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**SCHEME AND SYLLABI**  
**FOR**  
**MASTER OF ARCHITECTURE**  
**(URBAN DESIGN)**

**University School of Architecture and Planning**  
**and**  
**Affiliated Institutes**  
**(w.e.f. Academic Session 2021-22)**



GURU GOBIND SINGH  
INDRAPRASTHA  
UNIVERSITY

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## 1 Master of Architecture (Urban Design), USAP

The University School of Architecture and Planning of Guru Gobind Singh Indraprastha University (GGSIPU) offers two year full-time post-graduate degree course Master of Architecture (Urban Design), henceforth referred to as M. Arch. (UD).

### 1.1 Academic Programme

- 1.1.1 The USAP usually commences its Academic program in the month of August every year.
- 1.1.2 The duration of the M. Arch. (UD) program is of two academic years or four semesters comprising of 16 weeks of Imparting of instructions / teaching work (including class test) each.
- 1.1.3 The minimum period required for completion of the programme shall be two academic years.
- 1.1.4 The maximum period allowed for completion of the programme shall be n+2 academic years, (where 'n' is the duration of the course), i.e.. 4 yrs.
- 1.1.5 A student shall have to earn a minimum of 101 credits out of a total of 106 credits specified by the Syllabi and Scheme of Teaching and Examination of the programme for the award of the degree.

### 1.2 Urban Design Pedagogy

- 1.2.1 The M.Arch.(UD) program recognizes that there are three different aspects of any learning/teaching process: forming attitudes, providing information and knowledge and developing skills. With the intent of educating urban designers for successful practice, the program lays emphasis on all three. It is designed to offer theoretical, practical and interest- based education to the students through a series of structured and well- paced courses. The broad objectives of the Program are:

- a. To prepare the students to develop a holistic view of the city as a basis for designing the built environment and public realm in the third dimension.
- b. To examine and further develop the idea of "Urban" in the Indian context.
- c. To provide a platform for interdisciplinary learning from varied fields of knowledge like Architecture, Urban Planning, Landscape, Infrastructure Planning, Urban Economics, Behavioural Sciences, etc.
- d. To facilitate research and design intersection, where one informs the other. The program is not purely research based but highlights the need to interpret and assimilate research findings into design. The student by the end of the course should demonstrate his / her ability to conceptualize, inspect and synthesize environmental objectives, design methods, and contextual issues in urban condition.
- e. To promote active industry- collaboration by engaging and working with professionals from diverse disciplines, citizens groups and Public Authorities and involving various stakeholders in a city.
- f. To equip students to set "their agenda for Urban Design".
- g. To enable students to acquire skills to assume professional practice responsibilities and to offer professional services.

### 1.2.2 Pedagogic methods:

The pedagogic methods adopted in the course curriculum are:

- Classroom lectures: Well structured, interactive lecture courses with presentations and discussions.
- Practice Studios: Project- based guided, learning-by-doing, problem-solving and innovation-driven studio exercises.
- Lab Studio: Computer lab-based studios exercises
- Self-Driven Research: Realistic and topical issues addressed through self-driven research, supervised and guided by faculty.
- Educational tours and Field visits: City is the 'lab' for Urban Design and 'On-site' learning, observation, documentation and research is critical to link theory with practice. These provide the opportunity to engage with various stakeholders.
- Assignments/Self-study/ Seminars/ Presentations
- Special Expert Lectures: Focusing on Case studies and best practices to highlight real-world challenges and innovative urban design interventions as well as providing academia – industry collaboration. Also bring in an inter-disciplinary approach.

1.2.3 The Urban Design Program is structured around **five Knowledge Tracks (KT)** and **two Professional Skill Tracks (PST)** that are taught through a combination of Lecture-based Theory courses and Studio-based Practical courses.

a) The five Knowledge Tracks are as follows:

#### KT 1

##### History:

This track helps the students to understand the process of production of “urban” settlements, towns and cities from a historical, regional, socio-cultural and politico-economic perspective. The student is guided through a series of core texts in a structured manner. Through two courses, History of Indian Urbanism & History of Western Urbanism, the students learn to critically review and place the contemporary cities in reference to their historical background.

#### KT 2

##### Theory:

This track explains to the student the varied ideas, approaches, theories and ways to observe, appreciate, and analyse design of cities. The student is guided through a series of thoughtfully selected seminal theory and research works in the discipline in a structured manner, to develop sufficient clarity about alternative approaches to understand the city and to intervene.

