	Logical argument, legible narrative and representation	Almost complete.	Just adequate.	Inadequate for the purpose	Not acceptable
Attendance, time management and participation in class	Exceptional	Impressive	Positive and clear. Innovative and Worth appreciating.	High quality. High precision. Good range with good ability.	Eloquent, suggestive, well organised and resourceful	Above average. Demonstrative. High potential	Average.	Poor.	Not acceptable

CO-PO Mapping

	CO	PO1: Critical understanding of context	PO2: Urban propositioning	PO3: urban interventions with theoretical positions	PO4: Technical Competency	PO5: Creation of new knowledge
CO1	Instilling the ability of the students to critically understand the process of creating planning as a technical profession.	3	0	3	0	1
CO2	Making students aware the possibilities as well as limitations of different planning approaches through case studies.	3	3	2	2	1
CO3	Ability of students to use an appropriate planning technique/approach based on a particular vision or goal.	2	3	3	3	2

1 – Slight (Low) Correlation    2- Moderate (Medium) Correlation    3- Substantial (high) Correlation  
 0 – No Correlation



## KRVIA Post Graduate Program 2021 - 22

### SEM I | MODULE | URBAN DESIGN THEORY AND METHOD

Faculties: Manoj Parmar | Aaradhana

#### THEORY COURSE FORMAT: LECTURES 6| STUDENT ASSIGNMENTS 2

#### COURSE FORMAT: FACULTY PRESENTATION | STUDENTS DRAWING ASSIGNMENTS

#### COURSE OBJECTIVES

- Reading of cities, representing of cities
- To familiarize the students with the influential urban design theories, principles, conceptual and physical models, analytical methods and drawings over the period, and explores critically the imperative that has caused the situation, their interrelationships, spheres of influence.
- Students will be able to: critically review and interpret key urban design texts, construct and present basic arguments, engage with key literature and other sources of knowledge; and use basic conceptual frameworks for Urban Design arguments.

SESSIONS		TOPICS TO BE COVERED
Lecture 1	16/12/2021	Introduction to the course and discussion on what is Urban Design Theory and its relevance to understanding of our cities.
Lecture 2	23/12/2021	What is Urban scape: Reading of Serial Vision and Imageability
Lecture 3	6/1/2022	What is Urban Morphology: Reading of Good City Form and City Assembled
Lecture 4	13/1/2022	Sacred Cities
Lecture 5	20/1/2022	Linkage and Network Theories: Reading of Finding Lost Space
Lecture 6	27/1/2022	Space Distribution & Urban Experience: Reading of Urban Theory and Urban
Lecture 7	11/2/2022	Collage City

#### ASSIGNMENTS: 50 Marks

ASSIGNMENT I	Morphology Drawings Group Assignment	25
ASSIGNMENT II	Network Drawings Group Assignment	25

## **CO-PO mapped syllabi of Masters in Architectural & Urban Conservation 2021-2022 – Theory and Methods of Urban Design (E1a)**

### **Program Educational Objective (PEOs): M.Arch**

1. To nurture individuals towards a better understanding of learning methods to bridge the gap between theory and practice.
2. To respond to innovative needs and environmental and social responsibility one should acquire excellence in the field both in academics and practice.
3. To develop a culture of enquiry, a thirst to excel in a particular field of knowledge and an ability to have a broad-minded perspective on things.
4. To nurture an intent to unlearn and reinterpreted learning through the change, proceeding towards efficient and sustainable responses to varied situations.
5. To be able to assimilate knowledge to enhance spatial exploration, theorise and conceptualise ideas with respect to time and space. To define boundaries and regions to collaborate and meet the constantly changing world of climate change.

### **Programme outcomes:**

1. To acquire the ability to critically understand the context
2. To be able to recommend real and speculative urban propositions
3. To be able to validate urban interventions with theoretical positions
4. To be able to achieve technical competency for the respective streams
5. To undertake research for production of new knowledge

### **Course: Theory and Methods of Urban Design (E1a)**

#### **University Course Code: E1a**

MUDC 102 Sem- 1 Year - First

#### **KRVIA Course Code: UTH 622.1**

### **Course Objectives:**

1. To develop the method of reading and representing of cities through various types of drawings and narratives.
2. To familiarize the students with the influential urban design theories, principles, conceptual and physical models, analytical methods, and drawings over the period, and explores critically the imperative that has caused the situation, their interrelationships, and spheres of influence.
3. Students will be able to: critically review and interpret key urban design texts, construct and present basic arguments, engage with key literature and other sources of knowledge; and use basic conceptual frameworks for Urban Design arguments.

### **Course Outcomes (CO):**

1. Develop an understanding of reading and representing cities through various urban theories 2. Familiarize the students with the influential urban theories and explore critically the imperatives that have caused a situation, their interrelationships, and spheres of influence in the making of the city.
3. Critically assess and analyze important urban design theories, build and present basic arguments, and apply fundamental conceptual frameworks for urban design arguments.

**Rubrics:**

USM's Kamla Raheja Vidyandhi Institute for Architecture and Environmental Studies / Masters of Architecture									
Year of Assessment:	Subject:	Subject Code:	University Subject Code:	Sessional Marks:	Exercise 01: Marks out of 50	Credits	Date of submission		
<b>Exercise: Title</b>									
<b>Exercise Note / Task</b>									
<b>Assessment Grade</b>									
	O++	O+	O	A	B	C	D	E	F
	90% and above	80%	79% - 75%	74% - 70%	69% - 65%	64% - 60%	59% - 55%	54% - 50%	49% - 40%
	9.0	8.0	7.9 - 7.5	7.5 - 7.0	6.9 - 6.5	6.4 - 6.0	5.9 - 5.5	5.4 - 5.0	4.9 - 3.0
<b>Area of Evaluation</b>									
<b>Nature of Inquiry/ Interpretation</b>	Exceptional	Impressive	Explored many options. Clear, complete & curious. Covered width + depth both.	Innovative. Experimental and Bold Clarity. Expressive of relevance.	Confident. More than average. Easily acceptable.	Obvious. Safe / un-disputed.	Fair Based on biased hypothesis.	Weak. Based on biased hypothesis.	Not acceptable
<b>Rigour of data collection/collation/ and curation. for assignments</b>	Exceptional	Impressive	Meticulous, authentic and methodical organization of data	Distilled, well competed and organized	Lot of data and well organized	Just enough and not continuously linked	Just adequate	Not enough to support	Not acceptable
<b>Understanding/ analysis or interpretation of reading, text/ map/ drawing/ case study</b>	Exceptional	Impressive	Breakthrough interpretation and understanding of subject	Highly demonstrative. Beyond expected.	Clarity of thought and accurate synthesis	Good. Consistently seen.	Average. Obvious methods used.	Arbitrary. Ad-hoc.	Not acceptable
<b>Presentation/ representation or articulation, coherence and clarity of argument in the form of power-point, paper, map, drawing or report</b>	Exceptional	Impressive	Highly structured, persuasive argument with advanced technical skills	Potential beyond expectation. Few added attributes.	Logical argument, legible narrative and representation	Almost complete.	Just adequate.	Inadequate for the purpose	Not acceptable
<b>Attendance, time management and participation in class</b>	Exceptional	Impressive	Positive and clear. Innovative and Worth appreciating.	High quality. High precision. Good range with good ability.	Eloquent, suggestive, well organised and resourceful	Above average. Demonstrative. High potential	Average.	Poor.	Not acceptable

**CO-PO Mapping:**

	CO	PO1: Critical understanding of context	PO2: Urban propositioning	PO3: urban interventions with theoretical positions	PO4: Technical Competency	PO5: Creation of new knowledge
CO1	Develop an understanding of reading and representing cities through various urban theories	3	3	0	2	1
CO2	Familiarize the students with the influential urban theories and explore critically the imperatives that have caused a situation, their interrelationships, and spheres of influence in the making of the city.	3	3	3	2	1
CO3	Critically assess and analyze important urban design theories, build and present basic arguments, and apply fundamental conceptual frameworks for urban design arguments.	3	2	3	2	3

1 – Slight (Low) Correlation 2- Moderate (Medium) Correlation 3- Substantial (high) Correlation 0 – No Correlation

<b>COURSE CODE</b>	USOM622.1	<b>CREDITS</b>	
<b>COURSE NAME</b>	Urban Writing	<b>SESSIONAL MARKS</b>	50
<b>FACULTY</b>	Aditya, Binti, Ketaki, Sarah	<b>EXAM SCHEME</b>	Internal Assessment
<b>CLASS DAY/TIME</b>	Thursday, 1:30 pm to 3 pm	<b>NON-CLASS TIME</b>	-

**PEDAGOGIC INTENT** The Urban writing course is designed to assist and guide students to develop their writing skills as these are paramount to research inquiries, developing a research methodology, referencing and reviewing relevant academic literature throughout the Master's program

**COURSE METHODOLOGY** Faculty through lectures, writing activities in class and writing assignments will provide opportunities for students to construct, organize and articulate their ideas.

<b>LECT</b>	<b>DAY</b>	<b>DATE</b>	<b>TEACHING CONTENT</b>
1	Thursday	6/1/22	Introduction to the course: The purpose of Urban Writing, Difficulties and constraints of Urban Writing
2	Thursday	13/1/22	Exercise: Free Writing (writing on a random issue related to the Urban)
3	Thursday	20/1/22	Basic Writing Skills: Paraphrase/Summarise a short essay/article
4	Thursday	27/1/22	Republic Day
5	Thursday	3/2/22	Rhetorical modes of writing (narration, description, exposition and argumentation)
6	Thursday	10/2/22	Rhetorical methods of writing... contd. Choosing an everyday object and describing it in 500 words
7	Thursday	17/2/22	Elements of Academic writing: Motive of the argument, Analysis and structure, Keywords, Sources



8	Thursday	25/2/22	Exercise: Writing an academic essay on a topic of the student's choice
9	Thursday	3/3/22	Presentation of Assignment:
10	Thursday	10/3/22	Reading, Writing and Interpretation of academic text
11	Thursday	17/3/22	The process of Academic writing: Paraphrasing/Summarising an academic text
12	Thursday	24/3/22	Writing an essay on the Urban

**LEARNING OUTCOMES** The student will reliably demonstrate effective skills to evaluate and critique arguments and apply methods of inquiry that are prerequisite for academic research writing.

**CO-PO mapped syllabi of Masters in Architectural & Urban Conservation 2021-2022  
– Urban Writing (Urban Design and Urban Conservation)**

**Program Educational Objective (PEOs): M.Arch**

1. To nurture individuals towards a better understanding of learning methods to bridge the gap between theory and practice.
2. To respond to innovative needs and environmental and social responsibility one should acquire excellence in the field both in academics and practice.
3. To develop a culture of enquiry, a thirst to excel in a particular field of knowledge and an ability to have a broad-minded perspective on things.
4. To nurture an intent to unlearn and reinterpret learning through the change, proceeding towards efficient and sustainable responses to varied situations.
5. To be able to assimilate knowledge to enhance spatial exploration, theorise and conceptualise ideas with respect to time and space. To define boundaries and regions to collaborate and meet the constantly changing world of climate change.

**Programme outcomes:**

1. To acquire the ability to critically understand the context
2. To be able to recommend real and speculative urban propositions
3. To be able to validate urban interventions with theoretical positions
4. To be able to achieve technical competency for the respective streams
5. To undertake research for production of new knowledge

**Course:** Urban Writing

**University Course Code:**

Sem- 1

Year - First

**KRVIA Course Code:** USOM622.1

**Course Objectives:**

1. The Urban Writing course is designed to assist and guide students to develop their writing skills as these are paramount for research inquiries
2. To develop a research methodology by referencing and reviewing relevant academic literature which is essential throughout the Master's program

**Course Outcomes (CO):**

1. Demonstrate effective skills to evaluate and critique arguments
2. Application of methods of inquiry essential for academic research writing

USM's Kamla Raheja Vidyavidhi Institute for Architecture and Environmental Studies / Masters of Architecture										
Year of Assessment:	Subject:	Subject Code:	University Subject Code:	Sessional Marks:	Exercise 01: Marks out of 50	Credits	Date of submission			
Exercise: Title										
Exercise Note / Task Assessment										
Grade	O++	O+	O	Outstanding	Excellent	Very Good	Good	Fair	Satisfactory	Fail
Percentage	90% and above	80%	79% - 75%	79% - 75%	74% - 70%	69% - 65%	64% - 60%	59% - 55%	54% - 50%	49% - 40%
Equivalent out of 10.0	9.0	8.0	7.9 - 7.5	7.9 - 7.5	7.5 - 7.0	6.9 - 6.5	6.4 - 6.0	5.9 - 5.5	5.4 - 5.0	4.9 - 3.0
Area of Evaluation										
<b>Nature of Inquiry/ Interpretation</b>	Exceptional	Impressive	Explored many options. Clear, complete & curious. Covered width + depth both.	Innovative. Experimental and Bold Clarity. Expressive of relevance.	Confident. More than average. Easily acceptable.	Obvious. Safe / undisputed.	Fair Based on biased hypothesis.	Weak. Based on biased hypothesis.	Not acceptable	
<b>Rigour of data collection/collation/ and curation, for assignments</b>	Exceptional	Impressive	Meticulous, authentic and methodical organization of data	Distilled, well competed and organized	Lot of data and well organized	Just enough and not continuously linked	Just adequate	Not enough to support	Not acceptable	
<b>Understanding/ analysis or interpretation of reading, text/ map/ drawing/ case study</b>	Exceptional	Impressive	Breakthrough interpretation and understanding of subject	Highly demonstrative. Beyond expected.	Clarity of thought and accurate synthesis	Good. Consistently seen.	Average. Obvious methods used.	Arbitrary. Ad-hoc.	Not acceptable	
<b>Presentation/ representation or articulation, coherence and clarity of argument in the form of power-point, paper, map, drawing or report</b>	Exceptional	Impressive	Highly structured, persuasive argument with advanced technical skills	Potential beyond expectation. Few added attributes.	Logical argument, legible narrative and representation	Almost complete.	Just adequate.	Inadequate for the purpose	Not acceptable	
<b>Attendance, time management and participation in class</b>	Exceptional	Impressive	Positive and clear. Innovative and Worth appreciating.	High quality. High precision. Good range with good ability.	Eloquent, suggestive, well organised and resourceful	Above average. Demonstrative. High potential	Average.	Poor.	Not acceptable	

**CO-PO Mapping:**

	CO	PO1: Critical understanding of context	PO2: Urban propositioning	PO3: urban interventions with theoretical positions	PO4: Technical Competency	PO5: Creation of new knowledge
CO1	Demonstrate effective skills to evaluate and critique arguments	3	2	2	0	1
CO2	Application of methods of inquiry essential for academic research writing	2	2	2	0	1

1 – Slight (Low) Correlation    2- Moderate (Medium) Correlation    3- Substantial (high) Correlation  
 0 – No Correlation



KRVIA Masters:

Sem: I- 2021

**MODULE: URBAN SOCIOLOGY–**

**THEORY COURSE FORMAT: LECTURES 8| STUDENT ASSIGNMENTS 3**

**COURSE FORMAT: FACULTY PRESENTATION | STUDENTS ASSIGNMENTS**

**COURSE OBJECTIVES**

- To introduce the subject of urban sociology to students and its importance in understanding of the built environment.
- To familiarize students with the origin of the subject in Europe that went parallel with grappling with the challenges of the new society borne out of the conditions of industrial capitalism and its pathologies
- Influential urban sociological theories traced from the classical period (1820-1960)
- Contemporary theories and key concepts will be discussed with case studies and examples
- Reading lists will be shared
- Students will be able to: critically review and interpret texts, construct and present basic arguments, engage with key literature and other sources of knowledge; and use basic conceptual frameworks for their arguments and thesis

<b>FACULTY: Dr. Binti Singh</b>						
<b>SUBJECT: URBAN SOCIOLOGY : 20 HRS</b>						
<b>METHOD:</b>						
08.00 - 11.00	LECTURE	3	LECTURE	LECTURE	3	3
11.20 - 01.00	1.7	1.7	1.7	1.7	1.7	1.7
01.20 - 3.00	1.7	1.7	1.7	1.7	1.7	

<b>SESSIONS</b>	<b>TOPICS TO BE COVERED</b>
Lecture 1	Introduction to the course and discussion on what is Urban Sociology and its relevance to understanding of our cities.
Lecture 2	Classical theories: Max Weber, Emile Durkheim, Ferdinand Tonnies, Robert Redfield, Talcott Parsons The formal launch of Urban Sociology with Georg Simmel's work on Metropolis and Mental Life, influential works and theories of this period will be discussed

Lecture 3	Political Economy approach- Marx and Engels and others like Castells, Harvey and Lefebvre
Lecture 4	Critique of the Political Economy approach, the cultural approach to understand cities
Lecture 5	Myriad interpretations of the word urban and urbane, official definitions like census towns vs statutory towns
Lecture 6	Key concepts and theories Urbanism, Urbanity, Gentrification, Informality, Place and Place Making, Globalization and Culture

**ASSIGNMENTS: 50 Marks**

ASSIGNMENT I 11.20-3.00	Group Assignment Writeup on any topic of their choice	15
ASSIGNMENT II 8.00-11.00 & 1.20 -3.00	Group Assignment How to apply a theory or concept learnt in class to real life situations	15
ASSIGNMENT III 11.20-1.00 & 1.20 -3.00	Cases (secondary or primary) analyzed in sociological terms Group Assignment	20

**Reading list**

1. Young, Iris Marion. 1990. City Life and Difference in *Justice and the Politics of Difference*
2. Richard Le Gates and Frederic Stout, eds. 2011. Louis Wirth, 'Urbanism as a Way of Life' in *The City Reader: Fifth Edition*
3. Richard Le Gates and Frederic Stout, eds. 2011. Mumford, Lewis, 'What Is a City?' in *The City Reader: Fifth Edition*
4. *Sociology Anthony Giddens*

## CO-PO mapped syllabi of Masters of Urban Design & Urban Conservation

### Program Educational Objective (PEOs): M. Arch.

1. To nurture individuals towards a better understanding of learning methods to bridge the gap between theory and practice.
2. To respond to innovative needs and environmental and social responsibility one should acquire excellence in the field both in academics and practice.
3. To develop a culture of enquiry, a thirst to excel in a particular field of knowledge and an ability to have a broad-minded perspective on things.
4. To nurture an intent to unlearn and reinterpreted learning through the change, proceeding towards efficient and sustainable responses to varied situations.
5. To be able to assimilate knowledge to enhance spatial exploration, theorise and conceptualise ideas with respect to time and space. To define boundaries and regions to collaborate and meet the constantly changing world of climate change.

### Programme outcomes:

- To acquire the ability to critically understand the context
- To be able to recommend real and speculative urban propositions
- To be able to validate urban interventions with theoretical positions
- To be able to achieve technical competency for the respective streams
- To undertake research for production of new knowledge

**Course:** Compulsory Elective - 2

**University Course Code:** MUDE 102

**Sem-** 1

**Year –** 2021-22

### Course Objectives:

- Introduce students to the discipline of urban sociology through classical theories and discussions on them.
- Introduce readings and theories of urban sociology in the Global South.
- Help students correlate these readings and theories with real-world situations around them, in Mumbai, as well as other Indian cities.

### Course Outcomes:

- Students will learn to read aloud, discuss, and understand academic literature together, as a class, in a seminar-like class environment.
- Students will learn how theorization is done, through group-reading sessions and in-class discussions.
- Students will learn how to write short essays, based on their readings, with proper citations, referencing, and an academically sound writing style.



USM's Kamla Raheja Vidyaidhi Institute for Architecture and Environmental Studies / Masters of Architecture							
Year of Assessment:	Subject:	Subject Code:	University Subject Code:	Sessional Marks:	Exercise 01: Marks out of 50	Credits	Date of submission
Exercise: Title							
Exercise Note / Task Assessment							
Grade	O++	O+	O	Excellent	Very Good	Good	Fair
Percentage	90% and above	80%	79% - 75%	74% - 70%	69% - 65%	64% - 60%	59% - 55%
Equivalent out of 10.0	9.0	8.0	7.9 - 7.5	7.5 - 7.0	6.9 - 6.5	6.4 - 6.0	5.9 - 5.5
<b>Area of Evaluation</b>							
Nature of Inquiry/ Interpretation	Exceptional	Impressive	Explored many options. Clear, complete & curious. Covered width + depth both.	Innovative. Experimental and Bold Clarity. Expressive of relevance.	Confident. More than average. Easily acceptable.	Obvious. Safe / undisputed.	Fair Based on biased hypothesis.
Rigour of data collection/collation/ and curation, for assignments	Exceptional	Impressive	Meticulous, authentic and methodical organization of data	Distilled, well competed and organized	Lot of data and well organized	Just enough and not continuously linked	Not enough to support
Understanding/ analysis or interpretation of reading, text/ map/ drawing/ case study	Exceptional	Impressive	Breakthrough interpretation and understanding of subject	Highly demonstrative. Beyond expected.	Clarity of thought and accurate synthesis	Good. Consistently seen.	Arbitrary. Ad-hoc.
Presentation/ representation or articulation, coherence and clarity of argument in the form of power-point, paper, map , drawing or report	Exceptional	Impressive	Highly structured, persuasive argument with advanced technical skills	Potential beyond expectation. Few added attributes.	Logical argument, legible narrative and representation	Almost complete.	Inadequate for the purpose
Attendance, time management and participation in class	Exceptional	Impressive	Positive and clear. Innovative and Worth appreciating.	High quality. High precision. Good range with good ability.	Eloquent, suggestive, well organised and resourceful	Above average. Demonstrative. High potential	Poor.
							Not acceptable

**CO-PO Mapping:**

	CO	PO1: Critical understa nding of context	PO2: Urban propositi oning	PO3: urban interventi ons with theoretic al positions	PO4: Technical Compete ncy	PO5: Creation of new knowledg e
CO1	Students will learn to read aloud, discuss, and understand academic literature together, as a class, in a seminar-like class environment.	2	3	1	1	3
CO2	Students will learn how theorization is done, through group-reading sessions and in-class discussions.	3	3	3	1	3
CO3	Students will learn how to write short essays, based on their readings, with proper citations, referencing, and an academically sound writing style.	3	3	3	1	3

- 1 – Slight (Low) Correlation
- 2- Moderate (Medium) Correlation
- 3- Substantial (high) Correlation
- 0 – No Correlation



## **SEM I 2021-22 – LANDSCAPE DESIGN AND URBAN ECOLOGY- 16 WEEKS**

**THEORY COURSE FORMAT: LECTURES 16| STUDENT ASSIGNMENTS -4**

**STUDIO FORMAT: STUDENTS PRESENTATION | CASE STUDIES | FACULTY PRESENTATION**

### **PEDAGOGIC INTENT/COURSE OBJECTIVES:**

Introduction to the field of Ecological Planning and to understand the basis for frameworks and legal categories for environment and landscape conservation.

- 1) To trace genealogies of the varied conceptions of nature through history which are instrumental in shaping frameworks for landscape conservation.
- 2) To provide students with a historical overview of environmental discourses and theoretical origins of the field of ecological planning
- 3) To understand the origins of the field of ecological planning: the theoretical framework, its principles, concepts methods and application.
- 4) To critically review policy and legal frameworks or categories employed for the conservation and management of landscapes.

### **COURSE METHODOLOGY:**

The course comprises of a theory as well as a studio component. The course will be a lecture course interspersed with discussions on readings etc which will explore theoretical ideas and concepts and their genealogies. Case studies of ecological planning and the implications of various planning legislative and policy frameworks and their application will be discussed and analyzed. The studio component will involve a series of exercises and the application of the various analytical methods or tools which are introduced during the course.

- 1) Introduction to ideological origins , processes, methods and techniques of ecological mapping and analysis.
- 2) Introduction to genealogies of different conceptions of nature and the origin and evolution of concepts such as deep ecology, social ecology, sustainability etc.
- 3) Introduction to basic concepts in ecology. These include 1. Physical aspects such as geology, geomorphology and geomorphic units, terrain, physiography, slope and aspect, natural drainage and hydrology. 2. Biological aspects such as ecology, habitats and ecosystems, species, biodiversity, succession, resilience, climax, ecological niches, pioneer and keystone species, ecotones etc. 3. Related Concepts such as landscape types, landscape units, bio-geographic zones and bio-regions.
- 4) Introduction to values and criteria used for landscape assessment and help them understand concepts such as ecological or environmental significance, sensitivity, fragility and vulnerability.

### **LEARNING OUTCOMES**

- 1 Students will understand the context, theoretical framework and methods of ecological planning.

- 2 Students will learn to apply ecological methods to analyse contemporary urban and infrastructure planning development in their own contexts .
- 3 Students will learn to critically evaluate frameworks or categories employed for the conservation and management of landscapes.

<b>SESSIONS</b>	<b>DATE</b>	<b>TOPICS TO BE COVERED</b>
Session 1	7 <sup>th</sup> January	Lecture/discussion: Introduction to Urban Ecology and Ecological Planning
Session 2	14 <sup>th</sup> January	Group exercise 1: The Crisis of Environment: Nature, Climate and the age of the Anthropocene
Session 3	21 <sup>st</sup> January	Lecture/discussion: Historical overview of environmental discourses and theoretical origin of the field of Ecological Planning
Session 4	28 <sup>th</sup> January	Film screening/ discussion: Conceptions of the Environment Lecture: The Environment as a Contested Domain
Session 5	4 <sup>th</sup> February	Group exercise 2: Student presentations of Case studies in Ecological Planning with a discussion on Theoretical Framework, Methods and Application
Session 6	11 <sup>th</sup> February	Lecture/ Discussion Basic Concepts in Ecology, Urban Ecology and Ecosystems
Session 7	18 <sup>th</sup> February	Lecture: Mapping Physical Aspects: Terrain, Geomorphology, Hydrology
Session 8	25 <sup>th</sup> February	Working studio and Review: Terrain Analysis
Session 9	4 <sup>th</sup> March	Lecture: Mapping Biological aspects: Vegetation, Ecosystems, Land-cover
Session 10	11 <sup>th</sup> March	Working Studio and Review: Land-cover Analysis
Session 11	18 <sup>th</sup> March	Lecture/Discussion: Planning Frameworks and Legal Categories
Session 12	25 <sup>th</sup> March	Working Studio:Analysis and Synthesis
Session 13	1 <sup>st</sup> April	Working Studio:Analysis and Synthesis
Session 14	8 <sup>th</sup> April	Prefinal review
Session 15	15 <sup>th</sup> April	Concluding Seminar: Analysis of regulatory frameworks
Session 16	22 <sup>nd</sup> April	Final Review and Submission of Studio Work

<b>Assignment</b>	
Assignment 1	Group assignment- Presentation by students based on selected readings
Assignment 2	Group assignment- Presentation by students on case studies in ecological planning
Assignment 3	Group assignment- Presentation by students on analysis of regulatory frameworks
Assignment 4	Group submission of studio exercise on ecological mapping and analysis

## **CO-PO mapped syllabi of Masters in Urban Design 2021-2022 – Landscape Design and Urban Ecology**

### **Program Educational Objective (PEOs): M.Arch**

1. To nurture individuals towards a better understanding of learning methods to bridge the gap between theory and practice.
2. To respond to innovative needs and environmental and social responsibility one should acquire excellence in the field both in academics and practice.
3. To develop a culture of enquiry, a thirst to excel in a particular field of knowledge and an ability to have a broad-minded perspective on things.
4. To nurture an intent to unlearn and reinterpret learning through the change, proceeding towards efficient and sustainable responses to varied situations.
5. To be able to assimilate knowledge to enhance spatial exploration, theorise and conceptualise ideas with respect to time and space. To define boundaries and regions to collaborate and meet the constantly changing world of climate change.

### **Programme outcomes:**

1. To acquire the ability to critically understand the context
2. To be able to recommend real and speculative urban propositions
3. To be able to validate urban interventions with theoretical positions
4. To be able to achieve technical competency for the respective streams
5. To undertake research for production of new knowledge

**Course:** Landscape Design and Urban Ecology

**University Course Code:** MUDS 101

Sem- I

Year - First

**KRVIA Course Code:** UPL 644

### Course Objectives

1. To trace genealogies of the varied conceptions of nature through history which are instrumental in shaping frameworks for landscape conservation.
2. To provide students with a historical overview of environmental discourses and theoretical origins of the field of ecological planning
3. To understand the origins of the field of ecological planning: the theoretical framework, its principles, concepts methods and application.
4. To critically review policy and legal frameworks or categories employed for the conservation and management of landscapes.

### Course Outcomes (CO):

1. Students will understand the context, theoretical framework and methods of ecological planning.
2. Students will learn to apply ecological methods to analyse contemporary urban and infrastructure planning development in their own contexts .
3. Students will learn to critically evaluate frameworks or categories employed for the conservation and management of landscapes.

USM's Kamla Raheja Vidyavidhi Institute for Architecture and Environmental Studies / Masters of Architecture										
Year of Assessment:	Subject:	Subject Code:	University Subject Code:	Sessional Marks:	Exercise 01: Marks out of 50	Credits	Date of submission			
Exercise: Title										
Exercise Note / Task Assessment										
Grade	O++	O+	O	Outstanding	Excellent	Very Good	Good	Fair	Satisfactory	Fail
Percentage	90% and above	80%	79% - 75%	79% - 75%	74% - 70%	69% - 65%	64% - 60%	59% - 55%	54% - 50%	49% - 40%
Equivalent out of 10.0	9.0	8.0	7.9 - 7.5	7.9 - 7.5	7.5 - 7.0	6.9 - 6.5	6.4 - 6.0	5.9 - 5.5	5.4 - 5.0	4.9 - 3.0
Area of Evaluation										
Nature of Inquiry/ Interpretation	Exceptional	Impressive	Explored many options. Clear, complete & curious. Covered width + depth both.	Innovative. Experimental and Bold Clarity. Expressive of relevance.	Confident. More than average. Easily acceptable.	Obvious. Safe / undisputed.	Fair Based on biased hypothesis.	Weak. Based on biased hypothesis.	Not acceptable	
Rigour of data collection/collation/ and curation, for assignments	Exceptional	Impressive	Meticulous, authentic and methodical organization of data	Distilled, well competed and organized	Lot of data and well organized	Just enough and not continuously linked	Just adequate	Not enough to support		Not acceptable
Understanding/ analysis or interpretation of reading, text/ map/ drawing/ case study	Exceptional	Impressive	Breakthrough interpretation and understanding of subject	Highly demonstrative. Beyond expected.	Clarity of thought and accurate synthesis	Good. Consistently seen.	Average. Obvious methods used.	Arbitrary. Ad-hoc.	Not acceptable	
Presentation/ representation or articulation, coherence and clarity of argument in the form of power-point, paper, map, drawing or report	Exceptional	Impressive	Highly structured, persuasive argument with advanced technical skills	Potential beyond expectation. Few added attributes.	Logical argument, legible narrative and representation	Almost complete.	Just adequate.	Inadequate for the purpose	Not acceptable	
Attendance, time management and participation in class	Exceptional	Impressive	Positive and clear. Innovative and Worth appreciating.	High quality. High precision. Good range with good ability.	Eloquent, suggestive, well organised and resourceful	Above average. Demonstrative. High potential	Average.	Poor.	Not acceptable	

**CO-PO Mapping:**

	CO	PO1: Critical understanding of context	PO2: Urban propositioning	PO3: urban interventions with theoretical positions	PO4: Technical Competency	PO5: Creation of new knowledge
CO1	Students will understand the context, theoretical framework and methods of ecological planning.	3	0	0	2	0
CO2	Students will learn to apply ecological methods to analyse contemporary urban and infrastructure planning development in their own contexts .	3	2	2	3	3
CO3	Students will learn to critically evaluate frameworks or categories employed for the conservation and management of landscapes.	3	1	2	3	3

1 – Slight (Low) Correlation    2- Moderate (Medium) Correlation    3- Substantial (high) Correlation  
0 – No Correlation





# Unpacking Infrastructure

## Module 1: Water

### **Infrastructure as Spectacle**

The state of infrastructure of a city seems to represent the level of 'development' of the a city. As a result, large infrastructure projects have become emblematic of progress. Governments regularly construct these large scale spectacles that serve to position the city/country as a part of the global economy, as a place to attract investment. Often this tendency is far removed from the fundamental needs and desires of the communities they claim to serve. Infrastructural projects rather than enabling vectors of movement towards the democratic become instruments of oppression. Perhaps, it thus becomes important to unpack the term itself to be able to rediscover the ontological function of infrastructure itself.

### **Infrastructure as Substructure**

Infrastructures are imagined as the sub-structures that enable movement towards a distant horizon of a 'better life'- an ambiguous and contested term. As a result the imaginations, nature and role of infrastructures and the movements they enable are inevitably bound up in these contestations. Whose movement do they enable? At what cost?

To 'infrastructure' is to provide the necessary scaffolding upon which we can fulfil our lives. These fulfilments range from the desire for education, work, health, homes, communication, trade among many other aspects. These are seen as the fundamental structural supports through which we access the better life. They are imagined to be enablers, and as enablers they are seen as underneath ("infra") the 'real city'.

### **Infrastructure as Entanglement**

However, this simplistic binary collapses upon closer examination. The city itself can install be seen as an infrastructure that enables movement. It becomes a space that is claimed, negotiated, contested and moulded to enable movements. The simplistic binary of the sub and supra collapses and what we discover instead are deep and complex entanglements. To be able to act in the city is to engage with and within these entanglements.

### **Mapping Infrastructure**

Acts of representation can help us see, analyse and disentangle some of these connections and overlaps. The First Semester Masters Studio attempts to introduce the students to these interconnections and help them evolve ways of capturing and communicating them through acts of Mapping and Representation. These can help us understand, analyse through abstraction and communicate the way infrastructure is imagined, built and accessed in the city.

There are four frameworks through which we will be attempting to delay the question of the infrastructural. They are:

### **Infrastructure as Scaffolding**

These are the conceptual instruments that have been imagined by the city. They could include Financial, Organisational, Spatial, Political, Technological aspects.

### **Infrastructure as People**

These are the societal affiliations and bonds that enable movements through support structures. They include Communities, Kinships

### **Infrastructure as Process**

These are the practices of individuals or communities to access infrastructures, or to create them

They include Negotiations, Navigations, Rebellions

### **Infrastructure as Affect**

This category is interested in the experience of infrastructures in the city and the meaning they carry. These could be Phenomenological or Semiological

## **Module 1: Water**

The first module of the Unpacking Infrastructure Series will explore the phenomenon of Water in the city. It will identify different artefacts around the phenomenon. The students will then develop a framework of analysis through which they will discover the histories, networks and processes related to the artefact. After an intensive mapping exercise they will attempt to represent it as part of an Exhibition to be held at the end of the semester.

Date	Activity	Assignment	Grade
3 Jan 22	Introduction		
6 Jan 22	Studio Discussion		
10 Jan 22	Studio Discussion		
13 Jan 22	Studio Discussion		
17 Jan 22	Studio Discussion		
20 Jan 22	Studio Discussion	Discovery' - Site Studies and Concept	20%
24 Jan 22	Studio Discussion		
27 Jan 22	Studio Discussion		
31 Jan 22	First Review		
3 Feb 22	Studio Discussion		

Date	Activity	Assignment	Grade
7 Feb 22	Studio Discussion		
10 Feb 22	Studio Discussion		
14 Feb 22	Studio Discussion		
17 Feb 22	Studio Discussion	Mapping' First Draft of Representation	20%
21 Feb 22	Studio Discussion		
24 Feb 22	Second Review		
28 Feb 22	Studio Discussion		
3 Mar 22	Studio Discussion		
7 Mar 22	Studio Discussion		
10 Mar 22	Studio Discussion		
14 Mar 22	Studio Discussion	Analysis' Second Draft of Representation	20%
17 Mar 22	Studio Discussion		
21 Mar 22	Studio Discussion		
24 Mar 22	Studio Discussion		
28 Mar 22	Studio Discussion		
31 Mar 22	Third Review	Final Presentation	40%

## **CO-PO mapped syllabi of Masters in Urban Design Masters in Architectural & Urban Conservation 2021-2022 – Studio I**

### **Program Educational Objective (PEOs): M.Arch**

1. To nurture individuals towards a better understanding of learning methods to bridge the gap between theory and practice.
2. To respond to innovative needs and environmental and social responsibility one should acquire excellence in the field both in academics and practice.
3. To develop a culture of enquiry, a thirst to excel in a particular field of knowledge and an ability to have a broad-minded perspective on things.
4. To nurture an intent to unlearn and reinterpreted learning through the change, proceeding towards efficient and sustainable responses to varied situations.
5. To be able to assimilate knowledge to enhance spatial exploration, theorise and conceptualise ideas with respect to time and space. To define boundaries and regions to collaborate and meet the constantly changing world of climate change.

### **Programme outcomes:**

1. To acquire the ability to critically understand the context.
2. To be able to recommend real and speculative urban propositions.
3. To be able to validate urban interventions with theoretical positions.
4. To be able to achieve technical competency for the respective streams.
5. To undertake research for production of new knowledge.

Course: Studio I

University Course Code: MUDS102/S1A

Sem- 1

Year - First

KRVIA Course Code: UDCS61212.1/UDCS-666

### **Course Objectives:**

1. Mapping & documentation of an urban settlement/ form.
2. Tracing the historical evolution of the urban settlement/ geography/ forms.
3. Encourage critical thinking of theories and methods taught in other lecture courses.

### **Course Outcomes:**

1. Objectivity in data collection and representation.
2. Intensive mapping and data collection on contemporary urban and developmental challenges.
3. Engaging with a morphological survey/ analysis through detailed studies of the urban realm.
4. Explore and innovate on alternative techniques of representation for these complex urban conditions.

USM's Kamlra Raheja Vidyavidhi Institute for Architecture and Environmental Studies / Masters of Architecture									
Year of Assessment:	Subject:	Subject Code:	University Subject Code:	Sessional Marks:	Exercise 01: Marks out of 50	Credits	Date of submission		
<b>Exercise: Title</b>									
<b>Exercise Note / Task</b>									
<b>Assessment</b>									
<b>Grade</b>									
<b>Percentage</b>									
<b>Equivalent out of 10.0</b>									
<b>Area of Evaluation</b>									
<b>Nature of Inquiry/ Interpretation</b>	Exceptional	Impressive	Explored many options. Clear, complete & curious. Covered width + depth both.	Innovative. Experimental and Bold Clarity. Expressive of relevance.	Confident. More than average. Easily acceptable.	Obvious. Safe / un-disputed.	Fair Based on biased hypothesis.	Weak. Based on biased hypothesis.	Not acceptable
<b>Rigour of data collection/collation/ and curation. for assignments</b>	Exceptional	Impressive	Meticulous, authentic and methodical organization of data	Distilled, well competed and organized	Lot of data and well organized	Just enough and not continuously linked	Just adequate	Not enough to support	Not acceptable
<b>Understanding/ analysis or interpretation of reading, text/ map/ drawing/ case study</b>	Exceptional	Impressive	Breakthrough interpretation and understanding of subject	Highly demonstrative. Beyond expected.	Clarity of thought and accurate synthesis	Good. Consistently seen.	Average. Obvious methods used.	Arbitrary. Ad-hoc.	Not acceptable
<b>Presentation/ representation or articulation, coherence and clarity of argument in the form of power-point, paper, map , drawing or report</b>	Exceptional	Impressive	Highly structured, persuasive argument with advanced technical skills	Potential beyond expectation. Few added attributes.	Logical argument, legible narrative and representation	Almost complete.	Just adequate.	Inadequate for the purpose	Not acceptable
<b>Attendance, time management and participation in class</b>	Exceptional	Impressive	Positive and clear. Innovative and Worth appreciating.	High quality. High precision. Good range with good ability.	Eloquent, suggestive, well organised and resourceful	Above average. Demonstrative. High potential	Average.	Poor.	Not acceptable

**CO-PO Mapping:**

CO	PO	PO1: Critical understanding of context	PO2: Urban propositioning	PO3: urban interventions with theoretical positions	PO4: Technical Competency	PO5: Creation of new knowledge
CO1	Objectivity in data collection and representation.	3	0	0	2	3
CO2	Intensive mapping and data collection on contemporary urban and developmental challenges.	3	0	0	2	3
CO3	Engaging with a morphological survey / analysis through detailed studies of the urban realm.	3	0	0	2	3
CO4	Explore and innovate on alternative techniques of representation for these complex urban conditions.	3	0	0	3	3

1 – Slight (Low) Correlation    2- Moderate (Medium) Correlation    3- Substantial (high) Correlation  
 0 – No Correlation

# Semester II

## Scheme of Teaching and Examinations

### SCHEME OF TEACHING AND EXAMINATIONS MASTER OF ARCHITECTURE (M.ARCH) URBAN DESIGN SEM II

	EXAM CONDUCTED BY COLLEGE	TEACHING SCHEME			
		Lecture	Studio	Total	Credits
	<b>Semester II</b>				
<b>MUDC201</b>	Planning Techniques and Procedure-II	2		2	2
<b>MUDC202</b>	Transportation and Traffic for Urban Design	2		2	2
<b>MUDE201</b>	Choice Based Elective-1	2		2	2
<b>MUDC203</b>	Research Methodology	2	2	4	4
<b>MUDE202</b>	Choice Based Elective-2	2	2	4	4
<b>MUDS201</b>	Design Studio II		12		
		<b>10</b>	<b>16</b>	<b>26</b>	<b>26</b>

SCHEME OF EXAMINATION SEMESTER I					
		EXAM SCHEME			
		Theory (Paper)	Sessional Work		Credits
	<b>Semester II</b>		Internal	External Viva	
<b>MUDC201</b>	Planning Techniques and Procedure-II	50	50		100
<b>MUDC202</b>	Transportation and Traffic for Urban Design	50	50		100
<b>MUDE201</b>	Choice Based Elective-1		100		100
<b>MUDC203</b>	Research Methodology		100		100
<b>MUDE202</b>	Choice Based Elective-2		100		100
<b>MUDS201</b>	Design Studio II		500		500
	<b>TOTAL</b>	<b>100</b>	<b>900</b>		<b>1000</b>



**URBAN DESIGN**

**Semester II**

**2021-22**

<b>PG</b> <b>sem 2</b> <b>4th April -</b> <b>15 June</b> <b>2022</b>		MONDAY	TUESDAY	WEDNESDAY
	8.00 - 8.50	<b>Structural Conservation &amp; Conservation Science</b> <b>(UC)</b> Vikram, Apoorva 8-12	<b>Studio II</b> <b>(UD +UC)</b>  Paul Shweta Ketaki Vikram Aradhana Aditya Ainsley 8-11	<b>Cultural Exp</b> <b>Along S</b> <b>(U</b> Sanaeya 8-
	8.50 - 9.40			
	9.40 - 10.30			
	10.30 - 11.20			
				<b>Specificat</b> <b>(U</b> San 10.30
	12.00-12.50	<b>Structural Conservation &amp; Conservation Science</b>	<b>Data Urbanism (UD +UC)</b> Paul, Ankush 11.20-12.50	<b>Specificat</b>
	12.50 - 1.20			
	1.20 - 2.10	<b>Elective - I</b> <b>(UD +UC)</b> Karan/Aradhana/Vikram	<b>Planning Techniques &amp; Procedure II</b> <b>(UD)</b> Binti, Aditya	<b>Conservatio</b> <b>(U</b> Apo
2.10 - 3.00				

# Semester II

## Time-Table

WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
<b>Press-Heritage Silk route</b> <b>(UC)</b> , Apoorva 8-10	<b>Research Method</b> <b>(UD +UC)</b> Binti, Sarah, Ketaki, Ginella 8-10	<b>Studio II</b> <b>(UD +UC)</b>  Paul Shweta Ketaki Vikram Aradhana Aditya Ainsley 8-11	
<b>Design &amp; BOQ</b> <b>(UC)</b> Jaeya 10.30-12.30	<b>Transportation &amp; Traffic for Urban Design</b> <b>(UD)</b> Shuchi, Ankush 10.30-12.30		
BREAK			
<b>Design &amp; BOQ</b>	<b>Transportation &amp; Traffic for Urban Design</b>	<b>Cultural Landscape &amp; Intangible Heritage</b> <b>(UD +UC)</b> Shweta 11.20-12.50	
LUNCHBREAK			
<b>Urban Legislation</b> <b>(UC)</b> Apoorva	<b>Working Studio</b>	<b>UD theory II</b> <b>(UD)</b> Paul	

Urban Design  
 Choice Elective I: Data Urbanism  
 Choice Elective II: Urban Design Theory II

## **MODULE: SEM II 2021-22 – PLANNING TECHNIQUES**

**THEORY COURSE FORMAT: LECTURES 8 | STUDENT ASSIGNMENTS**

**STUDIO FORMAT: STUDENTS PRESENTATION | CASE STUDIES | FACULTY PRESENTATION**

**UNIVERSITY CODE: MUDC 201**

**KRVIA CODE: UDP 622.2**

### **COURSE OBJECTIVES**

The course will try to understand planning and its institutional framework in the Indian context, focusing on the city of Mumbai. India is rapidly going through the process of urbanization with the expected 40-45% of population residing in urban areas. The intent of the course is to understand various ways the urban planning strategies are conducted at government level. Urban planning in India is based on development plans, regional plans, zonal plans, zoning regulations, urban byelaws and various policies set up by the state government. Various past planning approaches are studied and critiqued as most of the methods adopted in India are parochial and unable to meet pace with the rapidly changing dynamics of eco-socio-cultural aspects of the urban areas. To address these various changing facets of urban planning such as social, economic, cultural, legal, political, ecological, technological, aesthetic, geographical, and so forth, new tools and techniques need to be understood and incorporated to understand, analyse, and influence the above-mentioned variety of forces and shaping of the built environment.

FACULTY: ADITYA SAWANT		
SUBJECT: PLANNING TECHNIQUES		
METHOD:		

<b>SESSIONS</b>	<b>TOPICS TO BE COVERED</b>
5-04-22	Institutions – This class will look at the technique of using institutions to plan new cities, in this case CIDCO initiated for the development of Navi Mumbai.
12-04-22	Public Participation - The class will look at the method of public participation as a planning instrument and its impact on development projects. The idea will be explored through a detailed analysis of a case study in Mumbai.
19-04-22	Public Private Partnerships – This class will cover the method of public private partnership through the case of the slum redevelopment scheme and the idea of market incentives like FSI, TDR for the private sector.
26-04-22	Co – relation – This class will look at the method of co-relation as a planning technique and as a tool for analysis. It will look at the case of the pandemic and the relation between built form and urban amenities to that of infection rates during the pandemic.
3-05-22	Data Collection and Survey Research Process
10-05-22	Aerial photography , Remote Sensing and GIS applications in planning
31-05-22	Preparation of Base Maps

7-06-22	Data and Planning- Discussion on deployment of smart technologies as planning tools and techniques
	International examples of smart cities
	Smart City Plans in Indian cities- Dholera
	Smart City Plans in Indian cities- Bhopal
	Smart City Plans in Indian cities- Amravati
	Working session
	Working session
	Final Exam

<b>Assignment</b>	
Assignment 1	Reaction papers for every class readings – about 300 to 500 words
Assignment 2	A writing assignment (about 1000 -1500 words)
Assignment 3	Final Examination

The course aims to first situate the idea of planning techniques in a broader socio-economic and political context. It positions the idea of techniques as something which is dynamic and constructed within the larger political economy of the city or region instead of looking at it as static universal methods of planning which assume a fixed planning paradigm.

The course will try to understand planning and its institutional framework in the Indian context. India is rapidly going through the process of urbanization with the expected 40- 45% of population residing in urban areas. The intent of the course is to understand various current urban planning methods and strategies that are conducted by the State and also other actors. Urban planning in India is based on development plans, regional plans, zonal plans, zoning regulations, urban byelaws and various policies set up by the state government. Various past and current planning approaches are studied and critiqued as most of the methods adopted in India are parochial and unable to meet pace with the rapidly changing dynamics of eco-socio-cultural aspects of the urban areas. To address these various changing facets of urban planning such as social, economic, cultural, legal, political, ecological, technological, aesthetic, geographical, and so forth, new tools and techniques need to be understood and incorporated to understand, analyse, and influence the above-mentioned variety of forces and shaping of the built environment.

The course is divided into three sections. The first section introduces the students to different planning paradigms in Europe around the turn of the 20th century and its impacts on colonial and post-colonial India. The second section analyses in detail individual planning methods/techniques currently used in various cities and regions of India through the methodology of Case Studies. And the third section looks at the planning of entire cities using a combination of planning techniques.