Two courses on Urban Design Theories – I & II cover a range of works from Europe and America to begin with and later attempt to create an Indian Urban Design narrative through discussions on works in the sub-continent, by Indian masters.

#### KT 3

##### Techniques & Institutional Framework:

This track equips the students with the tools necessary for a project, from conceptualization to post-delivery appraisal. This includes the courses- Techniques of Physical Planning, Planning City for Environment & Sustainability, Urban Governance, Administration & Legislation and Development Practice, Project Management & Finance.



**KT 4  
Urban Systems,  
Engineering &  
Infrastructure:** This track provides the students with basic working knowledge about the components, concepts, technical and design parameters of various natural and man-made systems that form the lifelines of a city. This includes Site Planning & Landscape, Urban Mobility, Housing, Urban Services & Infrastructure Planning.

**KT 5  
Inter-Disciplinary  
Exploration:** A range of electives are offered to the students to underscore the interdisciplinary nature of Urban Design. The track provides flexibility to the students to choose from a set of Elective Courses offered through different platforms. In the second semester the student has the option to choose from Electives courses offered through offline as well as Online GOI SWAYAM MOOC courses. There is also a provision for General Electives to explore individual interests personality goals and objectives. In the third semester Elective Courses provide a choice for advanced knowledge and skill enhancement.

- b) The practical and professional skills required for the discipline are developed through the following two Professional Skill Tracks (PST):

**PST1  
Practice  
Application:** It is essential that UD pedagogy links theoretical knowledge to practice. This means professionalizing academic knowledge. For this, the Program lays stress on Collaborative Studio work that involves research, learning-by-doing, problem solving etc. The theoretical knowledge is applied in the project-based Urban Design Studio- I, II & III. These prepare each student to take up an individual Thesis project as a culmination in the final semester.

Urban Design Studios provide an environment for a collaborative learning-teaching process where a group of students interact with a group of faculty through discussions, presentations, seminars, crits and juries. These help the students to develop their generic skills and competencies like ideation, analytical, strategic, critical and lateral thinking for creative problem solving, mental flexibility, figural fluency, effective visual, written and verbal communication, presentation skills, teamwork, leadership, negotiation, etc.

**PST 2  
Skill  
Development:** Practice of Urban Design involves dealing with both tangible and intangible issues, incorporating multiple professions. Through an intersection of innovation and research, urban designers can, not only expand and deepen their own body of knowledge, but also use this research in turn to accelerate and disseminate inventive work in urban design, so that the urban design field experiences significant innovation.

Towards this end, Research and Technical skills are imparted through skill enhancement courses like Digital Technology for Urban Design, Research Methodologies for Urban Design and Thesis Research Seminar.



- 1.2.4 As Urban Design deals with the public realm and the “public”, it is imperative that the program provides ample opportunity to the students to observe, actively engage and interact with the city and its stakeholders. Therefore, study tours to villages, towns and cities, visits to places of architectural interest, construction and industry sites, exhibitions, architectural conservation and development projects form an integral part of the post-graduate architecture curriculum and teaching program. The institution shall arrange such short and long study tours every year under the faculty guidance, ensuring a faculty : student ratio of 1:10 so as to ensure active on-site learning.
- 1.2.5 Since practice studio is the primary pedagogical method for the Program, the following norms for teacher: student ratio are to be followed:

S. No.	Studio Course with Credits	Faculty: Student Ratio
1	Less than 6	1:10
2	6-12	1:5

**Note:** With reference to the CoA Minimum Standards of Architectural Education Guidelines for Post-Graduate Programme 2006

- 1.2.6 The semester-wise distribution of credits is as follows:

	Course Type	Credits				
		1st	2nd	3rd	4th	TOTAL
1	Core Practical/ Studio *	22	16	18	20	76
2	Core Theory	06	08	06	02	22
3	Elective	----	04	04	----	08
	<b>TOTAL</b>	<b>28</b>	<b>28</b>	<b>28</b>	<b>22</b>	<b>106</b>

\*1 Hr Practical/ Studio = 1 Credit

### 1.3 Evaluation and Examination

- 1.3.1 The evaluation of students in a course shall have two components:

- (i) Continuous evaluation (CE) by the teacher(s) of the course.
- (ii) Evaluation through an Semester End Examination (SEE).