- Learning about different planning techniques and methods used today in the Indian context .
- Understanding the comparative strengths and weakness of these techniques with respect to each other
- Understanding the role of the context played in the success or failure of a particular technique

## **CO-PO mapped syllabi of Masters in Urban Design 2021-2022 – Planning Techniques and Procedures - II**

### **Program Educational Objective (PEOs): M.Arch**

1. To nurture individuals towards a better understanding of learning methods to bridge the gap between theory and practice.
2. To respond to innovative needs and environmental and social responsibility one should acquire excellence in the field both in academics and practice.
3. To develop a culture of enquiry, a thirst to excel in a particular field of knowledge and an ability to have a broad-minded perspective on things.
4. To nurture an intent to unlearn and reinterpreted learning through the change, proceeding towards efficient and sustainable responses to varied situations.
5. To be able to assimilate knowledge to enhance spatial exploration, theorise and conceptualise ideas with respect to time and space. To define boundaries and regions to collaborate and meet the constantly changing world of climate change.

### **Programme outcomes:**

- To acquire the ability to critically understand the context
- To be able to recommend real and speculative urban propositions
- To be able to validate urban interventions with theoretical positions
- To be able to achieve technical competency for the respective streams
- To undertake research for production of new knowledge

### **Course: Planning Techniques and Procedures II**

**University Course Code:** MUDC 201

Sem- 2

Year - First

**KRVIA Course Code:** UDP 622.2

### Course Objectives:

- Analyzing the application of planning techniques and approaches within different contexts and issues through planning case studies
- Introducing students to the survey research process to collect base information on which planning projections and goals can be set.
- Understanding role and application of Geographic Information Systems , remote sensing in base data collection and interpretation
- Overview of current official visions of planning globally and in India

### Course Outcomes:

- Instilling the ability of the students to critically understand the process of creating planning as a technical profession.
- Making students aware the possibilities as well as limitations of different planning approaches through case studies.
- Ability of students to use an appropriate planning technique/approach based on a particular vision or goal.

USM's Kamla Raheja Vidyavidhi Institute for Architecture and Environmental Studies / Masters of Architecture									
Year of Assessment:	Subject:	Subject Code:	University Subject Code:	Sessional Marks:	Exercise 01: Marks out of 50	Credits	Date of submission		
Exercise: Title									
Assessment Grade	O++	O+	Outstanding O	Excellent A	Very Good B	Good C	Fair D	Satisfactory E	Fail F
Percentage	90% and above	80%	79% - 75%	74% - 70%	69% - 65%	64% - 60%	59% - 55%	54% - 50%	49% - 40%
Equivalent out of 10.0	9.0	8.0	7.9 - 7.5	7.5 - 7.0	6.9 - 6.5	6.4 - 6.0	5.9 - 5.5	5.4 - 5.0	4.9 - 3.0
<b>Area of Evaluation</b>									
Nature of Inquiry/ Interpretation	Exceptional	Impressive	Explored many options. Clear, complete & curious. Covered width + depth both.	Innovative. Experimental and Bold Clarity. Expressive of relevance.	Confident. More than average. Easily acceptable.	Obvious. Safe / undisputed.	Fair Based on biased hypothesis.	Weak. Based on biased hypothesis.	Not acceptable
Rigour of data collection/collation/ and curation, for assignments	Exceptional	Impressive	Meticulous, authentic and methodical organization of data	Distilled, well compiled and organized	Lot of data and well organized	Just enough and not continuously linked	Just adequate	Not enough to support	Not acceptable
Understanding/ analysis or interpretation of reading, text/ map/ drawing/ case study	Exceptional	Impressive	Breakthrough interpretation and understanding of subject	Highly demonstrative. Beyond expected.	Clarity of thought and accurate synthesis	Good. Consistently seen.	Average. Obvious methods used.	Arbitrary. Ad-hoc.	Not acceptable
Presentation or articulation, coherence and clarity of argument in the form of power-point, paper, map , drawing or report	Exceptional	Impressive	Highly structured persuasive argument with advanced technical skills	Potential beyond expectation. Few added attributes.	Logical argument, legible narrative and representation	Almost complete.	Just adequate.	Inadequate for the purpose	Not acceptable
Attendance, time management and participation in class	Exceptional	Impressive	Positive and clear. Innovative and Worth appreciating.	High quality. High precision. Good range with good ability.	Eloquent, suggestive, well organised and resourceful	Above average. Demonstrative. High potential	Average.	Poor.	Not acceptable

	CO	PO1: Critical understanding of context	PO2: Urban propositioning	PO3: urban interventions with theoretical positions	PO4: Technical Competency	PO5: Creation of new knowledge
CO1	Instilling the ability of the students to critically understand the process of creating planning as a technical profession.	3	0	3	0	1
CO2	Making students aware the possibilities as well as limitations of different planning approaches through case studies.	3	3	2	2	1
CO3	Ability of students to use an appropriate planning technique/approach based on a particular vision or goal.	2	3	3	3	2

1 – Slight (Low) Correlation    2- Moderate (Medium) Correlation    3- Substantial (high) Correlation  
0 – No Correlation





<b>Course Name</b>	<b>Transportation &amp; Traffic for Urban Design</b>			
<b>Aim</b>	The course aims to familiarise students with various concepts and methods associated with transportation in cities, at various scales.			
<b>Course Objectives</b>	<p>The objectives of the course are:</p> <ul style="list-style-type: none"> <li>- Contextualise transportation issues and nuances, to cities in the Global South, particularly in India.</li> <li>- Understand different concepts and systems associated with Transportation Design.</li> <li>- Understand the Transportation Planning process</li> <li>- Familiarise students with the various methods of planning and modelling transportation infrastructure.</li> <li>- Study the various design elements involved in Transportation Planning such as Road Design, Decongestion methods, Parking, etc. as well as understand relevant implementation models</li> </ul>			
<b>Methodology/ Method of Instruction</b>	Lectures + Assignments + Structured Debates Lectures, assignments and debates will be organised around key thematic			
<b>Learning Outcomes</b>	<p>The students will be able to:</p> <ul style="list-style-type: none"> <li>- Develop an understanding of Transportation Planning with specific focus to Urban Design</li> <li>- Evaluate transportation initiatives and projects</li> <li>- Develop methods to study the impact of movement and transportation in their studio work</li> <li>- Identify suitable implementation models for transportation proposals in their studio work</li> <li>- Identify opportunities to create public infrastructure which is more human oriented than vehicular dependent</li> <li>- Correlate qualitative concepts like quality of life with infrastructure</li> </ul>			
<b>Lecture No.</b>	<b>Date</b>	<b>Lecture Content</b>	<b>Readings &amp; References</b>	<b>Assignments, if any</b>
1	04/07/2022	<p><b>Introductory Class</b></p> <p>History of Movement in the Indian Subcontinent Quality of Movement (modes, rapid transit systems, NUTP, etc)</p> <p>Challenges (India, the developing nations and the world-air, noise, water, habitat fragmentation, etc)</p> <p>Way forward</p>	National Urban Transport Policy 2006/14 IIHS RF Paper on Urban Transport	
2	04/14/2022	<p><b>Transportation in the Global South</b></p> <p>Understanding the Global South</p> <p>Modes of Transit- Formal, Informal and ParaTransit</p> <p>Modal Splits</p> <p>Myopic Transportation Planning and Induced Demand</p>		
3	04/21/2022	<p><b>Planning for Movement</b></p> <p>The Relationship of Planning &amp; Transportation</p> <p>Transportation Concepts &amp; Glossary</p> <p>Traffic planning practices - Assessment Stage and Modelling Stage</p> <p>Models of Implementation: Built Operate Transfer   Private Public Participation</p>		
4	04/28/2022	<p><b>Designing and Managing Movement</b></p> <p>Hierarchy of Movement</p> <p>Road Design Concepts</p> <p>Decongestion Methods: Traffic Management</p> <p>Decongestion Methods Eg: London  Singapore</p> <p>Parking</p>		Submission of transportation glossary
5	05/05/2022	<p><b>Imagined Movement   Real Cities</b></p> <p>Global and Indian experiments in Urban Transportation I</p> <p>Urban Infrastructure -BRTS and Beyond-The Curitiba Experiment</p>		
6	05/12/2022	<p><b>Imagined Movement   Real Cities</b></p> <p>Global and Indian experiments in Urban Transportation II</p> <p>Social Urbanism+Inclusive Transportation-Colombian Cities</p>		
7	05/19/2022	<p><b>Imagined Movement   Real Cities</b></p> <p>Global and Indian experiments in Urban Transportation III</p> <p>Examples from the Global North: Copenhagen-Cycling and Pedestrianisation Amsterdam- Reimagining Transportation Infrastructure Paris-The 15 min City-<i>proximity, diversity, density and ubiquity</i></p>		
8	05/26/2022	<p><b>Urban Infrastructures of the Future</b></p> <p>Student's Presentations</p> <p>Discussion</p>		Submission of final presentation.
9	06/02/2022			
10	06/09/2022			

## **CO-PO mapped syllabi of Masters in Urban Design 2021-22– Transportation and Traffic for Urban Design**

### **Program Educational Objective (PEOs): M.Arch**

1. To nurture individuals towards a better understanding of learning methods to bridge the gap between theory and practice.
2. To respond to innovative needs and environmental and social responsibility one should acquire excellence in the field both in academics and practice.
3. To develop a culture of enquiry, a thirst to excel in a particular field of knowledge and an ability to have a broad-minded perspective on things.
4. To nurture an intent to unlearn and reinterpret learning through the change, proceeding towards efficient and sustainable responses to varied situations.
5. To be able to assimilate knowledge to enhance spatial exploration, theorize and conceptualize ideas with respect to time and space. To define boundaries and regions to collaborate and meet the constantly changing world of climate change.

### **Programme outcomes:**

1. To acquire the ability to critically understand the context
2. To be able to recommend real and speculative urban propositions
3. To be able to validate urban interventions with theoretical positions
4. To be able to achieve technical competency for the respective streams
5. To undertake research for production of new knowledge

**Course:** Transportation & Traffic for Urban Design

**University Course Code:** MUDC 202

Sem- 2

Year - First

### **Course Objectives:**

1. Contextualise transportation issues and nuances, to cities in the Global South, particularly in India.
2. Understand different concepts and systems associated with Transportation Design.
3. Understand the Transportation Planning process
4. Familiarise students with the various methods of planning and modelling transportation infrastructure.
5. Study the various design elements involved in Transportation Planning such as Road Design, Decongestion methods, Parking, etc. as well as understand relevant implementation models

### **Course Outcomes (CO):**

1. Students will develop an understanding of transportation planning with specific focus to urban design
2. Students will identify opportunities to create public infrastructure which is more human oriented than vehicular dependent
3. Students will organise their responses to the studio questions in a more granular manner
4. Students will correlate qualitative concepts like quality of life with infrastructure

USM's Kamla Raheja Vidyavidhi Institute for Architecture and Environmental Studies / Masters of Architecture									
Year of Assessment:	Subject:	Subject Code:	University Subject Code:	Sessional Marks:	Exercise 01: Marks out of 50	Credits	Date of submission		
Exercise: Title									
Exercise Note / Task									
Assessment Grade	O++	O+	Outstanding O	Excellent A	Very Good B	Good C	Fair D	Satisfactory E	Fail F
Percentage	90% and above	80%	79% - 75%	74% - 70%	69% - 65%	64% - 60%	59% - 55%	54% - 50%	49% - 40%
Equivalent out of 10.0	9.0	8.0	7.9 - 7.5	7.5 - 7.0	6.9 - 6.5	6.4 - 6.0	5.9 - 5.5	5.4 - 5.0	4.9 - 3.0
<b>Area of Evaluation</b>									
Nature of Inquiry/ Interpretation	Exceptional	Impressive	Explored many options. Clear, complete & curious. Covered width + depth both.	Innovative, Experimental and Bold Clarity. Expressive of relevance.	Confident. More than average. Easily acceptable.	Obvious. Safe / undisputed.	Fair Based on biased hypothesis.	Weak. Based on biased hypothesis.	Not acceptable
Rigour of data collection/collation/and curation, for assignments	Exceptional	Impressive	Meticulous, authentic and methodical organization of data	Distilled, well competed and organized	Lot of data and well organized	Just enough and not continuously linked	Just adequate	Not enough to support	Not acceptable
Understanding/ analysis or interpretation of reading, text/ map/ drawing/ case study	Exceptional	Impressive	Breakthrough interpretation and understanding of subject	Highly demonstrative. Beyond expected.	Clarity of thought and accurate synthesis	Good. Consistently seen.	Average. Obvious methods used.	Arbitrary. Ad-hoc.	Not acceptable
Presentation/ representation or articulation, coherence and clarity of argument in the form of power-point, paper, map , drawing or report	Exceptional	Impressive	Highly structured, persuasive argument with advanced technical skills	Potential beyond expectation. Few added attributes.	Logical argument, legible narrative and representation	Almost complete.	Just adequate.	Inadequate for the purpose	Not acceptable
Attendance, time management and participation in class	Exceptional	Impressive	Positive and clear. Innovative and Worth appreciating.	High quality. High precision. Good range with good ability.	Eloquent, suggestive, well organised and resourceful	Above average. Demonstrative. High potential	Average.	Poor.	Not acceptable

**CO-PO Mapping:**

	CO	PO1: Critical underst anding of context	PO2: Urban proposi tioning	PO3: urban interventions with theoretical positions	PO4: Technic al Compet ency	PO5: Creatio n of new knowle dge
CO1	Students will develop an understanding of transportation planning with specific focus to urban design	3	1	1	2	1
CO2	Students will identify opportunities to create public infrastructure which is more human oriented than vehicular dependent	2	3	3	2	3
CO3	Students will organise their responses to the studio questions in a more granular manner	2	3	2	1	2
CO4	Students will correlate qualitative concepts like quality of life with infrastructure	1	0	0	3	2

1 – Slight (Low) Correlation    2- Moderate (Medium) Correlation    3- Substantial (high) Correlation  
0 – No Correlation

## Choice Elective - 1 (Data Urbanism II ) Course Structure

<b>Aim</b>	The course aims to enable students to harness the use of data-driven methods in urban design. This involves an engagement with preparation, visualisation and analysis of digital databases of various facets of the city.	
<b>Course Objectives</b>	The objectives of the course are:  1. Orient students to structured and objective methods of organising knowledge and data about cities. 2. Familiarise students with various concepts of geo-spatial mapping and creation of databases. 3. Enable the use of digital maps and databases to take objective decisions in the design of cities. 4. Explore ways of extending access to information about cities to the world through web-based portals and applications.	
<b>Methods</b>	The course is designed as a combination of lectures and hands-on sessions, where students are exposed to various conceptual and practical aspects of mapping our cities (both spatial and qualitative). This includes:  1. Formulating mapping methods that enable a structured organisation of data collected from site studies in the city. 2. Sourcing data about cities from remote-sensed sources such as satellite imagery. 3. Hands-on use of QGIS and SQL to analyse the collated data, to make inquiries into various urban phenomena.	
	<b>Lecture Schedule</b>	<b>Indicative Exercises</b>
	Lecture 0  - What have they learnt so far? - Show the databases they have created - Brief introduction to the Data Urbanism course  - Differences between CAD and GIS.	
	Lecture 1 - Data Appreciation  A history of databases - John Snow, Cholera; Census	
	Lecture 2 - Reference & Projection Systems  Introduce lab exercise	Download topo sheets, cadastral maps and discuss what each of the map shows.
	Lecture 3 - Remote sensing - elevation models, thematic products, bands, combinations, what they tell us  Reference maps - topo,	
	Lecture 4 - Raster Analysis	Choose a type of data (and source) and generate spatial analysis from tutorials.
	Lecture 5 - Vector Analysis (Boolean operations on shapefiles PLUS the database)  Buffering, topology etc.  Vector Processing	
	Lecture 6 - Vector Analysis (Boolean operations on shapefiles PLUS the database)  Buffering, topology, spatial indexing, etc.  Vector Processing	Q -  1. What is it that you want to investigate? 2. What are the layers you need to have to answer the question? 3. Where can you find the layers needed? (exercise - find sources)
	Lecture 7 - Discussion on the question table and how to populate it  Introduction to Querying using QGIS inbuilt functions - Filtering, Spatial Queries.	Students work on completing database.  Students are asked to be ready to present your screens and perform live queries.
	Lecture 8 -Live Running Queries using QGIS - Filtering, Spatial Queries.	Running queries and answering questions from the previous exercise
	Lecture 9 -Introduction to PostGIS - presentation  - configure their own systems with PostGRESQL, PostGIS - create extensions and databases.	
	Lecture 10 - Basic SQL querying  - some commands - sources for commands	
	Lecture 11 - Introduction to Python  - what is the python environment? - simple calculations, etc.	
	Lecture 12 - OSMnx & Jupyter notebook	
	Lecture 13 - OSMnx & Jupyter notebook	
	Lecture 14 - PyQGIS	

## **CO-PO mapped syllabi of Masters in Urban Design 2021-22–**

### **Choice Elective - 1 (Data Urbanism II )**

#### **Program Educational Objective (PEOs): M.Arch**

1. To nurture individuals towards a better understanding of learning methods to bridge the gap between theory and practice.
2. To respond to innovative needs and environmental and social responsibility one should acquire excellence in the field both in academics and practice.
3. To develop a culture of enquiry, a thirst to excel in a particular field of knowledge and an ability to have a broad-minded perspective on things.
4. To nurture an intent to unlearn and reinterpret learning through the change, proceeding towards efficient and sustainable responses to varied situations.
5. To be able to assimilate knowledge to enhance spatial exploration, theorize and conceptualize ideas with respect to time and space. To define boundaries and regions to collaborate and meet the constantly changing world of climate change.

#### **Programme outcomes:**

1. To acquire the ability to critically understand the context
2. To be able to recommend real and speculative urban propositions
3. To be able to validate urban interventions with theoretical positions
4. To be able to achieve technical competency for the respective streams
5. To undertake research for production of new knowledge

#### **Course: Choice Elective - 1 (Data Urbanism II )**

##### **University Course Code: MUDE201**

Sem- 2 Year - First

#### **Course Objectives:**

1. Build on the knowledge of geo-spatial data developed in the first semester to perform various analytical operations on acquired data
2. Enable students to create new geo-spatial data (both on the field and remotely)
3. Implement centralised workflows for the use of geospatial tools in the design studio
4. Understand ways of visualising and publishing geospatial data

#### **Course Outcomes (CO):**

1. Students will be able to use geospatial data to perform various kinds of urban analysis
2. Formulate innovative methods for integration of site studies and geospatial workflows
3. Publish multi-format geospatial drawings and inferences using various mediums
4. Discuss and debate ethical positions on the collection, use and publication of data.

USM's Kamla Raheja Vidyavidhi Institute for Architecture and Environmental Studies / Masters of Architecture										
Year of Assessment:	Subject:	Subject Code:	University Subject Code:	Sessional Marks:	Exercise 01: Marks out of 50	Credits	Date of submission			
Exercise: Title										
Exercise Note / Task Assessment										
Grade	O++	O+	O	Outstanding	Excellent	Very Good	Good	Fair	Satisfactory	Fail
Percentage	90% and above	80%	79% - 75%	79% - 75%	74% - 70%	69% - 65%	64% - 60%	59% - 55%	54% - 50%	49% - 40%
Equivalent out of 10.0	9.0	8.0	7.9 - 7.5	7.9 - 7.5	7.5 - 7.0	6.9 - 6.5	6.4 - 6.0	5.9 - 5.5	5.4 - 5.0	4.9 - 3.0
Area of Evaluation										
Nature of Inquiry/ Interpretation	Exceptional	Impressive	Explored many options. Clear, complete & curious. Covered width + depth both.	Innovative. Experimental and Bold Clarity. Expressive of relevance.	Confident. More than average. Easily acceptable.	Obvious. Safe / undisputed.	Fair Based on biased hypothesis.	Weak. Based on biased hypothesis.	Not acceptable	
Rigour of data collection/collation/ and curation, for assignments	Exceptional	Impressive	Meticulous, authentic and methodical organization of data	Distilled, well competed and organized	Lot of data and well organized	Just enough and not continuously linked	Just adequate	Not enough to support	Not acceptable	
Understanding/ analysis or interpretation of reading, text/ map/ drawing/ case study	Exceptional	Impressive	Breakthrough interpretation and understanding of subject	Highly demonstrative. Beyond expected.	Clarity of thought and accurate synthesis	Good. Consistently seen.	Average. Obvious methods used.	Arbitrary. Ad-hoc.	Not acceptable	
Presentation/ representation or articulation, coherence and clarity of argument in the form of power-point, paper, map , drawing or report	Exceptional	Impressive	Highly structured, persuasive argument with advanced technical skills	Potential beyond expectation. Few added attributes.	Logical argument, legible narrative and representation	Almost complete.	Just adequate.	Inadequate for the purpose	Not acceptable	
Attendance, time management and participation in class	Exceptional	Impressive	Positive and clear. Innovative and Worth appreciating.	High quality. High precision. Good range with good ability.	Eloquent, suggestive, well organised and resourceful	Above average. Demonstrative. High potential	Average.	Poor.	Not acceptable	



**CO-PO Mapping:**

	CO	PO1: Critical underst anding of context	PO2: Urban proposi tioning	PO3: urban interventi ons with theoretical positions	PO4: Technic al Compet ency	PO5: Creatio n of new knowle dge
CO 1	Students will be able to use geospatial data to perform various kinds of urban analysis	3	2	0	3	3
CO 2	Formulate innovative methods for integration of site studies and geospatial workflows	2	1	1	3	3
CO 3	Publish multi-format geospatial drawings and inferences using various mediums	2	2	1	3	3
CO 4	Discuss and debate ethical positions on the collection, use and publication of data.	0	0	2	1	1

1 – Slight (Low) Correlation 2- Moderate (Medium) Correlation 3- Substantial (high) Correlation  
0 – No Correlation

<b>MUDC 203</b>		COURSE NAME	<b>Research Methodology (Urban Design)</b>		SEMESTER	<b>II</b>	CREDITS	<b>4</b>
		FACULTY	<b>Ginella George, Sarah George, Dr. Binti Singh, Ketaki Tare</b>		SESSIONAL MARKS	<b>100</b>	SCHEME OF EXAMINATION	<b>Internal</b>
		TIME	<b>Thursday : 8 am to 10:30 am</b>		TEACHING HOURS	<b>2h 30m</b>	TIME REQUIRED OUTSIDE OF CLASS	<b>-</b>
what	UNIVERSITY COURSE DESCRIPTION	The course would expose the students to various structures of knowledge, cultural theory which would equip them into framing methodologies to structure and explore their area of concern. The course would have a dual purpose of not only assisting the students towards understanding the methods of research in exploring the urban field and articulating their concern but also to structure the synopsis of their thesis.						
why	PEDAGOGIC INTENT	The course will help to understand the criteria and components that make a theoretical framework for assessing and interpreting urban processes.						
how	METHODOLOGY	1) The course is structured around reading, reviewing and analysing different concepts that have emerged around the city. 2) Faculty will engage with the students through lectures and discussions that will focus on enhancing research design skills.						
when	SCHEDULE	DAY	DATE	TEACHING CONTENT OF THE DAY	MARKING DISTRIBUTION	ASSIGNMENT/DELIVERABLE		
	week 1	Thursday	7.4.2022	Introduction to the course <i>What is Knowledge? Ways and Methods of Knowing, Difference between Fact, Belief, Opinion and Bias</i>				
	week 2	Thursday	14.4.2022	<i>The Global City: Presentation by Group 1 on assigned readings</i> Class Discussion				
	week 3	Thursday	21.4.2022	<i>The Digital City: Presentation by Group 2 on assigned readings</i> Class Discussion				
	week 4	Thursday	28.4.2022	<i>The Sustainable City: Presentation by Group 3 on assigned readings</i> Class Discussion				
	week 5	Thursday	5.5.2022	<i>The Inclusive City: Presentation by Group 4 on assigned readings</i> Class Discussion				
	week 6	Thursday	12.5.2022	<i>The Gendered City: Presentation by Group 5 on assigned readings</i> Class Discussion				
	week 7	Thursday	2.6.2022	<i>The Informal City: Presentation by Group 6 on assigned readings</i> Class Discussion				
	week 8	Thursday	9.6.2022	Presentation by students on proposed thesis topics: Discussions and directions for future research				
	EVALUATION CRITERIA	Individual/ Group based presentations and class assignments						
	LEARNING OUTCOMES	Exploring insights around urban perspectives and critically examining contemporary issues and developments will enable students in framing their own independent arguments and 2.Choosing appropriate methods in the process of data collection						
	READING LIST	1. The Sage Handbook of Qualitative Research by Norman K. Denzin and Yvonna S. Lincoln 2. The City Reader, Edited by Richard T. LeGates and Frederic Stout						

## **CO-PO mapped syllabi of Masters in Urban Design 2021–2022 - Research Methodology**

### **Program Educational Objective (PEOs): M.Arch**

1. To nurture individuals towards a better understanding of learning methods to bridge the gap between theory and practice.
2. To respond to innovative needs and environmental and social responsibility one should acquire excellence in the field both in academics and practice.
3. To develop a culture of enquiry, a thirst to excel in a particular field of knowledge and an ability to have a broad-minded perspective on things.
4. To nurture an intent to unlearn and reinterpret learning through the change, proceeding towards efficient and sustainable responses to varied situations.
5. To be able to assimilate knowledge to enhance spatial exploration, theorise and conceptualise ideas with respect to time and space. To define boundaries and regions to collaborate and meet the constantly changing world of climate change.