- 1.3.2 The guidelines for distribution of weightage for various components of evaluation shall be as below:

#### a. Theory Courses:

- (i) Continuous Evaluation (CE) by teacher(s) - 25%
- (ii) Semester End Examination (SEE) - 75%

#### b. Practical / Laboratory / Studio Courses:

- (i) Continuous Evaluation (CE) by teacher(s) - 50%
- (ii) Semester End Examination (SEE) - 50%

1.3.3 The Continuous Evaluation (CE) by teacher(s) shall be based on the following criteria:

**a. Theory Courses:**

One Class Test per semester -	10 Marks
Assignment / Group Discussion / Viva Voce /	
Additional test / Quizzes etc. -	15 Marks

**b. Practical / Laboratory / Studio Courses:**

The Continuous Evaluation (CE) by teacher(s) shall be based on performance in the coursework through assignments of various nature including studies, exercises, presentations and reports etc. as prescribed by teacher(s) at suitable intervals during the semester.

**1.4 Criteria for Passing Course/s**

- 1.4.1 To pass a course and earn its assigned credits, it shall be essential for a student to obtain a minimum of 50% marks of total marks ( sum of both Continuous Evaluation by teacher(s) and Semester End Examination). A student who secures less than 50% marks in a course shall be deemed to have failed in that course.
- 1.4.2 To pass / qualify in a course, the student must appear in all components of the course. Non-appearance or being absent in any component shall mean that the student has failed in that course.
- 1.4.3 A student obtaining less than 50% marks in a course ( sum of both Continuous Evaluation by teacher(s) and Semester End Examination) and failing in the course, shall be allowed to re-appear in Semester End Examination of the course in the subsequent year, when the course is offered, subject to maximum permissible period as mentioned in 1.1.4.
- 1.4.4 Students who are eligible to re-appear in a Semester End / Supplementary Examination shall have to apply to the Controller of Examinations through the School / Institution concerned and pay the examinations fees as prescribed by the University, to be allowed to reappear in an examination.
- 1.4.5 The re-appearing student who secured less than 50% marks of the maximum marks of Continuous Evaluation by teacher(s) also have the option to repeat and improve the class test/ assignment(s) performance with regular batch of student. In such cases, the student will be required to apply for such improvement after the declaration of Results by University in the said year, to the Dean/ Director of the School/ Institute. The revised marks, if received from the School / Institution concerned at least 5 days before the commencement of Semester End Examinations shall be considered, otherwise the previous marks, already obtained by the student shall be taken into account without any modification. If such students do not re-appear in the Semester End Examinations, the improvement in teacher's continuous evaluation shall not be taken into account for result declaration.

## 1.5 Promotion Policy to the Next Academic Year

- 1.5.1 Upon declaration of the results of the semesters of an academic year, a student failing in any course or courses aggregating more than 8 course credits shall not be eligible for promotion to the next academic year.
- 1.5.2 A student who fails to get promoted to next academic year for the reason of deficiency in required credits, as stated above or due to being detained in a particular academic year, will automatically be declared to have taken an academic break. Such students shall be eligible to repeat such examinations as per 1.4.3 so as to obtain sufficient credits to be promoted to the next academic year. Such a student shall not be required to repeat any course that student has already completed successfully.

## 1.6 Semester End Examination

- 1.6.1 For the studio/ practical examination of the courses, every student in each course shall be evaluated by two external examiners. The sessional work, project, design, research, etc. shall be assessed by this jury of external examiners.
- 1.6.2 For the Final Year Course of Urban Design Thesis (MUD 401) every student shall be evaluated by two external examiners and an examiner is to examine not more than 05 students in a day. The Exam may be conducted over a period of two days.
- 1.6.3 Examinations for all theory courses shall be held at the end of semester. The course content of each theory course has been divided into Four Units. The question paper must cover the entire syllabus with at least one question from each of the four units. The question paper will be for a maximum of 75 marks. Adequate choice must be provided to the students. The duration of examination shall be three hours for theory courses.
- 1.6.4 The payment for each examiner shall be made as per the approved rates of the University.
- 1.6.5 Ordinance 11 shall be applicable to the conduct of teaching and examination of this programme of study.