### **Programme outcomes:**

1. To acquire the ability to critically understand the context
2. To be able to recommend real and speculative urban propositions
3. To be able to validate urban interventions with theoretical positions
4. To be able to achieve technical competency for the respective streams
5. To undertake research for production of new knowledge

**Course:** Research Methodology

**University Course Code:** MUDC 203

Sem- 2

Year - First

### **Course Objectives:**

1. To develop student's orientation towards critical reading and writing
2. To encourage students in framing independent arguments and developing critical thinking on contemporary issues

### **Course Outcomes (CO):**

1. Exploring insights around urban perspectives
2. Critically examining contemporary issues and developments in framing independent arguments
3. Choosing appropriate methods in the process of data collection

USM's Kamla Raheja Vidyavidhi Institute for Architecture and Environmental Studies / Masters of Architecture										
Year of Assessment:	Subject:	Subject Code:	University Subject Code:	Sessional Marks:	Exercise 01: Marks out of 50	Credits	Date of submission			
Exercise: Title										
Exercise Note / Task Assessment										
Grade	O++	O+	O	Outstanding	Excellent	Very Good	Good	Fair	Satisfactory	Fail
Percentage	90% and above	80%	79% - 75%	79% - 75%	74% - 70%	69% - 65%	64% - 60%	59% - 55%	54% - 50%	49% - 40%
Equivalent out of 10.0	9.0	8.0	7.9 - 7.5	7.9 - 7.5	7.5 - 7.0	6.9 - 6.5	6.4 - 6.0	5.9 - 5.5	5.4 - 5.0	4.9 - 3.0
Area of Evaluation										
Nature of Inquiry/ Interpretation	Exceptional	Impressive	Explored many options. Clear, complete & curious. Covered width + depth both.	Innovative. Experimental and Bold Clarity. Expressive of relevance.	Confident. More than average. Easily acceptable.	Obvious. Safe / undisputed.	Fair Based on biased hypothesis.	Weak. Based on biased hypothesis.	Not acceptable	
Rigour of data collection/collation/ and curation, for assignments	Exceptional	Impressive	Meticulous, authentic and methodical organization of data	Distilled, well competed and organized	Lot of data and well organized	Just enough and not continuously linked	Just adequate	Not enough to support	Not acceptable	
Understanding/ analysis or interpretation of reading, text/ map/ drawing/ case study	Exceptional	Impressive	Breakthrough interpretation and understanding of subject	Highly demonstrative. Beyond expected.	Clarity of thought and accurate synthesis	Good. Consistently seen.	Average. Obvious methods used.	Arbitrary. Ad-hoc.	Not acceptable	
Presentation/ representation or articulation, coherence and clarity of argument in the form of power-point, paper, map, drawing or report	Exceptional	Impressive	Highly structured, persuasive argument with advanced technical skills	Potential beyond expectation. Few added attributes.	Logical argument, legible narrative and representation	Almost complete.	Just adequate.	Inadequate for the purpose	Not acceptable	
Attendance, time management and participation in class	Exceptional	Impressive	Positive and clear. Innovative and Worth appreciating.	High quality. High precision. Good range with good ability.	Eloquent, suggestive, well organised and resourceful	Above average. Demonstrative. High potential	Average.	Poor.	Not acceptable	

**CO-PO Mapping:**

	CO	PO1: Critical understanding of context	PO2: Urban propositioning	PO3: urban interventions with theoretical positions	PO4: Technical Competency	PO5: Creation of new knowledge
CO1	Exploring insights around urban perspectives	2	3	1	0	3
CO2	Critically examining contemporary issues and developments in framing independent arguments	3	3	2	0	1
CO3	Choosing appropriate methods in the process of data collection	1	1	2	0	2

1 – Slight (Low) Correlation    2- Moderate (Medium) Correlation    3- Substantial (high) Correlation  
 0 – No Correlation

COURSE CODE	USOM	CREDITS	2
COURSE NAME	UD Theory 2	SESSIONAL MARKS	50
FACULTY	Aneerudha Paul	EXAM SCHEME	Internal
CLASS DAY/TIME	Friday, 1.20 – 3.00pm	NON-CLASS TIME	1:30 hours a week

**PEDAGOGIC INTENT:**

- To be able to read critical theory on urbanism and relate it to the contemporary spatial geography and transformation observed in Indian cities, especially Mumbai
- To be able to apply the theory to observe contemporary urban phenomena in the city
- To be able to write and formulate a coherent argument on the above phenomenon.

**COURSE METHODOLOGY:**

Lectures + Reading Classes+ Field Exercises

LECT	DATE	TEACHING CONTENT
1	08.04.22	Introduction to Patrick Geddes and Hall
2	15.04.22	Discussion
3	22.04.22	Introduction to Manual Castell
4	29.04.22	Discussion
5	06.05.22	Introduction to David Harvey and Saskia Sassen
6	13.05.22	Discussion
7	20.05.22	Discussion on writing by Indian authors
8	27.05.22	Discussion
9	3.06.22	Proposition and formulation of exploration by individual students

10	10.06.22	Discussion on Paper
11	15.06.22	Final Presentation and Submission

#### LEARNING OUTCOMES:

- Students will be able to use the theories to frame critical arguments
- Will be able to formulate research objectives for their thesis

#### READING LIST/REFERENCES:

- Patrick Geddes, The Evolution of Cities
- Peter Hall, Cities in Civilization
- Peter Hall, Cities of Tomorrow
- Saradha Dwivedi, Rahul Mehrotra, Bombay: The Cities Within
- Manuel Castell, Rise of a Networked Society
- Steve Graham, Simon Marvin, Splintering Urbanism
- Saskia Sassen, Global Cities, Global Network Linked Cities, Globalization and its discontent
- Ayona Dutta and Abdul Shabam Mega Urbanization in the Global South
- Susan Parnell and Sophie Oldfield The Routledge Handbook on the Cities of Global South
- David Harvey, i) The Urban Experience, ii) The Rebel Cities
- Rajesh Bhattacharya and Kalyan Sanyal, i) Bypassing the Squalor: New Towns, Immaterial Labour and Exclusion in Post-colonial Urbanisation , ii) Beyond the Factory: Globalisation, Informalisation of Production and the New Locations of Labour

## **CO-PO mapped syllabi of Masters in Urban Design 2021-2022 – Urban Design Theory 2**

### **Program Educational Objective (PEOs): M.Arch**

1. To nurture individuals towards a better understanding of learning methods to bridge the gap between theory and practice.
2. To respond to innovative needs and environmental and social responsibility one should acquire excellence in the field both in academics and practice.
3. To develop a culture of enquiry, a thirst to excel in a particular field of knowledge and an ability to have a broad-minded perspective on things.
4. To nurture an intent to unlearn and reinterpreted learning through the change, proceeding towards efficient and sustainable responses to varied situations.
5. To be able to assimilate knowledge to enhance spatial exploration, theorise and conceptualise ideas with respect to time and space. To define boundaries and regions to collaborate and meet the constantly changing world of climate change.

### **Programme outcomes:**

1. To acquire the ability to critically understand the context
2. To be able to recommend real and speculative urban propositions
3. To be able to validate urban interventions with theoretical positions
4. To be able to achieve technical competency for the respective streams
5. To undertake research for the production of new knowledge

**Course:** Urban Design Theory 2

**University Course Code:** MUDE 202

Sem- 2

Year - First

**KRVIA Course Code:** UDE 644

### **Course Objectives:**

- To be able to read critical theory on urbanism and relate it to the contemporary spatial geography and transformation observed in Indian cities, especially Mumbai.
- To be able to apply the theory to observe contemporary urban phenomena in the city
- To be able to write and formulate a coherent argument on the above phenomenon.

### **Course Outcomes:**

- Students can structure critical arguments regarding observed urban phenomena.
- They can formulate research objectives for their thesis, where they independently explore phenomena that have spatial implications in our cities.



USM's Kamla Raheja Vidyavidhi Institute for Architecture and Environmental Studies / Masters of Architecture										
Year of Assessment:	Subject:	Subject Code:	University Subject Code:	Sessional Marks:	Exercise 01: Marks out of 50	Credits	Date of submission			
Exercise: Title										
Exercise Note / Task Assessment										
Grade	O++	O+	O	Outstanding	Excellent	Very Good	Good	Fair	Satisfactory	Fail
Percentage	90% and above	80%	79% - 75%	79% - 75%	74% - 70%	69% - 65%	64% - 60%	59% - 55%	54% - 50%	49% - 40%
Equivalent out of 10.0	9.0	8.0	7.9 - 7.5	7.9 - 7.5	7.5 - 7.0	6.9 - 6.5	6.4 - 6.0	5.9 - 5.5	5.4 - 5.0	4.9 - 3.0
Area of Evaluation										
Nature of Inquiry/ Interpretation	Exceptional	Impressive	Explored many options. Clear, complete & curious. Covered width + depth both.	Innovative. Experimental and Bold Clarity. Expressive of relevance.	Confident. More than average. Easily acceptable.	Obvious. Safe / undisputed.	Fair Based on biased hypothesis.	Weak. Based on biased hypothesis.	Not acceptable	
Rigour of data collection/collation/ and curation, for assignments	Exceptional	Impressive	Meticulous, authentic and methodical organization of data	Distilled, well competed and organized	Lot of data and well organized	Just enough and not continuously linked	Just adequate	Not enough to support		Not acceptable
Understanding/ analysis or interpretation of reading, text/ map/ drawing/ case study	Exceptional	Impressive	Breakthrough interpretation and understanding of subject	Highly demonstrative. Beyond expected.	Clarity of thought and accurate synthesis	Good. Consistently seen.	Average. Obvious methods used.	Arbitrary. Ad-hoc.	Not acceptable	
Presentation/ representation or articulation, coherence and clarity of argument in the form of power-point, paper, map, drawing or report	Exceptional	Impressive	Highly structured, persuasive argument with advanced technical skills	Potential beyond expectation. Few added attributes.	Logical argument, legible narrative and representation	Almost complete.	Just adequate.	Inadequate for the purpose	Not acceptable	
Attendance, time management and participation in class	Exceptional	Impressive	Positive and clear. Innovative and Worth appreciating.	High quality. High precision. Good range with good ability.	Eloquent, suggestive, well organised and resourceful	Above average. Demonstrative. High potential	Average.	Poor.	Not acceptable	

## CO-PO Mapping

	CO	PO1: Critical understanding of context	PO2: Urban positioning	PO3: urban interventions with theoretical	PO4: Technical Competency	PO5: Creation of new knowledge
CO1	<ul style="list-style-type: none"> <li>Students can structure critical arguments regarding observed urban phenomena.</li> </ul>	3	3	3	1	3
CO2	<ul style="list-style-type: none"> <li>They can formulate research objectives for their thesis, where they independently explore phenomena that have spatial implications in our cities.</li> </ul>	3	3	2	1	3

1 – Slight (Low) Correlation 2- Moderate (Medium) Correlation 3- Substantial (high) Correlation 0 – No Correlation



<b>COURSE CODE</b>	MUDE 201	<b>CREDITS</b>	2
<b>COURSE NAME</b>	Cultural landscape and Intangible Heritage	<b>SESSIONAL MARKS</b>	-
<b>FACULTY</b>	Shweta Wagh	<b>EXAM SCHEME</b>	Internal
<b>CLASS DAY/TIME</b>	2	<b>NON-CLASS TIME</b>	2

### **PEDAGOGIC INTENT**

The practice of Conservation has seen a shift from scientific, specialised and expert oriented approaches to people centric and rights based approaches. In recent years concepts such as cultural landscapes and mixed heritage sites have been gaining increasing significance in the realm of heritage conservation. Originally conceptualised to bridge the nature- culture divide, the incorporation of these frameworks within heritage conservation discourses has broadened the scope of inventories and research activities. Today one sees the incorporation of several new categories based on the landscape framework in the fields of natural and cultural conservation.

This course will attempt to define and investigate the meaning of the term landscape and its various applications. It will attempt to trace the historical origins of landscape frameworks for natural and cultural conservation. Landscape is a term with multiple meanings and connotations. Through an analysis of relevant case studies the course will critically examine the introduction and assimilation of this concept within the discourse of heritage conservation and its incorporation into conservation management and policy frameworks. Through an understanding of the application of this theoretical framework, the course will attempt to trace the relation between discourse and practice.

- To introduce the concepts of nature-culture linkages and intangible cultural heritage in the realm of conservation
- To introduce students to the various frameworks and categories that have emerged in the domains of natural and cultural conservation to address the issue of nature culture linkages.
- To redefine methods and approaches, broaden the scope of inventories, and tools for heritage management
- To introduce the students to practical applications of these frameworks through a series of case studies which will encompass a number of varied contexts
- To look at the various conventions and institutional bodies concerned with nature and cultural conservation, their overlapping domains, the limitations of existing policy frameworks, and problems with implementation.

## **COURSE METHODOLOGY**

1. Lectures by the faculty to introduce definitions and categories and conceptual frameworks
2. Preparation of a timeline of the various conceptions, categories and policy frameworks related to nature-culture linkages in conversation which have emerged in the disciplines of nature and culture conservation.
3. Presentation of case studies by faculty and students: Various case studies will be analyzed and discussed to understand the issues and concerns regarding the protection and management of heritage sites.

<b>LECT</b>	<b>DATE</b>	<b>TEACHING CONTENT</b>
1	8 <sup>th</sup> April	Introduction to Landscape and Cultural landscapes: concepts, definitions and meanings
2	22 <sup>nd</sup> April	A historical evolution of Theoretical frameworks and perspectives
3	29 <sup>th</sup> April	Preparation of a timeline of the various conceptions, categories and policy frameworks related to nature-culture linkages in conversation
4	6 <sup>th</sup> May	Examining the notion of Cultural landscape: Linking Nature and Culture in Conservation
5	13 <sup>th</sup> May	Discourses related to Rights Based and People Centric Approaches to Conservation
6	20 <sup>th</sup> May	A Historical Overview of Policies and Frameworks for Conservation of Landscapes and Intangible Heritage
7	27 <sup>th</sup> May	A Historical Overview of Policies and Frameworks for Conservation of Landscapes and Intangible Heritage
8	3 <sup>rd</sup> June	Case studies on issues concerning the protection and management of Heritage Sites (Natural sites, mixed sites, associative landscapes)
9	10 <sup>th</sup> June	Case studies on issues concerning the protection and management of Heritage Sites (Indigenous, agrarian, traditional Landscapes)

## **LEARNING OUTCOMES**

1. Students will learn and comprehend concept of nature-culture linkages in conservation.
2. Students will understand frameworks and categories concerned with nature-culture linkages
3. Students will comprehend the scope and application of landscape frameworks in conservation

## **READING LIST/**

### **REFERENCES**

- Ishizawa, Maya, Inaba, Nobuku and Yoshida Masahito, (eds.), Proceedings of the First Capacity Building Workshop on Nature-Culture Linkages in Heritage Conservation in Asia and the Pacific (CBWNCL 2016). Agricultural Landscapes, Journal of World Heritage Studies, University of Tsukuba, Japan.
- World heritage Committee, 2008, -Operational guidelines for the implementation of the World heritage Convention, UNESCO World Heritage Centre
- Taylor, Ken, and Jane Lennon, eds. 2012. Managing Cultural Landscapes. London ; New York: Routledge.
- UNESCO WHC. 2005. Operational Guidelines for the Implementation of the World Heritage Convention. Unesco World Heritage Centre.
- Verschuuren, Bas, Robert Wild, Jeffrey Mcneely, and Gonzalo Oviedo, eds. 2010. Sacred Natural Sites: Conserving Nature and Culture. London ; Washington, D.C: Routledge.
- Glendinning, Miles. (2013) The Conservation movement, a history of architectural conservation. Routledge, Oxon and New York
- Chainani Shyam: Heritage and Environment-An Indian Diary
- Samuel, Raphael. (2008) in Graham Fairclough et al ed The Heritage Reader, Routledge

## **CO-PO mapped syllabi of Masters in Urban Design 2021-2022– Cultural Landscape and Intangible Heritage (UD)**

### **Program Educational Objective (PEOs): M.Arch**

1. To nurture individuals towards a better understanding of learning methods to bridge the gap between theory and practice.
2. To respond to innovative needs and environmental and social responsibility one should acquire excellence in the field both in academics and practice.
3. To develop a culture of enquiry, a thirst to excel in a particular field of knowledge and an ability to have a broad-minded perspective on things.
4. To nurture an intent to unlearn and reinterpreted learning through the change, proceeding towards efficient and sustainable responses to varied situations.
5. To be able to assimilate knowledge to enhance spatial exploration, theorise and conceptualise ideas with respect to time and space. To define boundaries and regions to collaborate and meet the constantly changing world of climate change.

### **Programme outcomes:**

1. To acquire the ability to critically understand the context
2. To be able to recommend real and speculative urban propositions
3. To be able to validate urban interventions with theoretical positions
4. To be able to achieve technical competency for the respective streams
5. To undertake research for production of new knowledge

**Course:** Cultural Landscape and Intangible Heritage

**University Course Code:** MUDE 201

Sem- II

Year - First

**KRVIA Course Code:** UDP 622.2

### **Course Objectives:**

1. To introduce the concepts of nature-culture linkages and intangible cultural heritage in the realm of conservation
2. To introduce students to the various frameworks and categories that have emerged in the domains of natural and cultural conservation to address the issue of nature culture linkages.
3. To redefine methods and approaches, broaden the scope of inventories, and tools for heritage management
4. To introduce the students to practical applications of these framework through a series of case studies which will encompass a number of varied contexts
5. To look at the various conventions and institutional bodies concerned with nature and cultural conservation, their overlapping domains, the limitations of existing policy frameworks, and problems with implementation.

### **Course Outcomes (CO):**

1. Students will learn and comprehend concept of nature-culture linkages in conservation.
2. Students will understand frameworks and categories concerned with nature-culture linkages
3. Students will comprehend the scope and application of landscape frameworks in conservation

### **Rubrics:**

USM's Kamla Raheja Vidyavidhi Institute for Architecture and Environmental Studies / Masters of Architecture									
Year of Assessment:	Subject:	Subject Code:	University Subject Code:	Sessional Marks:	Exercise 01: Marks out of 50	Credits	Date of submission		
Exercise: Title									
Exercise Note / Task									
Assessment									
Grade	O++	O+	O	A	B	C	D	E	Fail
Percentage	90% and above	80%	79% - 75%	74% - 70%	69% - 65%	64% - 60%	59% - 55%	54% - 50%	49% - 40%
Equivalent out of 10.0	9.0	8.0	7.9 - 7.5	7.5 - 7.0	6.9 - 6.5	6.4 - 6.0	5.9 - 5.5	5.4 - 5.0	4.9 - 3.0
<b>Area of Evaluation</b>									
Nature of Inquiry/ Interpretation	Exceptional	Impressive	Explored many options. Clear, complete & curious. Covered width + depth both.	Innovative. Experimental and Bold Clarity. Expressive of relevance.	Confident. More than average. Easily acceptable.	Obvious. Safe / undisputed.	Fair Based on biased hypothesis.	Weak. Based on biased hypothesis.	Not acceptable
Rigour of data collection/collation/ and curation, for assignments	Exceptional	Impressive	Meticulous, authentic and methodical organization of data	Distilled, well competed and organized	Lot of data and well organized	Just enough and not continuously linked	Just adequate	Not enough to support	Not acceptable
Understanding/ analysis or interpretation of reading, text/ map/ drawing/ case study	Exceptional	Impressive	Breakthrough interpretation and understanding of subject	Highly demonstrative. Beyond expected.	Clarity of thought and accurate synthesis	Good. Consistently seen.	Average. Obvious methods used.	Arbitrary. Ad-hoc.	Not acceptable
Presentation/ representation or articulation, coherence and clarity of argument in the form of power-point, paper, map, drawing or report	Exceptional	Impressive	Highly structured, persuasive argument with advanced technical skills	Potential beyond expectation. Few added attributes.	Logical argument, legible narrative and representation	Almost complete.	Just adequate.	Inadequate for the purpose	Not acceptable
Attendance, time management and participation in class	Exceptional	Impressive	Positive and clear. Innovative and Worth appreciating.	High quality. High precision. Good range with good ability.	Eloquent, suggestive, well organised and resourceful	Above average. Demonstrative. High potential	Average.	Poor.	Not acceptable



**CO-PO Mapping:**

	CO	PO1: Critical understanding of context	PO2: Urban propositioning	PO3: urban interventions with theoretical positions	PO4: Technical Competency	PO5: Creation of new knowledge
CO1	Students will learn and comprehend concept of nature-culture linkages in conservation.	3	0	3	1	3
CO2	Students will understand frameworks and categories concerned with nature-culture linkages	3	1	3	3	2
CO3	Students will comprehend the scope and application of landscape frameworks in conservation	2	2	2	3	1

1 – Slight (Low) Correlation    2- Moderate (Medium) Correlation    3- Substantial (high) Correlation  
0 – No Correlation

## ***Infrastructural Urbanism***

### **Exploring the urbanism along the new Metro Corridors of Mumbai**

*M.Arch UD + UC, Sem 2, 2022*

*Studio Faculty - Aneerudha Paul, Ainsley Lewis, vikram pawar , Shweta Wagh , Ketaki Bhadgaonkar, Aditya Sawant and Aradhana Paralikar .*

#### **Introduction**

The urban infrastructure networks, with their complex network architectures, work to bring heterogeneous places, people, buildings and urban elements into dynamic relationships and exchanges which would not otherwise be possible (Graham & Marvin, 2001).

The cities are witnessing growth of population densities resulting in the spread of the urban fabric, creating a demand for a rapid connectivity by the means of new transit systems. The studio intends to explore the dynamic relationships established as a result of introduction of a new transit network in a city fabric. The attempt would be to understand the causative forces of transformation in the immediate context of the urban blocks where the transit stations are inserted. The new network often creates development pressures due to increase in real estate values, increase in the population densities, floating population, changes in urban form, social fragmentation, etc. The students will attempt to understand these complexities and explore the role of urban design and conservation in the development process.

As a part of this process, the students will identify multiple nodes that are vulnerable to urban development pressures along the metro rail network that is under construction in the city of Mumbai. The intent is to study each node in detail with an attempt to assess the impact of the metro corridor/stations on the urban area in consultation with the various community groups and stakeholders. The studio will culminate in the form of design propositions including urban structure, control, guidelines, building scenarios and other mechanisms. The resolutions are expected to address all issues from conception to realization.

## Schedule of the project:

Date	Day	Submissions/Lectures
11th April	Monday	8.00 am to 9.00 am - Lecture by Shweta and Hussain 9.00 am to 10.00 am - Lecture by Aneerudha Paul 10.00 am to 11.00 am - Lecture by Nitin Killawala Followed by Introduction to the studio project + Formation of groups
12th April	Tuesday	8.00 am onwards - Site visit metro corridor Northern leg
13th April	Wednesday	7.30 am onwards - Site visit metro corridor Southern leg
19th April	Tuesday	<b>A1 Panel 1 no.</b> - Individual response based on the site visit (Individual work) <b>A1 Panel 1 no.</b> - Group's regional study of the metro corridor + justification and finalization of nodes to be studied in the detail (group work) Lecture by Studio Faculty - 1 hour
22nd April	Friday	Studio Discussion
26th April	Tuesday	Lecture by Studio Faculty - 1 hour Studio discussion
29th April	Friday	Studio Discussion
3rd May	Tuesday	Lecture by Studio Faculty - 1 hour Studio discussion
6th May	Friday	<b>A0 Panel 2 nos.</b> - Presentation of the study of node + model (Group work)
10th May	Tuesday	Lecture by Studio Faculty - 1 hour Studio discussion
13th May	Friday	<b>A1 Panel 1 no.</b> - Individual response on the node + vision + argument (Individual work)
17th May	Tuesday	Lecture by Studio Faculty - 1 hour Studio discussion
20th May	Friday	<b>A0 Panel 2 nos.</b> - Presentation of the possible individual propositions + strategies + concept design plan for the node (individual work)
21st May - 31st May		Holiday
3rd June	Friday	Studio Discussion
6th June	Tuesday	Studio Discussion
10th June	Friday	Studio Discussion
13th June	Tuesday	<b>A0 Panel 2 nos. - Pre Final review</b> - Presentation of the individual propositions with models.
17th June	Friday	Work on representation of panels and model
21st June	Tuesday	Work on representation of panels and model
24th June	Friday	<b>FINAL REVIEW</b>

**CO-PO mapped syllabi of Masters in Architectural & Urban Conservation 2020-2021 –  
Design Studio 2 - Urban Design  
Program Educational Objective (PEOs): M.Arch**

1. To nurture individuals towards a better understanding of learning methods to bridge the gap between theory and practice.
2. To respond to innovative needs and environmental and social responsibility one should acquire excellence in the field both in academics and practice.
3. To develop a culture of enquiry, a thirst to excel in a particular field of knowledge and an ability to have a broad-minded perspective on things.
4. To nurture an intent to unlearn and reinterpreted learning through the change, proceeding towards efficient and sustainable responses to varied situations.
5. To be able to assimilate knowledge to enhance spatial exploration, theorise and conceptualise ideas with respect to time and space. To define boundaries and regions to collaborate and meet the constantly changing world of climate change.