SEMESTER I										
			Teaching Scheme				Evaluation Scheme			
							Max. Marks			
							Continuous Evaluation (CE)	Semester End Evaluation (SEE)		
Track	Course Code	Course Name	Type	Lecture (L) Hrs/Wk	Studio (S) Hrs/Wk	Credits	Internal	Theory Exam	Practical / Viva Voce	Total
PST 1	MUD 101	Urban Design Studio - I	Core Studio	--	12	12	50	--	50	100
PST 2	MUD 103	Digital Technology for Urban Design	Core Studio	--	4	4	50	--	50	100
PST 2	MUD 104	Research Methodologies for Urban Design	Core Studio	--	2	2	50	--	50	100
KT 4	MUD 102	Site Planning and Landscape	Core Studio	--	4	4	50	--	50	100
KT 1	MUD 111	History of Indian Urbanism	Core Theory	2	--	2	25	75	--	100
KT 2	MUD 112	Urban Design Theories - I	Core Theory	2	--	2	25	75	--	100
KT 3	MUD 113	Techniques of Physical Planning	Core Theory	2	--	2	25	75	--	100
		Total		6	22	28				700

SEMESTER II										
Course Details			Teaching Scheme				Evaluation Scheme Max. Marks			
							Continuous Evaluation (CE)	Semester End Evaluation (SEE)		
Track	Course Code	Course Name	Type	Lecture (L) Hrs/Wk	Studio (S) Hrs/Wk	Credits	Internal	Theory Exam	Practical / Viva Voce	Total
PST 1	MUD 201	Urban Design Studio - II	Core Studio	--	12	12	50	--	50	100
PST 2	MUD 202	Advanced Computer Applications in Urban Design	Core Studio	--	4	4	50	--	50	100
KT 1	MUD 211	History of Western Urbanism	Core Theory	2	--	2	25	75	--	100
KT 2	MUD 212	Urban Design Theories - II	Core Theory	2	--	2	25	75	--	100
KT 3	MUD 213	Planning City for Environment & Sustainability	Core Theory	2	--	2	25	75	--	100
KT 4	MUD 214	Urban Mobility	Core Theory	2	--	2	25	75	--	100
KT 5	MUD 221	Urban Narratives*	Elective	--	4	4	50	--	50	100
	MUD 222	Fundamentals of Conservation *								
	MUD 223	Urban Sociology & Politics*								
	MUD 224	Open Electives *- Online SWAYAM MOOC Courses**								
	MUD 225	General Electives #	Elective NUES	--	--	2#	100			100#
		<b>Total</b>		<b>8</b>	<b>20</b>	<b>28</b>				<b>700 ##</b>

\* A Student is required to opt for Any One of the Four Elective courses.

\*\* In case a student opts for Online SWAYAM MOOC Courses, he/she is required to submit the name, credits, duration, date of exam, etc. of the SWAYAM MOOC course to the Dean/ Director of the School/ Institute for Approval at a time specified by the School. The course must offer credits equal to or more than 4 credits, but only 4 credits shall be considered towards credits earned. The student shall inform the Dean/ Director of the School/ Institute the name, credits, duration, date of exam, etc. of the Online MOOC Course Registered for. The same shall be intimated to the Controller of Examinations. The student is required to register for the final proctored exams conducted by SWAYAM and attend in-person at designated centres on specified dates. The student is required to submit a copy of the SWAYAM Certificate towards earning the credits. In case a student fails to earn the credits for any reason, he/she would be allowed to opt for any of the Offline Elective courses ONLY in the subsequent year, when the course is offered again.

# A Student would be required to opt for Any One of the General Elective courses of 2 Credits as and when mandated by the University (NSS/ NCC/ Yoga/ etc.), subject to the approval of the Academic Council.

## Total marks become 800 in case General Elective courses are mandated by the University.

SEMESTER III										
Course Details			Teaching Scheme				Evaluation Scheme Max. Marks			
Track	Course Code	Course Name	Type	Lecture (L) Hrs/Wk	Studio (S) Hrs/Wk	Credits	Continuous Evaluation (CE)	Theory Exam	Semester End Evaluation (SEE) Practical / Viva Voce	Total
PST 1	MUD 301	Urban Design Studio - III	Core Studio	--	12	12	50	--	50	100
PST 2	MUD 302	Thesis Research Seminar	Core Studio	--	6	6	50	--	50	100
KT 3	MUD 311	Urban Governance, Administration & Legislation	Core Theory	2	--	2	25	75	--	100
KT 4	MUD 312	Housing – Development & Policy	Core Theory	2	--	2	25	75	--	100
KT 4	MUD 313	Urban Services & Infrastructure Planning	Core Theory	2	--	2	25	75	--	100
KT 5	MUD 321	Urban Heritage *	Elective	--	4	4	50	--	50	100
	MUD 322	Inclusive Cities & Placemaking *								
	MUD 323	Urban Land Economics & Real Estate Development *								
Total				6	22	28				600

\* A Student is required to opt for Any One of the Three Elective courses.