**Programme outcomes:**

1. To acquire the ability to critically understand the context
2. To be able to recommend real and speculative urban propositions
3. To be able to validate urban interventions with theoretical positions
4. To be able to achieve technical competency for the respective streams
5. To undertake research for production of new knowledge

**Course: Studio II**

University Course Code: MUDS202/S2A Sem- 2 Year - First  
KRVIA Course Code: UDCS61212.2/UDCS-688

**Programme outcomes:**

1. To acquire the ability to critically understand the context
2. To be able to recommend real and speculative urban propositions
3. To be able to validate urban interventions with theoretical positions
4. To be able to achieve technical competency for the respective streams
5. To undertake research for production of new knowledge

**Course Objectives:**

- Situation analysis at neighbourhood and /or precinct/ heritage zone level.
- Detail investigations, surveys, and analysis for condition assessment of resources.
- Engage with various stakeholders including agencies, communities etc. and learn to communicate with them.

**Course Outcomes:**

- Objectivity in data collection and assessment.
- Devise pragmatic and localized programmatic strategies on complex urban issues.
- The outcome is imagined as a practice orientation to the studio.
- Learn to formulate urban intervention possibilities through a process of continuous interaction with these stakeholders.



## COMapping

	CO	PO1: Critical understandi ng of context	PO2: Urban proposition ing	PO3: urban interventi ons with theoretical positions	PO4: Technical Competency	PO5: Creation of new knowledg e
CO 1	Objectivity in data collection and assessment.	3	2	2	1	2
CO 2	Devise pragmatic and localized programmatic strategies on complex urban issue.	2	2	2	2	2
CO 3	The outcome is imagined as a practice orientation to the studio.	2	1	3	2	2
CO 4	Learn to formulate urban intervention possibilities through a process of continuous interaction with these actors and agencies.	2	2	3	2	2

1 – Slight (Low) Correlation    2- Moderate (Medium) Correlation    3- Substantial (high) Correlation  
0 – No Correlation



# Semester III

## Scheme of Teaching and Examinations

### SCHEME OF TEACHING AND EXAMINATIONS MASTER OF ARCHITECTURE (M.ARCH) URBAN DESIGN SEM III

	EXAM CONDUCTED BY COLLEGE	TEACHING SCHEME			
	Semester III	Lecture	Studio	Total	Credits
<b>MUDC301</b>	Development Finance	2		2	2
<b>MUDC302</b>	Urban Bye-Laws and Planning Legislation	2		2	2
<b>MUDE301</b>	Choice Based Elective-1	2		2	2
<b>MUDE302</b>	Choice Based Elective-2	2	2	4	4
<b>MUDS301</b>	Urban Design III		12	12	12
<b>MUDC303</b>	Thesis I	2	2	4	4
		<b>10</b>	<b>14</b>	<b>24</b>	<b>24</b>

SCHEME OF EXAMINATION SEMESTER I					
		EXAM SCHEME			
		Theory (Paper)	Sessional Work		Credits
	Semester III		Internal	External Viva	
<b>MUDC301</b>	Development Finance	50	50		100
<b>MUDC302</b>	Urban Bye-Laws and Planning Legislation	50	50		100
<b>MUDE301</b>	Choice Based Elective-1		100		100
<b>MUDE302</b>	Choice Based Elective-2		100		100
<b>MUDS301</b>	Urban Design III		450		450
<b>MUDC303</b>	Thesis I		150		150
	<b>TOTAL</b>	<b>100</b>	<b>900</b>		<b>1000</b>



**2021-22**

**Semester III**

PG

3

	MONDAY	TUESDAY	WEDNESDAY
9.00 - 9.50	<b>Studio III</b> <b>(UD +UC)</b>  Aneerudha Ketaki    Shweta Vikram	<b>Urban Byelaws +Planning Legislation</b> <b>UD+UC</b> Binti Ketaki	<b>Development Conservation</b> <b>(UD+UC)</b> Binti San
9.50 - 10.40			
10.40 - 11.30			
11.30 - 12.20			
12.20 - 1.20	L U N		
1.20 - 2.10	<b>Thesis I</b> <b>(UD+UC)</b>  Ainsley Sarah    Binti Ginella	<b>Conservation Approaches</b> <b>UC</b> Sanaeya	<b>Energy Efficiency of He</b> <b>UC</b> Ne
2.10 - 3.00			
3.00 - 3.50			
3.50 - 4.40			
			<b>Environment</b> <b>(UD+UC)</b> Sandee

# Semester III

## Time-Table

DAY	THURSDAY	FRIDAY	SATURDAY
Finance + Economics (UC) Sanaeya	<b>Studio III</b> (UD + UC)  Aneerudha Ketaki    Shweta Vikram	<b>Cultural Heritage &amp; Sites of Memory</b> (UC) Aproova	
History of Heritage Structures		<b>Heritage Management</b> (UC) Sanaeya	
B R E A K			
Heritage Structures Sanaeya	<b>Housing Seminar</b> (UD) Aditya	<b>Heritage Management</b> Sanaeya	
Urban Design + Ecology (UC) Sanaeya		<b>Spatialising Meanings</b> (UD)  Ankush	

Urban Design  
 Choice Elective I: Spatialising Meanings  
 Choice Elective II: Housing Seminar

## Development Finance 2021

Course Tutors: Dr. Binti Singh & Sanaeya Vandrewala

This course will discuss the various financial and institutional innovations undertaken particularly in post 1990s to boost projects and programs in the urban sector. The Jawaharlal Nehru National Urban Renewal Mission (JNNURM) 2005 -12 was one of the first urban development schemes implemented by the central government in India. Under JNNURM, the central government specified certain mandatory and optional reforms for cities, and provided assistance to the state governments and cities that were linked to the implementation of these reforms. JNNURM focused on improving urban infrastructure and service delivery, community participation, and accountability of city governments towards citizens. In 2011, an Expert Committee on Indian Urban Infrastructure and Services (HPEC) had projected that creation of the required urban infrastructure would translate into an investment of Rs 97,500 crore to Rs 1,95,000 crore annually. The current urban schemes are investing around Rs 32,500 crore annually. The Atal Mission for Rejuvenation and Urban Transformation (AMRUT), Smart Cities Mission, Heritage City Development and Augmentation Yojana (HRIDAY), Pradhan Mantri Awas Yojana – Housing for All (Urban) (PMAY-U), and Swachh Bharat Mission (Urban) are various programs to fund, institute and implement urban projects across sectors like housing, solid waste management, conservation etc. The new schemes suggest that cities may raise these funds through: (i) their own resources such as collection of user fees, land monetization, property taxes, etc., (ii) finance mechanisms such as municipal bonds, (iii) leveraging borrowings from financial institutions, and (iv) the private sector through Public Private Partnerships (PPPs). The course would introduce the students to the economic, financial frameworks, and the attendant institutional frameworks of urban development. It should inform the students of the present mode of financing projects and discuss their strengths and weakness through the relevant case studies. Students will be introduced to financial Innovations like BOT, Value Capture Financing (VCF), Municipal bonds, and Credit rating of cities. Understand the financial mechanism and innovation behind varied urban development projects ranging from large infrastructure projects like roads and metros to tourism and Smart city projects to those supported by international multilateral agencies like the World Bank across cities of India. Terms like ‘time value for money’, parameters required, in the order of priority, while preparing a project finance plan, key differences between ‘residual’ and ‘discounted’ cash flow models?, formulae to calculate Future Value (FV) from Present Value (PV)? sources to raise ‘debt’ , ‘equity’ or ‘grant in aid’ for a conservation/ development project? Are some of the practical outcomes of this course.

	<b>Lecture Titles</b>	
1	07/07/2021	Historic Overview
2	14/07/2021	Economic value of heritage
3	21/07/2021	Guest Lecture
4	28/07/2021	Financing urban infrastructure cases studies, Metro
5	04/08/2021	Tourism economics
6	11/08/2021	Guest Lecture
7	25/08/2021	Smart City projects, feasibility, pro poor
8	01/09/2021	Feasibility, business plan, costing

9	08/09/2021	Beautification projects like riverfronts, MUTP, MUIP
10	15/09/2021	Guest Lecture
11	22/09/2021	Measurements and indicators of heritage development
12	29/09/2021	Fundraising
13	06/10/2021	Financial innovations and practices in urban development
14	13/10/2021	Assignment Review/ Exam revision

## CO-PO mapped syllabi of master's in urban design 2021-2022

### Development Finance

#### Program Educational Objective (PEOs): M.Arch

1. To nurture individuals towards a better understanding of learning methods to bridge the gap between theory and practice.
2. To respond to innovative needs and environmental and social responsibility one should acquire excellence in the field both in academics and practice.
3. To develop a culture of enquiry, a thirst to excel in a particular field of knowledge and an ability to have a broad-minded perspective on things.
4. To nurture an intent to unlearn and reinterpreted learning through the change, proceeding towards efficient and sustainable responses to varied situations.
5. To be able to assimilate knowledge to enhance spatial exploration, theorise and conceptualise ideas with respect to time and space. To define boundaries and regions to collaborate and meet the constantly changing world of climate change.

#### Programme outcomes:

1. To acquire the ability to critically understand the context
2. To be able to recommend real and speculative urban propositions
3. To be able to validate urban interventions with theoretical positions
4. To be able to achieve technical competency for the respective streams
5. To undertake research for production of new knowledge

#### Course: Development Finance

University Course Code: MUDC 301

Sem- 3

Year - Second

KRVIA Course Code: UDF 722

#### Course Objectives:

- Understanding the conceptual framework of the critical area of the development finance and its centrality for sustainable urban development.
- The course covers multiple national and global innovations undertaken in recent times to finance urban development in general and specific urban sectors.

#### Course Outcomes:

- Students shall acquire an understanding of the role finance plays in urban development.
- Students will be equipped with assessing various financial innovations deployed in recent times for urban development and municipal service delivery.

USM's Kamla Raheja Vidyavidhi Institute for Architecture and Environmental Studies / Masters of Architecture									
Year of Assessment:	Subject:	Subject Code:	University Subject Code:	Sessional Marks:	Exercise 01: Marks out of 50	Credits	Date of submission		
Exercise: Title									
Exercise Note / Task Assessment									
Grade	O++	O+	O	Excellent	Very Good	Good	Fair	Satisfactory	Fail
Percentage	90% and above	80%	79% - 75%	74% - 70%	69% - 65%	64% - 60%	59% - 55%	54% - 50%	49% - 40%
Equivalent out of 10.0	9.0	8.0	7.9 - 7.5	7.5 - 7.0	6.9 - 6.5	6.4 - 6.0	5.9 - 5.5	5.4 - 5.0	4.9 - 3.0
Area of Evaluation									
Nature of Inquiry/ Interpretation	Exceptional	Impressive	Explored many options. Clear, complete & curious. Covered width + depth both.	Innovative. Experimental and Bold Clarity. Expressive of relevance.	Confident. More than average. Easily acceptable.	Obvious. Safe / undisputed.	Fair Based on biased hypothesis.	Weak. Based on biased hypothesis.	Not acceptable
Rigour of data collection/collation/ and curation, for assignments	Exceptional	Impressive	Meticulous, authentic and methodical organization of data	Distilled, well competed and organized	Lot of data and well organized	Just enough and not continuously linked	Just adequate	Not enough to support	Not acceptable
Understanding/ analysis or interpretation of reading, text/ map/ drawing/ case study	Exceptional	Impressive	Breakthrough interpretation and understanding of subject	Highly demonstrative. Beyond expected.	Clarity of thought and accurate synthesis	Good. Consistently seen.	Average. Obvious methods used.	Arbitrary. Ad-hoc.	Not acceptable
Presentation/ representation or articulation, coherence and clarity of argument in the form of power-point, paper, map , drawing or report	Exceptional	Impressive	Highly structured, persuasive argument with advanced technical skills	Potential beyond expectation. Few added attributes.	Logical argument, legible narrative and representation	Almost complete.	Just adequate.	Inadequate for the purpose	Not acceptable
Attendance, time management and participation in class	Exceptional	Impressive	Positive and clear. Innovative and Worth appreciating.	High quality. High precision. Good range with good ability.	Eloquent, suggestive, well organised and resourceful	Above average. Demonstrative. High potential	Average.	Poor.	Not acceptable

**CO-PO Mapping:**

	CO	PO1: Critical understa nding of context	PO2: Urban propositi oning	PO3: urban interventi ons with theoretical positions	PO4: Technical Compete ncy	PO5: Creation of new knowledge
CO1	Students shall acquire an understanding of the role finance plays in urban development.	3	2	2	1	2
CO2	Students will be equipped with assessing various financial innovations deployed in recent times for urban development and municipal service delivery.	3	3	3	1	2

1 – Slight (Low) Correlation    2- Moderate (Medium) Correlation    3- Substantial (high) Correlation  
 0 – No Correlation





## **Title of the Course: URBAN BYLAWS AND PLANNING LEGISLATION**

Marks 100 Hrs 2 per week

Description of course: This course engages the student with the awareness of govt. policies, regulations, rules and laws related to land, property and urban development.

### **Course Name: URBAN BYLAWS AND PLANNING LEGISLATION**

**Course Tutors: Dr Binti Singh and Ketaki Bhadgaonkar**

*Aim:* The course includes the study of the Constitution of India and subsequently the study of Urban Land Ceiling Act, Rent Control Act, Land Acquisition Act, Environment Protection Act, Co-operative Society Act, Apartment Ownership Act, Maharashtra Town and Regional Planning Act and the National building Code and any other important/relevant act. It also includes the study of Development Control Rules and Regulation, including special regulations for TDR, protection to heritage and conservation, etc.

#### *Course Objectives:*

- Theoretically understanding of governance
- Thorough understanding of urban policy and governance systems, institutions in India post 1947 to present
- Major urban laws, Acts, policies and programs
- General understanding of major urban sectors
- Recent concepts like City Liveability Index and current programs like SCM

#### *Learning Outcomes:*

Students will develop a thorough understanding of governance, urban policy, planning legislations and institutions operative in India and how different sectors work. They will also develop an understanding of new concepts like City Liveability Index, SDGs, the importance of gender and other variables in informing urban legislations in India with a comparative global understanding

#### *Course Lectures Schedule:*

Lecture Dates	Lecture Titles	Lecture Description
13/07/2021	Constitution of India and the History of Urban policy and governance in India	<ul style="list-style-type: none"><li>• Presentation on Constitution of India- Preamble, Values and the Federal structure</li><li>• Role and functions of the major institutions</li><li>• Important articles, provisions and schedules related to urban policy and governance</li><li>• Nation building exercise, post 1947</li></ul>

		<ul style="list-style-type: none"> <li>• Introduction to 5-year plans</li> <li>• A brief discussion on all the plans</li> <li>• The role and functions of the former Planning Commission/ now Niti ayog</li> <li>• Typology of Plans</li> <li>• Sectoral Planning- Urban Plans, Regional and development plans, Road Plan</li> <li>• Urban Planning Components in the 5-year Plans</li> <li>• Case study: Planning in Bombay/Mumbai and Delhi (recap)</li> </ul>
	Legislative Procedures	<ul style="list-style-type: none"> <li>• Introduction - Legislative Procedures</li> <li>• Introduction – Policy, Act, Guideline</li> </ul>
20/07/2021	Institutional framework of urban policy/governance in India- discussion on major legislations	Urban Legislations- Legal framework for urban and town planning, 74th Amendment Act, 1992, related Acts and policies and governance structure MRTP Act, Municipal Acts, for instance Maharashtra is governed by 4 municipal Acts CRZ norms, TP schemes, SRP, TDR
27/07/2021	Land Reforms	Urban Land ceiling Act Land Acquisition Act Land Pooling Act
03/08/2021	Institutional framework of urban policy/governance in India- discussion on institutions	Institutions- Statutory authorities involved in Urban Local Governance System like MCGM, MMRDRA, MHADA, UD, CIDCO, SRA. Their structure, functions, powers, process and resource, performance. Interface with NGOs, other agencies, role of domestic and international actors like World Bank (MIUP project etc) private sector/business as an agent in influencing policy decisions (case on industrial policies/ SEZs/ environmental clearance policies), R and R policy, Slum rehabilitation policy ☑ Role of bureaucracy, judiciary and media in influencing policy decisions ☑ Institutional innovations eg. PPP
10/08/2021	Model Building Bye laws	Discussion on the relevant sections of MRTP
17/08/2021	Governance- Theoretical understanding	Governance- Theoretically- Definition, concepts, components, government and governance, hierarchy and structure, pluralization of the state

		<ul style="list-style-type: none"> <li>✓ Urban governance can be elaborated with a discussion on its origin and rationale behind its emergence in Europe in the 1980s, Australia, New Zealand and UK are forerunners,</li> <li>New forms of urban governance like Partnerships discussed by Elander international case studies, cities like Belfast and London where partnerships have been used for urban renewal</li> <li>✓ Forms of urban governance- Jon Pierre talks of 4 forms of urban governance - a)welfarist, b)managerial(related to NPM), c)corporatists and d) Pro-growth approach</li> <li>✓ Participatory Process in Urban Governance- Stakeholders' participation, roles and responsibilities, access to government by various stakeholders. Case studies, Feedback on policies. Service Delivery, accountability and people's participation: decentralization and local governance in India, social audit now part and parcel of many government schemes, jun sunwaees, Citizens cards, new models of social accountability and participation like Area Sabhas under Community Participation Law and Public Disclosure law under the JNNURM; community/citizen engagement under Smart City Mission 2015, LAP</li> </ul>
24/08/2021	City – Region Linkages	<p>International examples like the prefectures in Japan. Example : The Greater Tokyo Area is the most populous metropolitan area in the world, consisting of the Kantō region of Japan as well as the prefecture of Yamanashi of the neighboring Chūbu region. In Japanese, it is referred to by various terms, one of the most common being Capital Region.</p> <p>Indian examples like MMR and NCR</p> <p>Growth of cities scale, complexity and its impact on national development, cities as engines of growth, cities as ecosystems, resources in cities.</p> <p>City, fringe and the periphery - physical and functional linkages, peri-urban development, Mega Cities and their Problems and Issues</p>

31/08/2021	Urban Sectors	Housing Water Solid Waste Management
07/09/2021	Housing related Acts	Co-op Societies Act Rent Control Act Apartment Ownership Act
21/09/2021	New Concepts informing Urban policy	General discussion on SDGs urban sustainability quality of life inclusion climate change Informality Gender And their importance in urban policy
28/09/2021		Environment Protection Act Protection of Heritage and Conservation
05/10/2021	Smart City Mission in India	SCM in India Convergence with other policies like AMRUT, HRIDAY, SBM, ODF, Digital India, PMAY Current Status with examples Challenges

## **CO-PO mapped syllabi of Masters in Urban Design 2021-2022 – Urban Byelaws and Planning Legislation**

### **Program Educational Objective (PEOs): M.Arch**

1. To nurture individuals towards a better understanding of learning methods to bridge the gap between theory and practice.
2. To respond to innovative needs and environmental and social responsibility one should acquire excellence in the field both in academics and practice.
3. To develop a culture of enquiry, a thirst to excel in a particular field of knowledge and an ability to have a broad-minded perspective on things.
4. To nurture an intent to unlearn and reinterpret learning through the change, proceeding towards efficient and sustainable responses to varied situations.
5. To be able to assimilate knowledge to enhance spatial exploration, theorize and conceptualize ideas with respect to time and space. To define boundaries and regions to collaborate and meet the constantly changing world of climate change.

### Programme outcomes:

- To acquire the ability to critically understand the context
- To be able to recommend real and speculative urban propositions
- To be able to validate urban interventions with theoretical positions
- To be able to achieve technical competency for the respective streams
- To undertake research for production of new knowledge

**Course:** Urban Byelaws and Planning Legislation

**University Course Code:** MUDC302

**Sem-** 3

**Year -** Second

**KRVIA Course Code:** UBL-722

### Course Objectives:

- Theoretically understanding of governance
- To develop a thorough understanding of urban policy and governance systems, institutions in India post 1947 to present.
- Major urban laws, Acts, policies and programs
- General understanding of major urban sectors and recent concepts like City Liveability Index and current programs like SCM

### Course Outcomes:

- Students will develop a thorough understanding of governance, urban policy, planning legislations and institutions operative in India and how different sectors work.
- They will develop an understanding of new concepts like City Liveability Index, SDGs, the importance of gender and other variables in informing urban legislations in India with a comparative global understanding.
- The students will be equipped with an understanding of implications of different urban Acts, reforms and policies in design and practice.

USM's Kamla Raheja Vidyavidhi Institute for Architecture and Environmental Studies / Masters of Architecture									
Year of Assessment:	Subject:	Subject Code:	University Subject Code:	Sessional Marks:	Exercise 01 : Marks out of 50	Credits	Date of submission		
<b>Exercise: Title</b>									
<b>Exercise Note / Task Assessment</b>									
<b>Grade</b>	<b>O++</b>	<b>O+</b>	<b>O</b>	<b>Excellent</b>	<b>Very Good</b>	<b>Good</b>	<b>Fair</b>	<b>Satisfactory</b>	<b>Fail</b>
<b>Percentage</b>	<b>90% and above</b>	<b>80%</b>	<b>79% - 75%</b>	<b>74% - 70%</b>	<b>69% - 65%</b>	<b>64% - 60%</b>	<b>59% - 55%</b>	<b>54% - 50%</b>	<b>49% - 40%</b>
<b>Equivalent out of 10.0</b>	<b>9.0</b>	<b>8.0</b>	<b>7.9 - 7.5</b>	<b>7.5 - 7.0</b>	<b>6.9 - 6.5</b>	<b>6.4 - 6.0</b>	<b>5.9 - 5.5</b>	<b>5.4 - 5.0</b>	<b>4.9 - 3.0</b>
<b>Area of Evaluation</b>									
<b>Nature of Inquiry/ Interpretation</b>	Exceptional	Impressive	Explored many options. Clear, complete & curious. Covered width + depth both.	Innovative. Experimental and Bold Clarity. Expressive of relevance.	Confident. More than average. Easily acceptable.	Obvious. Safe / undisputed.	Fair Based on biased hypothesis.	Weak. Based on biased hypothesis.	Not acceptable
<b>Rigour of data collection/collation/ and curation, for assignments</b>	Exceptional	Impressive	Meticulous, authentic and methodical organization of data	Distilled, well competed and organized	Lot of data and well organized	Just enough and not continuously linked	Just adequate	Not enough to support	Not acceptable
<b>Understanding/ analysis or interpretation of reading, text/ map/ drawing/ case study</b>	Exceptional	Impressive	Breakthrough interpretation and understanding of subject	Highly demonstrative. Beyond expected.	Clarity of thought and accurate synthesis	Good. Consistently seen.	Average. Obvious methods used.	Arbitrary. Ad-hoc.	Not acceptable
<b>Presentation/ representation or articulation, coherence and clarity of argument in the form of power-point, paper, map , drawing or report</b>	Exceptional	Impressive	Highly structured, persuasive argument with advanced technical skills	Potential beyond expectation. Few added attributes.	Logical argument, legible narrative and representation	Almost complete.	Just adequate.	Inadequate for the purpose	Not acceptable
<b>Attendance, time management and participation in class</b>	Exceptional	Impressive	Positive and clear. Innovative and Worth appreciating.	High quality. High precision. Good range with good ability.	Eloquent, suggestive, well organised and resourceful	Above average. Demonstrative. High potential	Average.	Poor.	Not acceptable

	CO	PO1: Critical underst anding of context	PO2: Urban proposi tioning	PO3: urban interve ntions with theoreti cal positio ns	PO4: Techni cal Compe tency	PO5: Creatio n of new knowle dge
CO1	Students will develop a thorough understanding of governance, urban policy, planning legislations and institutions operative in India and how different sectors work.	3	2	2	3	0
CO2	They will develop an understanding of new concepts like City Liveability Index, SDGs, the importance of gender and other variables in informing urban legislations in India with a comparative global understanding.	3	2	3	3	0
CO3	The students will be equipped with an understanding of implications of different urban Acts, reforms and policies in design and practice.	3	2	3	2	1

1 – Slight (Low) Correlation  
Correlation

2- Moderate (Medium) Correlation  
0 – No Correlation

3- Substantial (high)





**KRVIA Masters:**  
**Sem: II- 2021**

**MODULE:**

**THEORY COURSE FORMAT: LECTURES 8| STUDENT ASSIGNMENTS 3**  
**COURSE FORMAT: FACULTY PRESENTATION | STUDENTS ASSIGNMENTS**

**COURSE NAME**

**Spatialising Meanings: Spatial Visualisation of Data in Architecture & Urban Studies**

**COURSE OBJECTIVES**

- The course engages with the realm of data visualisation in urban studies, and aims to expose the students to the necessary skills and philosophical positions in the discourse of communicating meanings through architecture and urban design

<b>FACULTY: Ankush Chandran</b>
<b>SUBJECT: Urban Design Elective</b>
<b>METHOD: Lectures &amp; Exercises</b>

<b>SESSIONS</b>	<b>DATE</b>	<b>TOPICS TO BE COVERED</b>
Lecture 1	07/07/21	<p><b>Introduction and orientation</b></p> <p>Introduction -</p> <ul style="list-style-type: none"> <li>• Research &amp; Meaning in Social Life,</li> <li>• Data and its place in Human Society</li> </ul> <p>Introduction to the structure and schedule of the elective            Additional readings on the premise of the elective</p> <hr/> <p>Readings for Critical Appreciation writing:</p> <ol style="list-style-type: none"> <li>1. Tufte, E. R. (1993). <i>Envisioning information</i> (Vol. 199). Graphics Press Cheshire, CT.</li> <li>2. Schacht, R. (1986). <i>Nietzsche on Philosophy, Interpretation and Truth</i>. In <i>Nietzsche as Affirmative Thinker</i> (pp. 1–19). Springer.</li> <li>3. Heidegger, M. (1977). <i>The age of the world picture</i>. In <i>Science and the Quest for Reality</i> (pp. 70–88). Springer.</li> <li>4. Lootsma, B. (1998). <i>Reality Bytes: The Meaning of Research in the Second Modern Age</i>. <i>Revista Daidalos</i>, (69/70), 8–21.</li> </ol>
Lecture 2	14/07/21	Responses to, and debates on, the week's readings - Critical Appreciation format

Lecture 3	21/07/21	<p><b>Visualising Form</b></p> <p>Presentation on Giving Form to Data, examples, introduction to readings</p> <hr/> <p>Readings for Critical Appreciation writing:</p> <ol style="list-style-type: none"> <li>1. Tufte, E. R. (1990). Escaping Flatland. <i>Envisioning Information</i>, 12–35.</li> <li>2. Maas, W. (2001). MVRDV: Pig City. <i>ARCHITHESE-NIEDERTEUFEN-</i>, 31(6), 76–81</li> <li>3. Maas, W. (1998). Datascape: The final extravaganza. <i>Daidalos</i>, 69(70), 48–54.</li> </ol>
Lecture 4	28/07/21	Responses to, and debates on, the week's readings - Critical Appreciation format
Lecture 5	04/08/21	<b>Hands-on Exercise 1</b> - Spatialisation of Data - splitting of class into 4 groups - working studio (the student groups will come up with their own ideas of what phenomenon to map, how to identify spatial characteristics in the phenomenon and how to spatialise the data )
Lecture 6	11/08/21	Review of data collected, drawing parallels, and modes of visualisation
Lecture 7	18/08/21	<b>Final presentation</b> of the outcomes of <b>Hands-on Exercise 1</b>
Lecture 8	25/08/21	<p><b>Data Hunting and Cyber Space</b></p> <p>Contemporary Data collection methods and techniques : Introductory presentation + case examples Transparency - blockchaining, open-sourcing, digital democracy</p> <p>Introduction to <b>Exercise 2</b> - Students research and read-up in groups, identify case examples of online methods, heuristics, geo-spatial collection, IoT.</p>
Lecture 9	01/09/21	Student Presentations for <b>Exercise 2</b>
Lecture 10	08/09/21	Presentation on Sampling - inclusion, biases and representation Ethics and privacy
Lecture 11	15/09/21	<p><b>Visualising Meaning</b></p> <p>Introductory presentation, various ideas of semiotics and society, introduction to readings, etc.</p> <hr/> <p>Readings for Critical Appreciation writing:</p> <ol style="list-style-type: none"> <li>1. Barthes. R. (1957) 2000. <i>Mythologies</i>. London: Vintage</li> <li>2. Lash, Scott and John Urry (1994) <i>Economies of Signs and Space</i>. London: Sage.</li> </ol>

		<ol style="list-style-type: none"> <li>3. Taylor, D. (2002). "You Are Here": the DNA of Performance. TDR, 46(1), 149–169</li> <li>4. Baudrillard, J. (1994). Simulacra and simulation. University of Michigan press.</li> <li>5. Canetti, E. (1981). Crowds and Power, New York: Continuum</li> <li>6. Laurel, B. (2009). Designed Animism. In T. Binder, J. Löwgren, &amp; L. Malmberg, eds., (Re)searching the digital Bauhaus, London: Springer, pp. 251–274</li> <li>7. Project Weltstadt. (2014). Performative Urbanism. The Urban Incubator: Belgrade.</li> <li>8. Whybrow, N. (2005). Street scenes: Brecht, Benjamin and Berlin, Bristol; Portland, Or.:</li> </ol>
Lecture 12	22/09/21	Responses to, and debates on, the week's readings
Lecture 13	29/09/21	Responses to, and debates on, the week's readings
Lecture 14	06/10/21	<b>Exercise 3</b> - Spatialisation of Meaning - splitting the class into 4 groups - working studio (this time, the students are assigned different themes and they must brainstorm how to identify spatial characteristics in the phenomenon and how to spatialise the data. In this exercise, how well you convert the interpretation to spatial form is of great importance and shall be emphasised in the working studio)
Lecture 15	13/10/21	Review of data collected, drawing parallels, and modes of visualisation
Lecture 16	20/10/21	Final presentation of the outcomes of <b>Exercise 3</b>

### ASSIGNMENTS: 50 Marks

Exercise 1	<b>Hands-on Exercise 1</b> - Spatialisation of Data - splitting of class into 4 groups - working studio (the student groups will come up with their own ideas of what phenomenon to map, how to identify spatial characteristics in the phenomenon and how to spatialise the data )	15 marks
Exercise 2	<b>Exercise 2</b> - Students research and read-up in groups, identify case examples of online methods, heuristics, geo-spatial collection, IoT	15 marks
Exercise 3	<b>Exercise 3</b> - Spatialisation of Meaning - splitting the class into 4 groups - working studio (this time, the students are assigned different themes and they must brainstorm how to identify spatial characteristics in the phenomenon and how to spatialise the data. In this exercise, how well you convert the interpretation to spatial form is of great importance and shall be emphasised in the working studio)	20 marks

## Reading list

1. Tufte, E. R. (1993). *Envisioning information* (Vol. 199). Graphics Press Cheshire, CT.
2. Schacht, R. (1986). Nietzsche on Philosophy, Interpretation and Truth. In *Nietzsche as Affirmative Thinker* (pp. 1-19). Springer.
3. Heidegger, M. (1977). The age of the world picture. In *Science and the Quest for Reality* (pp. 70-88). Springer.
4. Lootsma, B. (1998). Reality Bytes: The Meaning of Research in the Second Modern Age. *Revista Daidalos*, (69/70), 8-21.
5. Tufte, E. R. (1990). Escaping Flatland. *Envisioning Information*, 12-35.
6. Maas, W. (2001). MVRDV: Pig City. *ARCHITHESE-NIEDERTEUFEN*, 31(6), 76-81
7. Maas, W. (1998). Datascape: The final extravaganza. *Daidalos*, 69(70), 48-54.
8. Barthes, R. (1957) 2000. *Mythologies*. London: Vintage
9. Lash, Scott and John Urry (1994) *Economies of Signs and Space*. London: Sage.
10. Taylor, D. (2002). "You Are Here": the DNA of Performance. *TDR*, 46(1), 149-169
11. Baudrillard, J. (1994). *Simulacra and simulation*. University of Michigan press.
12. Canetti, E. (1981). *Crowds and Power*, New York: Continuum
13. Laurel, B. (2009). Designed Animism. In T. Binder, J. Löwgren, & L. Malmberg, eds., *(Re)searching the digital Bauhaus*, London: Springer, pp. 251-274
14. Project Weltstadt. (2014). *Performative Urbanism. The Urban Incubator*: Belgrade.
15. Whybrow, N. (2005). *Street scenes: Brecht, Benjamin and Berlin*, Bristol; Portland, Or.:

## **CO-PO mapped syllabi of Masters in Urban Design 2021-22–**

### **Choice Elective -1 (Spatialising Meanings)**

#### **Program Educational Objective (PEOs): M.Arch**

1. To nurture individuals towards a better understanding of learning methods to bridge the gap between theory and practice.
2. To respond to innovative needs and environmental and social responsibility one should acquire excellence in the field both in academics and practice.
3. To develop a culture of enquiry, a thirst to excel in a particular field of knowledge and an ability to have a broad-minded perspective on things.
4. To nurture an intent to unlearn and reinterpret learning through the change, proceeding towards efficient and sustainable responses to varied situations.
5. To be able to assimilate knowledge to enhance spatial exploration, theorize and conceptualize ideas with respect to time and space. To define boundaries and regions to collaborate and meet the constantly changing world of climate change.

#### **Programme outcomes:**

1. To acquire the ability to critically understand the context
2. To be able to recommend real and speculative urban propositions
3. To be able to validate urban interventions with theoretical positions
4. To be able to achieve technical competency for the respective streams
5. To undertake research for production of new knowledge

#### **Course: Choice Elective -1 (Spatialising Meanings)**

**University Course Code: MUDE301**

Sem- 3 Year - Second

#### **Course Objectives:**

1. The course engages with the realm of data visualisation in urban studies, and aims to expose the students to the necessary skills and philosophical positions in the discourse of communicating meanings through architecture and urban design

#### **Course Outcomes (CO):**

1. Students will develop an appreciation of the relevance of data in research.
2. Students will be exposed to different methods of data gathering
3. Students will learn to represent their data in a spatial context using various techniques

USM's Kamla Raheja Vidyavidhi Institute for Architecture and Environmental Studies / Masters of Architecture										
Year of Assessment:	Subject:	Subject Code:	University Subject Code:	Sessional Marks:	Exercise 01: Marks out of 50	Credits	Date of submission			
Exercise: Title										
Exercise Note / Task Assessment										
Grade	O++	O+	O	Outstanding	Excellent	Very Good	Good	Fair	Satisfactory	Fail
Percentage	90% and above	80%	79% - 75%	74% - 70%	69% - 65%	64% - 60%	59% - 55%	54% - 50%	49% - 40%	
Equivalent out of 10.0	9.0	8.0	7.9 - 7.5	7.5 - 7.0	6.9 - 6.5	6.4 - 6.0	5.9 - 5.5	5.4 - 5.0	4.9 - 3.0	
Area of Evaluation										
<b>Nature of Inquiry/ Interpretation</b>	Exceptional	Impressive	Explored many options. Clear, complete & curious. Covered width + depth both.	Innovative. Experimental and Bold Clarity. Expressive of relevance.	Confident. More than average. Easily acceptable.	Obvious. Safe / undisputed.	Fair Based on biased hypothesis.	Weak. Based on biased hypothesis.	Not acceptable	
<b>Rigour of data collection/collation/ and curation, for assignments</b>	Exceptional	Impressive	Meticulous, authentic and methodical organization of data	Distilled, well competed and organized	Lot of data and well organized	Just enough and not continuously linked	Just adequate	Not enough to support	Not acceptable	
<b>Understanding/ analysis or interpretation of reading, text/ map/ drawing/ case study</b>	Exceptional	Impressive	Breakthrough interpretation and understanding of subject	Highly demonstrative. Beyond expected.	Clarity of thought and accurate synthesis	Good. Consistently seen.	Average. Obvious methods used.	Arbitrary. Ad-hoc.	Not acceptable	
<b>Presentation/ representation or articulation, coherence and clarity of argument in the form of power-point, paper, map, drawing or report</b>	Exceptional	Impressive	Highly structured, persuasive argument with advanced technical skills	Potential beyond expectation. Few added attributes.	Logical argument, legible narrative and representation	Almost complete.	Just adequate.	Inadequate for the purpose	Not acceptable	
<b>Attendance, time management and participation in class</b>	Exceptional	Impressive	Positive and clear. Innovative and Worth appreciating.	High quality. High precision. Good range with good ability.	Eloquent, suggestive, well organised and resourceful	Above average. Demonstrative. High potential	Average.	Poor.	Not acceptable	

**CO-PO Mapping:**

	CO	PO1: Critical underst anding of context	PO2: Urban proposi tioning	PO3: urban interventions with theoretical positions	PO4: Technic al Compet ency	PO5: Creatio n of new knowle dge
CO1	Students will develop an appreciation of the relevance of data in research.	0	1	2	3	3
CO2	Students will be exposed to different methods of data gathering	2	1	0	3	3
CO3	Students will learn to represent their data in a spatial context using various techniques	2	2	2	3	2

1 – Slight (Low) Correlation 2- Moderate (Medium) Correlation 3- Substantial (high) Correlation 0 – No Correlation





## **Masters in Urban Design**

### **Programme outcomes:**

- To acquire the ability to critically understand the context
- To be able to recommend real and speculative urban propositions
- To be able to validate urban interventions with theoretical positions
- To be able to achieve technical competency for the respective streams
- To undertake research for production of new knowledge

**Course:** Housing Seminar

**University Course Code:** MUDE 302

**Sem-** 3

**Year -** Second

**KRVIA Course Code:** UDE 722.2

### **Course Objectives:**

- Understanding the 'Housing Question' in India through the supply side of low income housing that was produced in the country since Independence
- Situating the production of housing, particularly low-income housing , in the larger socio-political and economic context of the country at different time periods since independence
- To speculate on the future trajectories in housing in the age of digitalization

### **Course Outcomes:**

- A historical perspective of housing delivery in India and the role of the State , the NGOs and the private sector in the production of housing.
- An understanding of the nature of the built-form produced and its relationship with the institutional and ideological structures of the actors involved.

**Course Schedule:**

<b>LECT</b>	<b>DATE</b>	<b>TEACHING CONTENT</b>
1	8-07-21	Introduction to all the actors involved in Housing Delivery
2	15-07-21	Historical Perspective of the State in housing
3	22-07-21	Role of State Institutions like HUDCO/MHADA and NHB
4	29-07-21	Housing Delivery through State led schemes like JNNURM , IAY
5	5-08-21	State led large scale housing projects like Dharavi Redevelopment , Tsunami Rehabilitation projects
6	12-08-21	Historical Perspective of the role of NGOs in housing
7	19-08-21	Role of NGO organizations/Multi-lateral Institutions like SPARC, World Bank
8	26-08-21	NGO led projects like Markandeya , Yerwada as models for housing delivery
9	2-09-21	Understanding the shift from a closed economy to a liberalized economy in housing
10	9-09-21	Housing delivery through public-private partnerships
11	16-09-21	Understanding the Slum Rehabilitation Authority model of low income housing delivery
12	23-09-21	Affordable housing produced by private developers
13	30-09-21	Future Trajectories of Housing in the age of digitalization
14	7-10-21	Final Presentation of assignment
15		

## CO-PO mapped syllabi of Masters Urban Design 2021 -22 – Housing Seminar

### Program Educational Objective (PEOs): M.Arch

1. To nurture individuals towards a better understanding of learning methods to bridge the gap between theory and practice.
2. To respond to innovative needs and environmental and social responsibility one should acquire excellence in the field both in academics and practice.
3. To develop a culture of enquiry, a thirst to excel in a particular field of knowledge and an ability to have a broad-minded perspective on things.
4. To nurture an intent to unlearn and reinterpreted learning through the change, proceeding towards efficient and sustainable responses to varied situations.
5. To be able to assimilate knowledge to enhance spatial exploration, theorise and conceptualise ideas with respect to time and space. To define boundaries and regions to collaborate and meet the constantly changing world of climate change.

### Programme outcomes:

1. To acquire the ability to critically understand the context
2. To be able to recommend real and speculative urban propositions
3. To be able to validate urban interventions with theoretical positions
4. To be able to achieve technical competency for the respective streams
5. To undertake research for production of new knowledge

**Course:** Housing Seminar

**University Course Code:** MUDE 302

**Sem- 3**

**Year - Second**

**KRVIA Course Code:** UDE 722.2

### Course Objectives:

- Understanding the 'Housing Question' in India through the supply side of low income housing that was produced in the country since Independence
- Situating the production of housing, particularly low-income housing, in the larger socio-political and economic context of the country at different time periods since independence
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### Course Outcomes:

- A historical perspective of housing delivery in India and the role of the State, the NGOs and the private sector in the production of housing.
- An understanding of the nature of the built-form produced and its relationship with the institutional and ideological structures of the actors involved.

USM's Kamla Raheja Vidyandhi Institute for Architecture and Environmental Studies / Masters of Architecture									
Year of Assessment:	Subject:	Subject Code:	University Subject Code:	Sessional Marks:	Exercise 01: Marks out of 50	Credits	Date of submission		
<b>Exercise: Title</b>									
<b>Exercise Note / Task Assessment</b>									
<b>Grade</b>	<b>O++</b>	<b>O+</b>	<b>O</b>	<b>Excellent</b>	<b>Very Good</b>	<b>Good</b>	<b>Fair</b>	<b>Satisfactory</b>	<b>Fail</b>
<b>Percentage</b>	<b>90% and above</b>	<b>80%</b>	<b>79% - 75%</b>	<b>74% - 70%</b>	<b>69% - 65%</b>	<b>64% - 60%</b>	<b>59% - 55%</b>	<b>54% - 50%</b>	<b>F</b>
<b>Equivalent out of 10.0</b>	9.0	8.0	7.9 - 7.5	7.5 - 7.0	6.9 - 6.5	6.4 - 6.0	5.9 - 5.5	5.4 - 5.0	4.9 - 3.0
<b>Area of Evaluation</b>									
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	CO	PO1: Critical understandi ng of context	PO2: Urban propositioni ng	PO3: urban interventio ns with theoretical positions	PO4: Technical Competen cy	PO5: Creation of new knowled ge
CO 1	A historical perspective of housing delivery in India and the role of the State , the NGOs and the private sector in the production of housing.	3	1	0	2	1
CO 2	An understandi ng of the nature of the built- form produced and its relationship with the institutional and ideological structures of the actors involved.	3	1	1	2	1

1 – Slight (Low) Correlation    2- Moderate (Medium) Correlation    3- Substantial (high) Correlation  
0 – No Correlation



## Master of Urban Design and Architectural Urban Conservation

### Semester 3 2021-22

#### INTRODUCTION

##### **Infrastructural Urbanism**

600 million Indians will be living in urban India by 2040. India will lead the world in urban growth contributing to 17% of total global urban growth. Urbanization is also seen as a necessary condition for economic growth. Increasing investment in intra-city transit infrastructure is reducing travel time between two cities leading to the development of large urban conurbations eg. Mumbai Thane– Pune, NCR, Ahmedabad-Baroda-Surat.

Much of the urban programs in India have been strategized at the national level-JNNURM in 2005, and the Smart City Mission in 2015 which are then implemented at the city level. Alongside, large-scale infrastructure corridors and massive highways/expressways under the Bharat Mala initiative of the Government of India is transforming the very idea of the “Geography of the city”. City- region, city-state and a new form of urbanization without cities fuel this current imagination. Most of these ongoing processes are driven by what we broadly understand as “infrastructure”- be it expressways and highways, digital technologies, water, sanitation, electricity, culture and heritage, forests, and land among many more. We are at the same time faced with choices to discern our future urban trajectories. Do we follow the Chinese model of urbanization of building one city after another many of which eventually become ghost towns or do we follow digital technologies to create fluid networks characterized by time-space compression?

It is in-between areas that are seeing the highest increase in population growth and facing pressures of inadequate infrastructure. In the case of Mumbai-Thane – Pune urban conurbation, the population today is about 25 million people which is as big as certain countries. These areas are also the primary source of GDP for the state of Maharashtra and India as well. Yet, in terms of governance, they are powerless. The State government controls major development institutions while the elected representatives like Mayors have little direct say in controlling the development agenda.

Given these rapid urban transformations, playing out at several tiers of governance structures involving multiple stakeholders drive us to understand:

- 1) How do infrastructure(s) (highways/expressways, metro railways, digital technologies, blue and green ecologies, culture and heritage, land, administrative definition) transform a geography into “urban”?
- 2) Large urban conurbations (UC) connected by rapid means of transport, contain in them different typologies of settlements – from dense urban areas, rural areas, villages as well as ecologically reserved areas. Can we therefore call them cities in the classic sense or do we need a new vocabulary?
- 3) Does thinking of the urban conurbation as a single entity also gives an opportunity to address various issues of development in these ‘rurban’ areas, villages etc. in a holistic manner which otherwise get neglected as geographies between dense urban cores.



4) How do we think about reforming governance and democratization of policy making such that local communities have a greater say in the development of these cities?

5) Given that Climate Change risks and resilience are major global challenges, can a connected urban region without the aggregation of residential, commercial, industrial spaces seen in cities , be a solution to reducing the carbon footprint of urbanization?

The three-year cycle for the post graduate program will focus on issues of Infrastructural Urbanism. The broad area of inquiry and investigations are the contemporary notions of development that are the catalyst for urbanism that facilitates mobility of people, production and consumption goods.

### **Samruddhi Mahamarg- Aurangabad Jalna**

In the first cycle, we focus on Package 3 between Aurangabad and Jalna. The sites selected for the study are part of a cultural route stretching approximately 120kms to Ellora passing through Khultabad, Daulatabad, and Aurangabad connecting Jalna. The seven sites selected for study include varying per-urban conditions along the expressway. Five groups consist of a mixed group of Urban Design and Architectural & Urban Conservation students focusing on the World Heritage Site of Ellora, the sacred landscape of Khultabad, the protected monument of Daulatabad, the Cultural sector of Aurangabad and the new proposed Krishnagar along the expressway at Maliwada. The other two groups consisting of Urban Design students focus on the industrial areas of AURIC along with MIDC Shendra and the industrial area located at the periphery of Jalna town. The course on Data Urbanism conducted in the previous semester facilitated a quick identification of these sites that will transform rapidly owing to the Samruddhi Expressway.

### **Course Schedule:**

<b>LECT</b>	<b>DATE</b>	<b>TEACHING CONTENT</b>
1	03/07/2022	Study trip - Identification of sites
2	13/07/2022	Study trip - Identification of sites
3	29/07/2022	Data Collection
4	23/08/2022	Data Collection
5	13/09/2022	Collation of information
6	07/10/2022	Collation of information
7	14/10/2022	Prefinal Review
8	20/10/2022	Final

## **CO-PO mapped syllabi of Masters in Architectural & Urban Conservation 2021-2022 – Design Studio - Urban Design 3**

### **Program Educational Objective (PEOs): M.Arch**

1. To nurture individuals towards a better understanding of learning methods to bridge the gap between theory and practice.
2. To respond to innovative needs and environmental and social responsibility one should acquire excellence in the field both in academics and practice.
3. To develop a culture of enquiry, a thirst to excel in a particular field of knowledge and an ability to have a broad-minded perspective on things.
4. To nurture an intent to unlearn and reinterpreted learning through the change, proceeding towards efficient and sustainable responses to varied situations.
5. To be able to assimilate knowledge to enhance spatial exploration, theorise and conceptualise ideas with respect to time and space. To define boundaries and regions to collaborate and meet the constantly changing world of climate change.