SEMESTER IV										
			Teaching Scheme				Evaluation Scheme			
			Type	Lecture (L) Hrs/Wk	Studio (S) Hrs/Wk	Credits	Continuous Evaluation (CE)	Semester End Evaluation (SEE)		Total
Track	Course Code	Course Name					Internal	Theory Exam	Practical / Viva Voce	
PST 1	MUD 401	Urban Design Thesis	Core Studio	--	20 *	20	50	--	50	100
KT 3	MUD 411	Development Practice, Project Management & Finance	Core Theory	2	--	2	25	75	--	100
		<b>Total</b>		<b>02</b>	<b>20</b>	<b>22</b>				<b>200</b>

\* The Urban Design Thesis studio hours are to be divided into two components:-

- Studio Faculty Contact – 8 hrs
- Self- Study– 12 hrs  
(drawing work, library research, site visits, data collection, and other related activities)

**SEMESTER I**  
**COURSE NAME- URBAN DESIGN STUDIO - I**  
**COURSE CODE- MUD 101**

**Pedagogy and Evaluation:**

Lecture (L) Hrs/Wk	Studio (S) Hrs/Wk	Credits	Internal	Theory Exam Marks	Practical / Viva Voce Marks	Total Marks
-	12	12	50	-	50	100

**Objective:**

The course introduces application of analytical methods drawn from the theory courses and understand the various tools of analysis through study of small urban areas of suitable size and also complements them. Studio exercises will introduce intervention at different scales ranging from architectural to regional.

**Studio Exercises:**

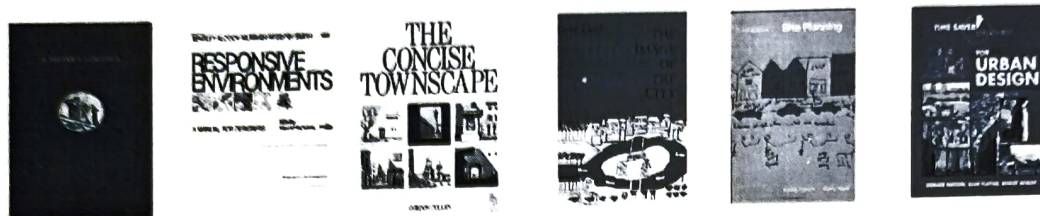
• **Urban Space and Activity Study**

Documentation of an area by denotation, drawings, connotation, graphics and writing. This would be done under the following 7 processes mentioned at A to G. The area would be selected so that the components of its fabric are amenable to illustration of attributes given from 1 to 7 and any other.

- A. **Base Information and Knowledge generation process-** Understanding, Interpretation and analysis through following methods of data acquisition and tools:
  - (1) Identification of chosen area in different scales from architectural to regional
  - (2) Static Attributes: Morphology, Building, Types, Typology, Open Space Typology, Path/Street Typology.
  - (3) Dynamic Attributes - Movement systems, Structure and Morphology of functions, Distribution of uses, etc.
  - (4) Quality of Environment, mapping environmental resources
  - (5) Perception recording: Visual and Experiential
  - (6) Social-Economic Attributes: Surveying through observation & interaction, collection of secondary data from reliable sources.
  - (7) Cultural Attributes.
- B. **Learning presentation of the Chronological History of genesis and evolution-** through retrospective analysis using secondary and primary data of attributes in Part A above.
- C. **Learning the Idea of 'Context'-** from lower scale to higher scale, Physical and non all non-physical attributes.
- D. **Synthesis-** Statements of Issues, Transformation, Potential, Constraints and Opportunities.
- E. **Preparation of Proposed Comprehensive 'Structure Plan' Set** with graphics and text by using the tools above.
- F. **Demonstration of Design Interventions:** transformative proposition, new propositions, inserts, amalgamations and additions and extensions, and simple guideline suggestions.
- G. **Preparing a Report.**

**Learning Outcomes:** Capability of working with Fundamental working methods and tools. Comprehending scope of work in handling urban design exercises in subsequent studio exercises and studies.