### **Programme outcomes:**

1. To acquire the ability to critically understand the context
2. To be able to recommend real and speculative urban propositions
3. To be able to validate urban interventions with theoretical positions
4. To be able to achieve technical competency for the respective streams
5. To undertake research for production of new knowledge

### **Course: Studio II**

University Course Code: MUDES202/S2A Sem- 3 Year - Second

KRVIA Course Code: UDCS61212.2/UDCS-688

### **Programme outcomes:**

1. To acquire the ability to critically understand the context
2. To be able to recommend real and speculative urban propositions
3. To be able to validate urban interventions with theoretical positions
4. To be able to achieve technical competency for the respective streams
5. To undertake research for production of new knowledge

### **Course Objectives:**

- Analysis of urban functions at miso, macro and micro scales.
- Documentation, investigation, condition analysis, survey methods & tools for context and setting inquiry.
- Methodological procedure for urban and architectural realizations.
- The studio should simultaneously explore and innovate on techniques of representation for these complex urban conditions.

### **Course Outcomes:**

- Objectivity in data collection, analysis and recommendations.
- Identify broad urban design principles, based on any current/relevant urban issues.
- Ability to frame site appropriate urban design programs and projects.
- Proficiency in the technique of place making for the given project.

USM's Kamla Raheja Vidyaniidhi Institute for Architecture and Environmental Studies / Masters of Architecture															
Year of Assessment:	2021-22 Sem 3		Subject:	Urban design 3	Subject Code:	MUDS301	Sessional Marks:	450	Exercise 01: Marks out of 500	12	Credits	12	Date of submission		
Exercise: Title	Exercise Note / Task														
Assessment Grade	O++		Outstanding O	O+		Excellent A	Very Good B <th>Good C</th> <th>Fair D</th> <th>Satisfactory E</th> <th>Fail F</th> <td colspan="3"></td>		Good C	Fair D	Satisfactory E	Fail F			
Percentage Equivalent out of 10.0	90% and above		79% - 75%	80%	74% - 70%	69% - 65%	64% - 60%	59% - 55%	54% - 50%	49% - 40%					
	9.0	8.0	7.9 - 7.5	7.5 - 7.0	6.9 - 6.5	6.4 - 6.0	5.9 - 5.5	5.4 - 5.0	4.9 - 3.0						
Area of Evaluation															
Site observations and ability to critically analyse the data gathered.	Exceptional	Impressive	Explored many options. Clear, complete & curious. Covered width + depth both.	Innovative, Experimental and Bold Clarity. Expressive of relevance.	Confident. More than average. Easily acceptable.	Obvious. Safe / undisputed.	Fair Based on biased hypothesis.	Weak. Based on biased hypothesis.	Not acceptable						
Rigour of data collection/collation/ and curation, for each	Exceptional	Impressive	Meticulous, authentic and methodical organization of data	Distilled, well competed and organized	Lot of data and well organized	Just enough and not continuously linked	Just adequate	Not enough to support	Not acceptable						
Understanding/ analysis or interpretation of readings/ maps/ drawings/ case studies	Exceptional	Impressive	Breakthrough interpretation and understanding of subject	Highly demonstrative. Beyond expected.	Clarity of thought and accurate synthesis	Good. Consistently seen.	Average. Obvious methods used.	Arbitrary. Ad-hoc.	Not acceptable						
Presentation/ representation or articulation, coherence and clarity of argument in the assigned/selected form/ mode	Exceptional	Impressive	Highly structured, persuasive argument with advanced technical skills	Potential beyond expectation. Few added attributes.	Logical argument, legible narrative and representation	Almost complete.	Just adequate.	Inadequate for the purpose	Not acceptable						
Attendance, time management and participation in class	Exceptional	Impressive	Positive and clear. Innovative and Worth appreciating.	High quality. High precision. Good range with good ability.	Eloquent, suggestive, well organised and resourceful	Above average. Demonstrative. High potential	Average.	Poor.	Not acceptable						

## COMapping

	CO	PO1: Critical understandi ng of context	PO2: Urban proposition ing	PO3: urban interventi ons with theoretical positions	PO4: Technical Competency	PO5: Creation of new knowledg e
CO 1	Objectivity in data collection and assessment.	3	2	2	2	2
CO 2	Identify broad urban design principles, based on any current/ relevant urban	2	2	2	3	3
CO 3	Ability to frame site appropriate urban design programs and projects.	2	1	3	2	2
CO 4	Proficiency in the technique of place making for the given project.	2	2	3	2	3

1 – Slight (Low) Correlation    2- Moderate (Medium) Correlation    3- Substantial (high) Correlation  
0 – No Correlation



<b>MUDC 303</b>		COURSE NAME	Thesis 1		SEMESTER	III	CREDITS	4
		FACULTY	Ainsley Lewis, Ginella George, Dr. Binti Singh, Sarah George			150	SCHEME OF EXAMINATION	Internal
		TIME	Monday 1:20 pm to 3:20 pm			2	TIME REQUIRED OUTSIDE OF CLASS	-
		UNIVERSITY COURSE DESCRIPTION	The Thesis is divided into two parts, one that is initiated in semester 3 and the second demonstrated in semester 4. In the first part, students are required to put forth theoretical arguments and raise critical issues, which would help them create a method to observe, map, analyze and frame possibilities of interventions or initiate transformation in a particular urban condition. The first part of the thesis would assist the students to simultaneously be able to create the structure of the argument of the thesis that would culminate in the form of a written report.					
why	PEDAGOGIC INTENT	The course is designed to enable students in identifying issues in the research design in carrying out a thesis project						
how	METHODOLOGY	Faculty will orient students through lectures and group discussions on identifying and organizing the essential components required for selecting a research topic and writing a thesis proposal						
when	SCHEDULE	DAY	DATE	TEACHING CONTENT OF THE DAY			MARKING DISTRIBUTION	ASSIGNMENT/DELIVERABLE
	week 1	Monday	5.7.2021	Introduction to Framework & Schedule.				
	week 2	Monday	12.7.2021	Group Discussion				
	week 3	Monday	19.7.2021	Defining the Research question; Group Discussion				
	week 4	Monday	26.7.2021	Group Discussion				
	week 5	Monday	2.8.2021	Group Discussion				
	week 6	Monday	9.8.2021	Writing an Abstract				
	week 7	Monday	16.8.2021	Group Discussion				
	week 8	Monday	23.8.2021	Group Discussion				
	week 9	Monday	30.8.2021	How to structure a Thesis proposal				
	week 10	Monday	6.9.2021	Group Discussion				
	week 11	Monday	13.9.2021	Group Discussion				
	week 12	Monday	20.9.2021	Literature review				
	week 13	Monday	27.9.2021	Group Discussion				
	week 14	Monday	4.11.2021	Research Design and Methodology				
	week 15	Monday	11.11.2021	Group Discussion				
	week 16	Monday	18.10.2021	Group Discussion				
		Monday	25.10.2021	Presentation by students				
	EVALUATION CRITERIA	Individual/ Group based presentations and class assignments						
	LEARNING OUTCOMES	Students will be able to comprehend the objectives of doing research, analyzing data and writing a thesis proposal						
	READING LIST	1. The Sage Handbook of Qualitative Research by Norman K. Denzin and Yvonna S. Lincoln 2. The City Reader, Edited by Richard T. LeGates and Frederic Stout						

## CO-PO mapped syllabi of Masters in Urban Design 2021-22– Thesis-1

### Program Educational Objective (PEOs): M.Arch

1. To nurture individuals towards a better understanding of learning methods to bridge the gap between theory and practice.
2. To respond to innovative needs and environmental and social responsibility one should acquire excellence in the field both in academics and practice.
3. To develop a culture of enquiry, a thirst to excel in a particular field of knowledge and an ability to have a broad-minded perspective on things.
4. To nurture an intent to unlearn and reinterpreted learning through the change, proceeding towards efficient and sustainable responses to varied situations.
5. To be able to assimilate knowledge to enhance spatial exploration, theorise and conceptualise ideas with respect to time and space. To define boundaries and regions to collaborate and meet the constantly changing world of climate change.

### Programme outcomes:

1. To acquire the ability to critically understand the context
2. To be able to recommend real and speculative urban propositions
3. To be able to validate urban interventions with theoretical positions
4. To be able to achieve technical competency for the respective streams
5. To undertake research for production of new knowledge

**Course:** Thesis-1

**University Course Code:** MUDC 303

Sem- 3

Year - Second

### Course Objectives:

1. To equip students to develop a methodological framework
2. To hone their skills in research in order to enhance their individual thesis proposals

### Course Outcomes (CO):

1. Creating methods to observe, map, analyze and frame possibilities of interventions or initiate transformation in a particular urban condition
2. Writing a thesis proposal

USM's Kamla Raheja Vidyandhi Institute for Architecture and Environmental Studies / Masters of Architecture									
Year of Assessment:	Subject:	Subject Code:	University Subject Code:	Sessional Marks:	Exercise 01: Marks out of 50	Credits	Date of submission		
Exercise: Title									
Exercise Note / Task Assessment									
Grade									
Percentage									
Equivalent out of 10.0									
<b>Area of Evaluation</b>									
Nature of Inquiry/ Interpretation	Exceptional	Impressive	Explored many options. Clear, complete & curious. Covered width + depth both.	Innovative. Experimental and Bold Clarity. Expressive of relevance.	Confident. More than average. Easily acceptable.	Obvious. Safe / undisputed.	Fair Based on biased hypothesis.	Weak. Based on biased hypothesis.	Not acceptable
Rigour of data collection/collation/ and curation, for assignments	Exceptional	Impressive	Meticulous, authentic and methodical organization of data	Distilled, well competed and organized	Lot of data and well organized	Just enough and not continuously linked	Just adequate	Not enough to support	Not acceptable
Understanding/ analysis or interpretation of reading, text/ map/ drawing/ case study	Exceptional	Impressive	Breakthrough interpretation and understanding of subject	Highly demonstrative. Beyond expected.	Clarity of thought and accurate synthesis	Good. Consistently seen.	Average. Obvious methods used.	Arbitrary. Ad-hoc.	Not acceptable
Presentation/ representation or articulation, coherence and clarity of argument in the form of power-point, paper, map , drawing or report	Exceptional	Impressive	Highly structured, persuasive argument with advanced technical skills	Potential beyond expectation. Few added attributes.	Logical argument, legible narrative and representation	Almost complete.	Just adequate.	Inadequate for the purpose	Not acceptable
Attendance, time management and participation in class	Exceptional	Impressive	Positive and clear. Innovative and Worth appreciating.	High quality. High precision. Good range with good ability.	Eloquent, suggestive, well organised and resourceful	Above average. Demonstrative. High potential	Average.	Poor.	Not acceptable



**CO-PO Mapping:**

	CO	PO1: Critical underst anding of context	PO2: Urban proposi tioning	PO3: urban interventions with theoretical positions	PO4: Technic al Compet ency	PO5: Creatio n of new knowle dge
CO1	Creating methods to observe, map, analyze and frame possibilities of interventions or initiate transformation in a particular urban condition	3	3	2	1	3
CO2	Writing a thesis proposal	3	3	2	1	3

1 – Slight (Low) Correlation    2- Moderate (Medium) Correlation    3- Substantial (high) Correlation  
 0 – No Correlation



# **EMBEDDING 'NATURE BASED SOLUTIONS' IN CITIES:**

**Reimagining Urban Infrastructure  
Through Landscape**

## **Environment and Ecology II**

Course Structure for KRVIA Masters UD +UC Elective.

**Sandeep B. Menon**

Course conductor

KRVIA M.ARCH: SEM: III (URBAN DESIGN/CONSERVATION)

YEAR: 2021-2022

SUB/STUDIO: Environment and Ecology II

ELECTIVE NAME:

**Embedding 'Nature Based Solutions' In Cities: Reimagining Urban Infrastructure Through Landscape**

FACULTY: Sandeep B. Menon

**INTENT:**

The course intends to provide thorough exposure to the students regarding the state-of-the-art research outcomes, theoretical constructs and global world views in the field of ecological urbanism and 'nature based' infrastructural futures. The course acknowledges the academic and professional commitment to the UN Sustainable Development Goals 2030 target and is designed to impart a holistic understanding of the urban landscapes as complex ecological systems which encompass the dynamic relation between ecology and space.

The course deals with advanced concepts of ecology and explores relevant contextual frameworks and approaches for the planning and design of urban landscapes as urban infrastructure.

**Course Objectives:**

- To introduce students to the concept of 'Anthropocene' as a global epoch and the cutting edge research on 'Planetary Boundaries'.
- To introduce advanced principles, concepts and methods of understanding urban ecology and Infrastructural urbanism.
- To enable students to understand and discern the natural processes in the environment and their implications in the design and planning.
- To demonstrate landscape approaches in the planning, design and management of greenfield and brownfield interventions through the help of socially and environmentally appropriate case studies of projects.

## METHODOLOGY:

The course builds upon the knowledge base shared with the students in their first semester course “Landscape Design, Urban Ecology and Natural Heritage”. The current course is designed as a series of lectures, relevant case study presentations and short documentary screenings. The modules will have a set of reference materials as well which will be provided to the students in PDF formats a week before the module begins. Students are expected to familiarize themselves with the reading material before the lectures.

The course is divided into three modules:

The first module ‘**Theory and Methods**’ (5 Classes) looks at introducing the students to advanced concepts of Ecological Urbanism and Urban Infrastructural Histories. These include lectures and presentations on ‘Anthropocene’, the ‘Climate Crisis’ and ‘Nature Based Solutions’ and the ideas of coping, adapting and transforming in the changing climatic future. The concepts of ‘Planetary Boundaries’ and the paradox of ‘Infinite Growth’ will also be taken up as part of the module with the help of an animated documentary followed by allied lectures and discussions.

The second module titled ‘**Urban Metabolism + Flows**’ deals with the theory and case examples of infrastructural projects from the global South and other relevance urban examples pertaining to energy, material + water, information, human movement and the present pandemic of the zoonotic Coronavirus crisis. The physical manifestations of these processes and the possibilities of ensuring resilience in the urban structure and design as a response to the constant flux.

The third module titled ‘**Landscapes as Infrastructure**’ deal with the topics pertaining to the urban form, urban environment, resilience, urban ecological structure and the interrelations with the various components which constitute the whole. The various topics are explained using a synthesis of ecological planning

and design methods in which urban design is emphasized as mode for ecological intervention. All the lectures are based on relevant case studies which help in demonstrating the relevance of understanding the methods of intervention.

While reviewing the case studies in each of the generic categories, factors such as intention, approaches, methods, processes, variants, environmental, spatial and temporal issues, conceptual position of the designers; which determine the specificity of design response will be explored.

## LECTURE SCHEDULE

Module One: Theory and Methods	08-08	<b>Infrastructural Urbanism- Socio-ecological transformations over time:</b> <i>Lecture + Presentation</i>
		Urban transformations through time and future imaginations
	15-08	<b>Introduction to Nature Based Solutions (NBS)</b> and bridge with Sem 1 Course content
		Introduction of <b>Assignment 1:</b> Mapping + assessing the City's Infrastructural history
	22-08	<b>Planetary Boundaries:</b> <i>Lecture + Presentation</i>
	<b>The idea of Infinite Growth</b> as an indicator of ' <i>Development</i> '- Docu Screening and Discussion Documentary Screening: 'There's No Tomorrow' by Dermot O'Conner (Viewing link with subtitles will be provided after the lecture slot)	
	29-08	<b>'Climate Crisis' and 'Infrastructural Urbanism':</b> Lecture on Coping, Adapting and Transforming in the changing climatic future <b>Assignment 2:</b> Discerning the 'ripple effects' of climate crisis in Mumbai
Module II: Urban	06-09	<b>Climate Change, Pandemics and Urban Infrastructural Transformations:</b> Lecture + Presentation

- 13-09 Case Examples: London, Bombay, Philadelphia, Velha Goa and the current global pandemic of Covid  
**Changing Energy Dependencies + Urban Transportation:**  
Lecture + Presentation
- 20-07 Alternative ideas: Tactical Urbanism and other urban 'acupuncture'  
Case Example- Curitiba  
**Landscapes as Resilient Living Machines:** Food and its implication on Urbanism
- 27-07 Local/Introduced Crops and its implications, Globalised Food supply Chains, Changing consumption patterns, Urban Agriculture  
Case Study: East Kolkata Wetland Bio-Region  
**Urban landscapes as Blue Green Infrastructure: I**  
Presentation + Lecture
- 03-08 A case study of Urban River Kallang Restoration in Singapore  
Introducing  
**Assignment 3:** Group Research work and preparation for presentation: 'Eco-City Resume: Reimagining Mumbai's Infrastructure based on NBS'  
**Urban landscapes as Blue Green Infrastructure: II**  
Responses to combat Urban Flooding- Lecture + Presentation
- 10-08 Sustainable Urban Drainage Systems(SUDS)  
Case Study: Chulalongkorn University Centenary Park and Precinct Upgradation, Bangkok  
**Ecological Restoration of Derelict Landscapes as Urban Infrastructure:** Lecture + Presentation
- 17-08 Case Study: Fresh Kills, Staten Island- Land Fill Reclamation  
Students' Research work Submission and Presentation:

## **'Mumbai Ver 2.0: Reimagining Mumbai's Infrastructure based on NBS'**

**24-08**

Final Marking and Discussion  
**Urban Landscapes for Place:**  
Eco-restoring of the Highline Park, New York

Eco-restoration of an urban blight, experimenting with urban flora, Concepts of Crime Prevention through Environmental Design (CPTED)  
Concluding session

### **SELECTED READINGS:**

**[abridged PDFs of the relevant chapters will be provided to students a week before the lecture ]**

Berger, Alan. "Urban Land is a Natural Thing to Waste" in Harvard Design Magazine Fall 2005/Winter 2006.

Brown, Lester. (2008) 'Plan B 3.0: Mobilizing to Save Civilization'. W.W. Norton & Co.

Cervero, Robert. (2004) "Transit and the Metropolis: Finding Harmony" in Wheeler, Stephen M. and Timothy Beatley. The Sustainable Urban Development Reader. London and New York: Routledge.

Hough, M (2004). 'Cities and Natural Processes'. Routledge

Huber,J (2010). 'Low Impact Development: A design Manual for Urban Areas'. University of Arkansas

Lynch, Kevin (1990). "The Waste of Place" in Places: Vol. 6: No. 2. 1990.

Mostafavi.M, Doherty.G (2010). 'Ecological Urbanism'. Massachusetts: Harvard University, Graduate School of Design

Orff, Kate (2016). 'Toward an Urban Ecology: SCAPE / Landscape Architecture': Monacelli Press

Pluntz,Richard (2017) 'City Riffs: Urbanism, Ecology, Place' GSAPP,Columbia University

Rankin, Tom.(2015) "Rome Works: An Architect Explores the World's Most Resilient City. Peruzzi Press

Rifkin, Jeremy.(2010) 'The Third Industrial Revolution'. \*Available on-line

Sassen, Saskia.(2007) "Seeing Like a City" in Burdett, Ricky, ed. The Endless City. Phaidon.

Sennet, Richard.(2007) "The Open City" in Burdett, Ricky, ed. The Endless City. Phaidon

Spirn, A.W. (1985). 'The Granite Garden-Urban Nature and Human Design'. New York: Basic Books

Stuart, Tristram, (2009)"Waste: Uncovering the Global Food Scandal". London: Penguin. p. 220-231.

## **CO-PO mapped syllabi of Masters in Architectural & Urban Conservation 2021-22 – Environment & Ecology**

### **Program Educational Objective (PEOs): M.Arch**

1. To nurture individuals towards a better understanding of learning methods to bridge the gap between theory and practice.
2. To respond to innovative needs and environmental and social responsibility one should acquire excellence in the field both in academics and practice.
3. To develop a culture of enquiry, a thirst to excel in a particular field of knowledge and an ability to have a broad-minded perspective on things.
4. To nurture an intent to unlearn and reinterpret learning through the change, proceeding towards efficient and sustainable responses to varied situations.
5. To be able to assimilate knowledge to enhance spatial exploration, theorise and conceptualise ideas with respect to time and space. To define boundaries and regions to collaborate and meet the constantly changing world of climate change.

### **Programme outcomes:**

1. To acquire the ability to critically understand the context
2. To be able to recommend real and speculative urban propositions
3. To be able to validate urban interventions with theoretical positions
4. To be able to achieve technical competency for the respective streams
5. To undertake research for production of new knowledge

### **Course: Environment & Ecology**

**University Course Code: ---**

**Sem-3**

**Year - Second**

**KRVIA Course Code: USOM 724**

### **Course Objectives:**

- To introduce students to the concept of ‘Anthropocene’ as a global epoch and the cutting-edge research on ‘Planetary Boundaries’.
- To introduce advanced principles, concepts, and methods of understanding urban ecology and Infrastructural urbanism.
- To enable students to understand and discern the natural processes in the environment and their implications in the design and planning.
- To demonstrate landscape approaches in the planning, design and management of greenfield and brownfield interventions through the help of socially and environmentally appropriate case studies of projects.

### **Course Outcomes:**

- To understand advanced concepts of Ecological Urbanism and Urban Infrastructural Histories.
- Proposing the physical manifestations of these processes and the possibilities of ensuring resilience in the urban structure and design as a response.
- To enable the structure and the interrelations with the various components which constitute the whole, using a synthesis of ecological planning and design methods in which urban design is emphasized as mode for ecological intervention.