**Recommended Readings,** In addition to theory course readings as necessary:



- 1 Alexander, C. (1977) *A Pattern Language: Towns, Buildings, Construction*. NY: Oxford University Press.
- 2 Bentley, I. et al. (1985) *Responsive Environments: A Manual for Designers*. London: Architectural Press.
- 3 Broadbent, G. (1990) *Emerging Concepts in Urban Design*. London: Taylor & Francis Ltd.
- 4 Cullen, G. (1971) *The Concise Townscape*. NY: Van Nostrand Reinhold.
- 5 Greed, C. & Roberts, M. (2016) *Introducing Urban Design: Interventions and Responses*. NY: Routledge
- 6 Lynch, K. (1960) *The Image of the City*. Cambridge : Harvard University Press.
- 7 Moughtin, J.C. (2007) *Urban Design: Street and Square*. Routledge
- 8 Moughtin, J.C. (2016) *Urban Design: Green Dimensions*. Routledge
- 9 Sitte, C. (orig.1889, 1965.) *City Planning According to Artistic Principles*. NY: Random House.
- 10 Spreiregen, P.D. (1965) *Urban Design: The Architecture of Towns and Cities*. NY: Mcgraw-hill Inc
- 11 Watson, D. (ed.) 2003 *Time Saver Standards for Urban Design*. McGraw Hill.



**SEMESTER I**  
**COURSE NAME- SITE PLANNING AND LANDSCAPE**  
**COURSE CODE- MUD 102**

**Pedagogy and Evaluation:**

Lecture (L) Hrs/Wk	Studio (S) Hrs/Wk	Credits	Internal	Theory Exam Marks	Practical / Viva Voce Marks	Total Marks
-	6	6	50	-	50	100

**Objective:**

To provide an understanding of the ecological aspects of large sites and develop skills for comprehensive design incorporating various infrastructure and services related to site planning.

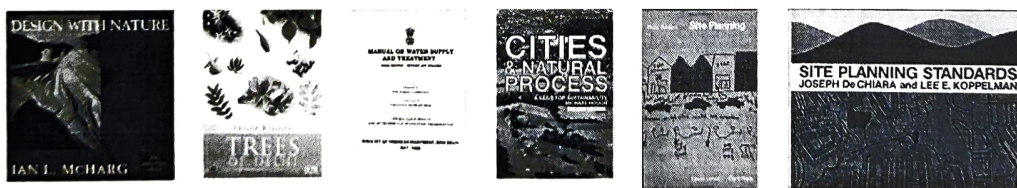
**Studio Exercises:**

- **Understanding Basic Principles of Ecology and Site Planning**
  - Introduction to ecology and site planning as an approach
  - Ecological Planning- Theory, Process and Approach, Historical evolution of Landscape Urbanism
  - Methods of Site Surveys and overlays
  - Site resource systems: Physiography; Geology and soils; Hydrology; flora and fauna; biodiversity and natural conservation zones; Microclimate; Cultural resources
  - Reading contours, graphical representation and interpolation, Slope and Gradient analysis; Aspect analysis, Drainage analysis, site level stormwater drainage systems, determination of catchment areas; Site Grading, cut and fill analysis; drainage elements: swales and culverts, etc., Road Layout and Parking, Grading and storm water of Roads, parking lots, paths and plazas, etc.
  - Urban Blue-Green Infrastructure Planning- approaches, components and strategies for water supply, disposal and treatment of sewerage, stormwater and solid waste.

• **Learning Application of Principles of Ecology and Site Planning on a Chosen Site**

A suitable site, preferably sloping with a multitude of natural and man-made features, shall be selected. The students are required to map the various attributes of the site. After detailed site evaluation and analysis of all the parameters, the students shall design a project with multiple functions with an emphasis on the site planning, ecological and infrastructure aspects.