USM's Kamla Raheja Vidyavidhi Institute for Architecture and Environmental Studies / Masters of Architecture									
Year of Assessment:	Subject:	Subject Code:	University Subject Code:	Sessional Marks:	Exercise 01: Marks out of 50	Credits	Date of submission		
Exercise: Title									
Exercise Note / Task Assessment									
Grade	O++	O+	O	Excellent	Very Good	Good	Fair	Satisfactory	Fail
Percentage	90% and above	80%	79% - 75%	74% - 70%	69% - 65%	64% - 60%	59% - 55%	54% - 50%	49% - 40%
Equivalent out of 10.0	9.0	8.0	7.9 - 7.5	7.5 - 7.0	6.9 - 6.5	6.4 - 6.0	5.9 - 5.5	5.4 - 5.0	4.9 - 3.0
Area of Evaluation									
<b>Nature of Inquiry/ Interpretation</b>	Exceptional	Impressive	Explored many options. Clear, complete & curious. Covered width + depth both.	Innovative. Experimental and Bold Clarity. Expressive of relevance.	Confident. More than average. Easily acceptable.	Obvious. Safe / undisputed.	Fair Based on biased hypothesis.	Weak. Based on biased hypothesis.	Not acceptable
<b>Rigour of data collection/collation/ and curation, for assignments</b>	Exceptional	Impressive	Meticulous, authentic and methodical organization of data	Distilled, well competed and organized	Lot of data and well organized	Just enough and not continuously linked	Just adequate	Not enough to support	Not acceptable
<b>Understanding/ analysis or interpretation of reading, text/ map/ drawing/ case study</b>	Exceptional	Impressive	Breakthrough interpretation and understanding of subject	Highly demonstrative. Beyond expected.	Clarity of thought and accurate synthesis	Good. Consistently seen.	Average. Obvious methods used.	Arbitrary. Ad-hoc.	Not acceptable
<b>Presentation/ representation or articulation, coherence and clarity of argument in the form of power-point, paper, map , drawing or report</b>	Exceptional	Impressive	Highly structured, persuasive argument with advanced technical skills	Potential beyond expectation. Few added attributes.	Logical argument, legible narrative and representation	Almost complete.	Just adequate.	Inadequate for the purpose	Not acceptable
<b>Attendance, time management and participation in class</b>	Exceptional	Impressive	Positive and clear. Innovative and Worth appreciating.	High quality. High precision. Good range with good ability.	Eloquent, suggestive, well organised and resourceful	Above average. Demonstrative. High potential	Average.	Poor.	Not acceptable

CO-PO Mapping:

	CO	PO1: Critical understanding of context	PO2: Urban propositioning	PO3: urban interventions with theoretical positions	PO4: Technical Competency	PO5: Creation of new knowledge
CO1	To understand advanced concepts of Ecological Urbanism and Urban Infrastructural Histories.	3	2	1	3	3
CO2	Proposing the physical manifestations of these processes and the possibilities of ensuring resilience in the urban structure and design as a response.	3	3	3	3	3
CO3	To enable the structure and the interrelations with the various components which constitute the whole, using a synthesis of ecological planning and design methods in which urban design is emphasized as mode for ecological intervention.	3	3	3	3	3

1 – Slight (Low) Correlation 2- Moderate (Medium) Correlation 3- Substantial (high) Correlation  
0 – No Correlation



# Semester IV

## Scheme of Teaching and Examinations

### SCHEME OF TEACHING AND EXAMINATIONS

#### MASTER OF ARCHITECTURE (M.ARCH) URBAN DESIGN SEM IV

EXAM CONDUCTED BY COLLEGE		TEACHING SCHEME			
Semester III		Lecture	Studio	Total	Credits
<b>MUDE401</b>	Choice Based Elective-1		4	4	4
<b>MUDE402</b>	Choice Based Elective-2		4	4	4
<b>MUDS401</b>	Thesis I		16	16	16
				<b>24</b>	<b>24</b>

### SCHEME OF EXAMINATION SEMESTER I

		EXAM SCHEME			
		Theory (Paper)	Sessional Work		
Semester III			Internal	External Viva	Credits
<b>MUDE401</b>	Choice Based Elective-1		50		50
<b>MUDE402</b>	Choice Based Elective-2		100		100
<b>MUDS401</b>	Thesis I		300	550	850
	<b>TOTAL</b>		<b>450</b>	<b>550</b>	<b>1000</b>

**2021-22**

**Semester IV**

		MONDAY	TUESDAY	WEDNESDAY
PG 2	8.00 - 8.50	Cultural Territories and Urban Resilience <b>(UD+UC)</b> Manoj Parmar	<b>Thesis Writing (UD + UC)</b> Ginella Sarah Binti Ketaki Aditya	Self S
	8.50 - 9.40			
	9.40 - 10.30	Building Resilience Amongst Communities Urban Conservation	<b>Thesis II</b> Manoj/Chaarvi, Shweta, Aditya, Ginella	<b>Theoretical Un</b> <b>Formulating The</b> <b>Guest Speakers (</b>
	10.30 - 11.20			
	11.20 - 12.00			
	12.00-12.50	Aneerudha Paul	<b>Thesis II</b> Paul/Shuchi, Sanaeya, George, Vikram/Apoorva	Self S
	12.50 - 1.20	L U N		
	1.20 - 2.10	<b>(UD+UC)</b> <b>(Working Studio)</b>	<b>Thesis II</b> Ketaki, Sandeep, Ainsley, Jimmy	Self S
2.10 - 3.00				

# Semester IV

## Time-Table

SDAY	THURSDAY	FRIDAY	SATURDAY
Study	Sociological and Cultural Perspectives on Resilience (UD+UC) Binti Singh	Thesis Writing (UD + UC) Ginella Sarah Binti Ketaki Aditya	
Derpinnings-thesis Argument. (UD+UC) Sanaeya	Imaging Crisis (UD+UC) Rohan Shivkumar	Thesis II Manoj/Chaarvi, Shweta, Aditya, Ginella	
BREAK			
Study	Elective 4	Thesis II Paul/Shuchi, Sanaeya, George, Vikram/Apoorva	
N C H BREAK			
Study	(UD+UC) (Working Studio)	Thesis II Ketaki, Sandeep, Ainsley, Jimmy	

Urban Design

Choice Elective I: Imaging Crisis

Choice Elective II: Building Resilience Amongst Communities

Urban Conservation

Choice Elective I: Cultural Territories and Urban Resilience

Choice Elective II: Sociological and Cultural Perspectives on Resilience

# KRVIA Masters: 2021-2022

SEMESTER: IV

THESIS II

## Objectives

The final semester of the Masters in Urban Design is a reflective process focused on the learnings of the first three semesters. A professional is expected to have a position with regards to Urbanism and is encouraged to reflect, critique and validate one's position through background research, theoretical readings and academic paper writing that forms the backbone to structure the argument of the thesis. All of this is undertaken in the earlier semester and the fourth semester is envisaged as an opportunity to validate the inferences in a specific context. In this semester the proposition is based on one's own readings of the site and context to recommend either real or speculative interventions

## Teaching Method

The trajectory for the Masters in Urban Conservation is similar to that of Urban Design and is conducted simultaneously without any distinction between streams.

This method facilitates a broader perspective for the professional. One may choose to focus on larger philosophical or theoretical issues relevant to the Indian context. This is demonstrated through the identification of an appropriate scale of an individual building or to a larger precinct.

## Learning Outcomes

The learning outcome is a culmination of the masters program, which is geared towards young practitioners that have the ability to critically understand the context, to recommend real and speculative propositions, validated through theoretical positions.

## SCHEDULE OF PROGRESS & JURIES

DATE	PROGRESS / REMARKS / TASKS	Grades
16/11/2021		
19/11/2021		
23/11/2021		
26/11/2021		
30/11/2021		
03/12/2021		



07/12/2021	Progress guide marking 1	10
10/12/2021		
14/12/2021		
17/12/2021		
04/01/2022		
07/01/2022		
11/01/2022	Progress guide marking 2	15
14/01/2022		
18/01/2022		
21/01/2022	Thesis Argument & Site Introduction-cross group jury	20
25/01/2022		
28/01/2022		
01/02/2022		
04/02/2022	Progress guide marking 3	15
08/02/2022		
11/02/2022	Thesis Argument & Site Analysis-cross group jury	20
15/02/2022		
18/02/2022		
22/02/2022	Site Analysis & Issues – I -cross group jury	20
25/02/2022		
01/03/2022		
04/03/2022	Progress guide marking 4	20
08/03/2022		
11/03/2022	Site Analysis & Issues – II -cross group jury	25
15/03/2022		
18/03/2022		
22/03/2022		
25/03/2022	Demonstration And Interventions- Exhibition Jury	20

29/03/2022		
01/04/2022	Progress guide marking 5	30
05/04/2022	Final cut-off external jury (This is tentative and subject to change depending on the date of the final jury)	50

## CO-PO mapped syllabi of Masters in Urban Design and Architectural & Urban Conservation 2021-2022 – Thesis II

### Program Educational Objective (PEOs): M.Arch

1. To nurture individuals towards a better understanding of learning methods to bridge the gap between theory and practice.
2. To respond to innovative needs and environmental and social responsibility one should acquire excellence in the field both in academics and practice.
3. To develop a culture of enquiry, a thirst to excel in a particular field of knowledge and an ability to have a broad-minded perspective on things.
4. To nurture an intent to unlearn and reinterpret learning through the change, proceeding towards efficient and sustainable responses to varied situations.
5. To be able to assimilate knowledge to enhance spatial exploration, theorize and conceptualize ideas with respect to time and space. To define boundaries and regions to collaborate and meet the constantly changing world of climate change.

### Programme outcomes:

- To acquire the ability to critically understand the context
- To be able to recommend real and speculative urban propositions
- To be able to validate urban interventions with theoretical positions
- To be able to achieve technical competency for the respective streams
- To undertake research for production of new knowledge

**Course:** Thesis II

**University Course Code:** MUDS401 / S4A  
Second

**Sem-** 4

**Year -**

**KRVIA Course Code:** UDCT 71616 / UDCT 71515

### Course Objectives:

- To have a position with regards to Urbanism
- To encourage reflecting, critique and validate one's position through background research, theoretical readings and academic paper writing.
- To structure the argument of the thesis.
- To validate the inferences in a specific context

### Course Outcomes:

- Ability to critically review and build on existing literature for production of new knowledge.
- They will develop propositions based on one's own readings of the site and context to recommend either real or speculative interventions.
- The students will be equipped with an ability to validate urban propositions through theoretical positions.
- Equip the students to propose instruments for implementation in the urban realm.
- Develop methods and skills for appropriate representation using innovative techniques.

**USM's Kamla Raheja Vidyavidhi Institute for Architecture and Environmental Studies / Masters of Architecture**

Year of Assessment:	Subject:	Subject Code:	University Subject Code:	Sessional Marks:	Exercise	Credits	Date of submission
Exercise: Title							
Exercise Note / Task Assessment							
Grade	O++	O+	Outstanding	Excellent	Very Good	Good	Satisfactory
Percentage	90% and above	80%	79% - 75%	74% - 70%	69% - 65%	64% - 60%	54% - 50%
Equivalent out of 10.0	9.0	8.0	7.9 - 7.5	7.5 - 7.0	6.9 - 6.5	6.4 - 6.0	5.9 - 5.5 5.4 - 5.0
<b>Area of Evaluation</b>							
Site observations and ability to critically analyse the data gathered.	Exceptional	Impressive	Explored many options. Clear, complete & curious. Covered width + depth both.	Innovative. Experimental and Bold Clarity. Expressive of relevance.	Confident. More than average. Easily acceptable.	Obvious. Safe / undisputed.	Fair Based on biased hypothesis. Weak. Based on biased hypothesis.
Rigour of data collection/collation/ and curation, for each stage	Exceptional	Impressive	Meticulous, authentic and methodical organization of data	Distilled, well competed and organized	Lot of data and well organized	Just enough and not continuously linked	Just adequate Not enough to support
Understanding/ analysis or interpretation of readings/ maps/ drawings/ case studies	Exceptional	Impressive	Breakthrough interpretation and understanding of subject	Highly demonstrative. Beyond expected.	Clarity of thought and accurate synthesis	Good. Consistently seen.	Average. Obvious methods used. Arbitrary. Ad-hoc. Not acceptable
Presentation/ representation or articulation, coherence and clarity of argument in the assigned/selected form/mode	Exceptional	Impressive	Highly structured, persuasive argument with advanced technical skills	Potential beyond expectation. Few added attributes.	Logical argument, legible narrative and representation	Almost complete.	Inadequate for the purpose Not acceptable
Attendance, time management and participation in class	Exceptional	Impressive	Positive and clear. Innovative and Worth appreciating.	High quality. High precision. Good range with good ability.	Eloquent, suggestive, well organised and resourceful	Above average. Demonstrative. High potential	Average. Poor. Not acceptable

## CO-PO Mapping

	CO	PO1: Critical understa nding of context	PO2: Urban propositi oning	PO3: urban interventio ns with theoretical positions	PO4: Technica l Compete ncy	PO5: Creation of new knowledg e
CO1	Ability to critically review and build on existing literature for production of new knowledge.	1	1	2	2	3
CO2	They will develop propositions based on one's own readings of the site and context to recommend either real or speculative interventions.	3	3	3	2	2
CO3	The students will be equipped with an ability to validate urban propositions through theoretical positions.	3	2	2	2	2
CO4	Equip the students to propose instruments for implementation in the urban realm.	2	3	3	3	2
CO5	Develop methods and skills for appropriate representation using innovative techniques.	1	2	3	3	2

1 – Slight (Low) Correlation  
Correlation

2- Moderate (Medium) Correlation  
0 – No Correlation

3- Substantial (high)

# Imaging Crises & Resilience

MUDE401

Elective - Urban Design and Conservation 2021-22

*Conductor: Rohan Shivkumar*

*Aim:*

The elective approaches issues of resilience through the examination of cultural artefacts, especially those emerging from moving image practices.

*Learning Outcomes:*

Through diagnostic processes of contextualisation, systemic and formal analysis and narrativisation the cultural artefacts allow insight into our current presumptions and preoccupations, and help to examine the possibilities of understanding and projecting more resilient futures. The cultural artefacts chosen dwell upon particular objects (films, poetry, essays) that grapple with some of the environmental, social and economic anxieties of our contemporary world. They mirror some of the geographies reflected in the other electives that run in tandem.

*The intention of the course is to enable students with the ability to critically examine acts of representation. It will enable students to contextualise the work, study its structure and formal characteristics and examine its rhetoric for political and social significance. It would examine the role of the producer, the presumptions of who the audience is meant to be, and the tools deployed, along with a critical analysis of the potentials and pitfalls of the approach deployed.*

*Course Objectives:*

- *To understand the relationship between representation and the making of an argument about nature and resilience*
- *To analyse a cultural artefact within a context and its modes of making the argument.*
- *To evaluate the effectivity of the cultural artefact in making an argument about nature and resilience*

## **Course Structure**

*Course Duration:*

10 weeks, 2 hrs (once) a week.

*Course Format:*

Short-term Elective

## **Course Content**

*Prerequisites for Participation:*

Students from the Post graduate Program of Urban Design and Urban Conservation.

*Course Syllabus:*

Week 1. 2 Dec 20 . Introductory Lecture. Making Meaning. Modes and Messages

Week 2. 9 Dec 20 . Propoganda and Image Making. Films Division India

Week 3. 16 Dec 20. The Third Cinema. The Hour of the Furnaces, 1968, Octavio Getino and Fernando Solanas

Week 4. 6 Jan 21. Nature as the Sublime. Watermark 2013, Jennifer Baichwal, Edward Burtynsky

Week 5. 13 Jan 21. Temporalities . Le Quattro Volte, 2010, Michelangelo Frammartino

Week 6. 20 Jan 21. The Agit Prop Film. The Narmada Diary, 1995, Anand Patwardhan

Week 7. 27 Jan 21. The Post-Human. Leviathan, 2012, Lucien Castaing-Taylor and Véréna Paravel

Week 8. 3 Feb 21. Multi-Media Experiences. The Sovereign Forest, 2011, Amar Kanwar

Week 9. 10 Feb 21, Submission of Assignment

Week 10. 17 Feb 21. Final Discussion

#### *Course Assignments:*

The student will each be assigned one cultural artefact to be analysed based on contextual and formal strategies. They would try and excavate the intention of the producer, the presumptions made of the intended audience and the formal strategies used.

#### *Expected Time Spent on Course:*

Time spent in hours: 2 hours per week.

Time spent in ECTS (European Credit Transfer and Accumulation System): < 1 ECTS = 25 hours >

## **Course Grading**

#### *Assessment Criteria and Distribution of Marks:*

<b><i>Stages &amp; Details</i></b>	<b><i>Percentage of Total Marks</i></b>
<i>Framework for Analysis</i>	20%
Formal Analysis	40%
<i>Social and Political Analysis</i>	40%
<b><i>Total</i></b>	<b>100%</b>

## **CO-PO mapped syllabi of Masters in Architectural & Urban Conservation 2021-2022**

### **Elective- Imaging Crisis**

#### **Program Educational Objective (PEOs): M.Arch**

1. To nurture individuals towards a better understanding of learning methods to bridge the gap between theory and practice.
2. To respond to innovative needs and environmental and social responsibility one should acquire excellence in the field both in academics and practice.
3. To develop a culture of enquiry, a thirst to excel in a particular field of knowledge and an ability to have a broad-minded perspective on things.
4. To nurture an intent to unlearn and reinterpret learning through the change, proceeding towards efficient and sustainable responses to varied situations.
5. To be able to assimilate knowledge to enhance spatial exploration, theorize and conceptualize ideas with respect to time and space. To define boundaries and regions to collaborate and meet the constantly changing world of climate change.

#### **Programme outcomes:**

1. To acquire the ability to critically understand the context
2. To be able to recommend real and speculative urban propositions
3. To be able to validate urban interventions with theoretical positions
4. To be able to achieve technical competency for the respective streams
5. To undertake research for production of new knowledge

**Course:** Elective: Imaging Crisis

**University Course Code:** E4A

Sem- 4

Year - Second

**KRVIA Course Code:** UDC 744.1

#### **Course Objectives:**

- The intention of the course is to enable students with the ability to critically examine acts of representation.
- It will enable students to contextualise the work, study its structure and formal characteristics and examine its rhetoric for political and social significance.
- It would examine the role of the producer, the presumptions of who the audience is meant to be, and the tools deployed, along with a critical analysis of the potentials and pitfalls of the approach deployed.

#### **Course Outcomes (CO):**

1. To understand the relationship between representation and the making of an argument about nature and resilience
2. To analyse a cultural artefact within a context and its modes of making the argument.
3. To evaluate the effectivity of the cultural artefact in making an argument about nature and resilience



USM's Kamla Raheja Vidyavidhi Institute for Architecture and Environmental Studies / Masters of Architecture										
Year of Assessment:	Subject:	Subject Code:	University Subject Code:	Sessional Marks:	Exercise 01: Marks out of 50	Credits	Date of submission			
Exercise: Title										
Exercise Note / Task Assessment										
Grade	O++	O+	O	Outstanding	Excellent	Very Good	Good	Fair	Satisfactory	Fail
Percentage	90% and above	80%	79% - 75%	79% - 75%	74% - 70%	69% - 65%	64% - 60%	59% - 55%	54% - 50%	49% - 40%
Equivalent out of 10.0	9.0	8.0	7.9 - 7.5	7.9 - 7.5	7.5 - 7.0	6.9 - 6.5	6.4 - 6.0	5.9 - 5.5	5.4 - 5.0	4.9 - 3.0
Area of Evaluation										
Nature of Inquiry/ Interpretation	Exceptional	Impressive	Explored many options. Clear, complete & curious. Covered width + depth both.	Innovative. Experimental and Bold Clarity. Expressive of relevance.	Confident. More than average. Easily acceptable.	Obvious. Safe / undisputed.	Fair Based on biased hypothesis.	Weak. Based on biased hypothesis.	Not acceptable	
Rigour of data collection/collation/ and curation, for assignments	Exceptional	Impressive	Meticulous, authentic and methodical organization of data	Distilled, well competed and organized	Lot of data and well organized	Just enough and not continuously linked	Just adequate	Not enough to support	Not acceptable	
Understanding/ analysis or interpretation of reading, text/ map/ drawing/ case study	Exceptional	Impressive	Breakthrough interpretation and understanding of subject	Highly demonstrative. Beyond expected.	Clarity of thought and accurate synthesis	Good. Consistently seen.	Average. Obvious methods used.	Arbitrary. Ad-hoc.	Not acceptable	
Presentation/ representation or articulation, coherence and clarity of argument in the form of power-point, paper, map , drawing or report	Exceptional	Impressive	Highly structured, persuasive argument with advanced technical skills	Potential beyond expectation. Few added attributes.	Logical argument, legible narrative and representation	Almost complete.	Just adequate.	Inadequate for the purpose	Not acceptable	
Attendance, time management and participation in class	Exceptional	Impressive	Positive and clear. Innovative and Worth appreciating.	High quality. High precision. Good range with good ability.	Eloquent, suggestive, well organised and resourceful	Above average. Demonstrative. High potential	Average.	Poor.	Not acceptable	

	CO	PO1: Critical underst anding of context	PO2: Urban proposi tioning	PO3: urban interventions with theoretical positions	PO4: Technic al Compet ency	PO5: Creatio n of new knowle dge
CO1	To understand the relationship between representation and the making of an argument about nature and resilience	2	0	0	0	0
CO2	To analyse a cultural artefact within a context and its modes of making the argument.	3	0	0	0	2
CO3	To evaluate the effectivity of the cultural artefact in making an argument about nature and resilience	3	0	0	0	1

1 – Slight (Low) Correlation    2- Moderate (Medium) Correlation    3- Substantial (high) Correlation  
0 – No Correlation



## Electives 2 - Building resilience among communities. – Aneerudha Paul

### Objective

The course attempts to construct a framework for comprehending resilience among communities within cities in India. The course deals explicitly with communities that inhabit our cities' margins and are most vulnerable to its risks. Such people encounter risks that evolve due to stress that develops over time due to lack of government policy or sudden shock events arising from biological, geophysical, hydrological, meteorological, or climatological causes. The course attempts to create a framework for analyzing such risk experienced by these communities and seeks to construct a role for urban designers to intervene in such contexts.

The introductory part of the course would engage with resilience concepts to evolve a working definition relevant to cities in India. The next part would be to develop frameworks sensitive to cases that each student would take from her or his city to comprehend the notion of resilience among these groups. Within this framework, the student would explore techniques of representing the spatial implications of the methodology adopted.

### Schedule

	Date	Content	Mode
Class 1	6.01.20	Unpacking Notions of Resilience	Video Recording + Discussion
Class 2	13.01.20	Discussing Frameworks of Resilience	Video Recording + Discussion
Class 3	20.01.20	Towards a community framework for comprehending resilience	Video Recording + Discussion
Class 4	27.01.20	Discussing Case Studies.	Video Recording + Discussion
Class 5	3.02.20	Students presentation	Presentation

### Course Outcomes

- Students can analyze the risks faced by vulnerable communities.
- Students can link it to the development process of the communities so that they can frame sensitive design interventions.

### Submission

The student would work in groups to choose a city they are familiar with and enumerate the city's risk. It would then find a community that is vulnerable to the risk identified and formulate a framework to analyze their resilience capacities. The critical challenge would be to understand the articulated frame's spatial implication and work with a mode of representation. A successful analysis would hint at possible strategies for resilience building among the chosen community.

### References

The resilience renaissance? Unpacking of Resilience for tackling climate change and disasters - Aditya V. Bhadur, Maggie Ibrahim and Thomas Tanner

A conceptual analysis of livelihoods and resilience: addressing the 'insecurity of agency' - Adam Pain and Simon Levine

Hyogo Framework for Action 2005-2015: I S D R International Strategy for Disaster Reduction, [www.unisdr.org/wcdr](http://www.unisdr.org/wcdr), Building the Resilience of Nations and Communities to Disasters

Re-framing Resilience: a Symposium Report- Edited by Melissa Leach

Staying Secure, Staying Poor: The "Faustian Bargain", Geof Wood, University of Bath, UK

## **CO-PO mapped syllabi of Masters in Urban Design 2021-2022 Electives – Building Resilience among communities**

### **Program Educational Objective (PEOs): M.Arch**

1. To nurture individuals towards a better understanding of learning methods to bridge the gap between theory and practice.
2. To respond to innovative needs and environmental and social responsibility one should acquire excellence in the field both in academics and practice.
3. To develop a culture of enquiry, a thirst to excel in a particular field of knowledge and an ability to have a broad-minded perspective on things.
4. To nurture an intent to unlearn and reinterpreted learning through the change, proceeding towards efficient and sustainable responses to varied situations.
5. To be able to assimilate knowledge to enhance spatial exploration, theorise and conceptualise ideas with respect to time and space. To define boundaries and regions to collaborate and meet the constantly changing world of climate change.

### **Programme\_outcomes:**

1. To acquire the ability to critically understand the context
2. To be able to recommend real and speculative urban propositions
3. To be able to validate urban interventions with theoretical positions
4. To be able to achieve technical competency for the respective streams
5. To undertake research for the production of new knowledge

### **Course: Electives 2- Building Resilience among communities**

**University Course Code:** MUDE 402

Sem- 4

Year - Second

**KRVIA Course Code:** UCA-744.1

### **Course Objectives:**

- To construct a framework for comprehending Resilience among communities within cities in India
- Create a framework for analyzing such risk experienced by these communities.
- Devise a role for urban designers to intervene in such contexts

### **Course Outcomes:**

- Students can analyze the risks faced by vulnerable communities.
- Students can link it to the development process of the communities so that they can frame sensitive design interventions.

USM's Kamla Raheja Vidyandh Institute for Architecture and Environmental Studies / Masters of Architecture									
Year of Assessment:	Subject:	Subject Code:	University Subject Code:	Sessional Marks:	Exercise 01: Marks out of 50	Credits	Date of submission		
Exercise: Title									
Exercise Note / Task Assessment									
Grade									
Percentage									
Equivalent out of 10.0									
<b>Area of Evaluation</b>									
Nature of Inquiry/ Interpretation	Exceptional	Impressive	Explored many options. Clear, complete & curious. Covered width + depth both.	Innovative. Experimental and Bold Clarity. Expressive of relevance.	Confident. More than average. Easily acceptable.	Obvious. Safe / undisputed.	Fair Based on biased hypothesis.	Weak. Based on biased hypothesis.	Not acceptable
Rigour of data collection/collation/ and curation, for assignments	Exceptional	Impressive	Meticulous, authentic and methodical organization of data	Distilled, well competed and organized	Lot of data and well organized	Just enough and not continuously linked	Just adequate	Not enough to support	Not acceptable
Understanding/ analysis or interpretation of reading, text/ map/ drawing/ case study	Exceptional	Impressive	Breakthrough interpretation and understanding of subject	Highly demonstrative. Beyond expected.	Clarity of thought and accurate synthesis	Good. Consistently seen.	Average. Obvious methods used.	Arbitrary. Ad-hoc.	Not acceptable
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Attendance, time management and participation in class	Exceptional	Impressive	Positive and clear. Innovative and Worth appreciating.	High quality. High precision. Good range with good ability.	Eloquent, suggestive, well organised and resourceful	Above average. Demonstrative. High potential	Average.	Poor.	Not acceptable

## CO-PO Mapping

	CO	PO1: Critical understanding of context	PO2: Urban propositioning	PO3: urban interventions with theoretical positions	PO4: Technical Competency	PO5: Creation of new knowledge
CO1	<ul style="list-style-type: none"> <li>Students can analyze the risks faced by vulnerable communities.</li> </ul>	3	1	2	1	2
CO2	<ul style="list-style-type: none"> <li>Students can link it to the development process of the communities so that they can frame sensitive design interventions.</li> </ul>	3	2	3	1	2

1 – Slight (Low) Correlation 2- Moderate (Medium) Correlation 3- Substantial (high) Correlation 0 – No Correlation