**Recommended Readings:**



- 1 Arnold, H. F. *Trees in Urban Design*. NY: Van Nostrand Reinhold
- 2 Arora, A. (1991) *Delhi Ridge Forest*. New Delhi: Kalpavriksha.
- 3 CPHEEO Manuals on Storm Water Drainage, Water Supply and Sewerage, Waste Management, New Delhi.
- 4 De Chiara, Joseph (1986) *Site Planning*. NY: McGraw-Hill Book Company.
- 5 Hough, M. (1989) *City Form and Natural Process: Towards a New Urban Vernacular*. Routledge
- 6 Howard, E. (1946) *Garden Cities of Tomorrow*. London: Faber & Faber.
- 7 Jacobs, P. and Way, D. (1968) *Visual Analysis of Landscape Development*. Cambridge: Harvard University Press.
- 8 Krishen, P. (2006) *Trees of Delhi*, New Delhi: DK Publishing
- 9 Lynch, K., Hack, G. (1962) *Site Planning*. Cambridge: MIT Press.
- 10 McHarg, Ian L. (1969) *Design with Nature*. Cambridge: MIT Press.
- 11 Robinette Gary O. (1983) *Landscape Planning and Energy Conservation*, NY: Van-Nostrand Reinhold.
- 12 Rohilla, S.K. Jainer, S. & Matto, M, (2017) *Green Infrastructure: A Practitioner's Guide*. N Delhi: CSE
- 13 Thomas H Russ, T. H. (2002) *Site Planning And Design Handbook*. McGraw Hill Professional.

SEMESTER- I

COURSE NAME- DIGITAL TECHNOLOGY FOR URBAN DESIGN

COURSE CODE- MUD 103

**Pedagogy and Evaluation:**

Lecture (L) Hrs/Wk	Studio (S) Hrs/Wk	Credits	Internal	Theory Exam Marks	Practical / Viva Voce Marks	Total Marks
-	4	4	50	-	50	100

**Objective:**

To introduce relevant computer applications such as Geographical Information Systems and other software systems including 3D computation tools for documentation, mapping, analysis and presentation for urban design tasks, site planning etc. The theoretical base is explained followed by practical application of the software. This may be taken up for the ongoing studio exercises or independent assignments.

**Studio Exercises:**

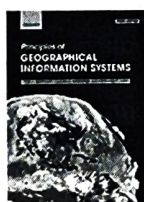
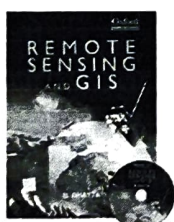
• **Understanding Basic Principles and Application of Relevant Computer Applications and Softwares**

- Introduction to Remote Sensing and its applications.
- Introduction to GIS, Data vs Information, Definitions, Purpose of GIS.
- Application of GIS in Urban Design, different components of GIS, Coordinate system and Geocoding
- GIS and Data Models- Types of data- Raster and Vector, Triangulated Irregular Network Data Model, Non-spatial Data (Attributes)
- GIS Analytical Operations, Georeferencing
- Creating maps – symbology and visualization, annotations, etc.
- National Spatial Data Infrastructure in India, National Urban Information system, National Map Policy
- Other modelling and data analysis software

• **Practical Application of different software on Urban Design exercises**

Short mapping exercises may be given. The Urban Design Studio Project may also be used to demonstrate the learnings.

**Recommended Readings:**



- Bhatta, B. (2011) *Remote Sensing and GIS*. India: OUP.
- Burrough, P. A., McDonnell, R. A. and Lloyd, C. D. (2015) *Principles of Geographical Information Systems*. Oxford : OUP.
- Chang, K. (2015) *Introduction to Geographic Information Systems*. McGraw-Hill Education.
- Ian, H. (2010) *An Introduction to Geographical Information Systems*. Pearson Education.
- Kunze A., Burkhardt R., Gebhardt S., Tuncer B. (2012) 'Visualization and Decision Support Tools in Urban Planning' in: Arisona S.M., Aschwanden G., Halatsch J., Wonka P. (eds) *Digital Urban Modelling and Simulation. Communications in Computer and Information Science*, vol 242. Springer, Berlin, Heidelberg. [https://doi.org/10.1007/978-3-642-29758-8\\_15](https://doi.org/10.1007/978-3-642-29758-8_15)
- Longley, P. A. et al. (2010) *Geographic Information Systems and Science*. John Wiley & Sons.
- Mesev, V. E. (2003) *Remotely Sensed Cities*. London: Taylor and Francis.
- Weng, Q. (2011) *An Introduction to Contemporary Remote Sensing*. McGraw-Hill Education.



**SEMESTER-** I  
**COURSE NAME-** RESEARCH METHODOLOGIES FOR URBAN DESIGN  
**COURSE CODE-** MUD 104

**Pedagogy and Evaluation:**

Lecture (L) Hrs/Wk	Studio (S) Hrs/Wk	Credits	Internal	Theory Exam Marks	Practical / Viva Voce Marks	Total Marks
-	2	2	50	-	50	100

**Objective:**

To introduce various paradigms, methods and processes of research, in order to understand the significance of the same with reference to urban design and to develop skills of conducting and communicating research.

**Studio Exercises:**

• **Understanding Research**

- Introduction to the need, relevance and role of research in Urban Design.
- Design of research and the process of formulating a research project.
- Types of research, their advantages, disadvantages and applications.
- Research design and methodologies used for research in Urban Design and Urban Studies
- Methods of data collection and data analysis, etc. Qualitative and Quantitative Methods, Reading Census Data and Projections
- Aspects of Technical writing.
- Referencing-Harvard/APA
- Introduction to cyber security and laws related to the same including Intellectual Property Rights.
- Introduction to software for checking plagiarism.

Students are required to practice the above aspects of research through short exercises, like literature review, data collection and analysis, etc.

**Recommended Readings:**



- Creswell, J.W. (2003) *Research Design: Qualitative, Quantitative and Mixed Methods Approaches*, Sage.
- Crotty, M. (2003) *The Foundations of Social Research: Meaning and Perspective in the Research*, London: Sage.
- De Vaus D.A (2002) *Surveys In Social Research*. New Delhi: Rawat Publications.
- Denzin, N.K.; and Lincoln, Y.S.; (Eds.). (1994) *Handbook of Qualitative Research*. London: Sage Publications.
- Dey, I. (1993) *Qualitative Data Analysis : A User Friendly Guide for Social Scientists*. London :Routledge
- Dwivedi, R.S.(1997) *Research Methods in Behavioral Sciences*. Macmillan India Limited
- Gibbs, Jac P. (1960) *Urban Research Methods*. NY: D Van Nosttrand Co. Inc.
- Goode, W.J. and Hatt P.K. (1982) *Methods in Social Research*, NY: McGraw-Hill Inc.
- Groat, L & Wang, D. (2002) *Architectural Research Methods.*, NY : John Wiley and Sons Inc.
- Kothari, C.R. (1991) *Research Methodology-Methods and Techniques*. New Delhi: Wiley Eastern Limited.
- Leedy, P. D. *Practical Research: Planning and Design*. MacMillan Publishing Co.
- Machi, L.A. and McEvoy, B.T. (2012) *The Literature Review, Six Steps to Success*, Sage, New Delhi.
- Panneerselvam, (2012) *Research Methodology*. New Delhi: Prentice Hall of India.
- Patten, Mildred L. & Newhart, M. (2018) *Understanding Research Methods: An Overview of the Essentials*. NY: Routledge.
- Sople, (2012) *Managing Intellectual Property: The Strategic Imperative*. New Delhi: Prentice Hall of India.



**SEMESTER-** I  
**COURSE NAME-** HISTORY OF INDIAN URBANISM  
**COURSE CODE-** MUD 111

**Pedagogy and Evaluation:**

Lecture (L) Hrs/Wk	Studio (S) Hrs/Wk	Credits	Internal	Theory Exam Marks	Practical / Viva Voce Marks	Total Marks
2	-	2	25	75	-	100

**Objective:**

The course is an introduction and overview to the methods of understanding the historical background and context of development of urban settlements in the subcontinent. It discusses the social, cultural, economic, political and environmental factors that have contributed to the phenomenon of formation of towns and cities in various periods in Indian History through the writings of historians with diverse perspectives. It begins with an exposition of history as a method of understanding the 'urban'

**Teaching Instructions:** The course is structured with particular works of authors covering the aspect of urban issues in the respective historical periods organized in a chronological order from earlier to contemporary.

These texts are identified as the source of core readings. The Idea is not to memorize the texts. Identified Core Texts are a recommended and convenient source for preparing lectures and selective readings to be given to the students. The Idea is not to memorize the texts but to understand the concepts. The teacher may use the first week to introduce them and distribute selected parts in the form of a reader among the students and discuss them in the second week.

**Content:**

**Unit 1 History as Framework of Urban Study**

- Week 1&2-** History as a tool and framework for analysis. Sources and approaches to history writing in India. Political--ideas and institutions, social orders and changes; economic--mode of production, stages and evolution of ancient economy, Transition from ancient to medieval; and historical methods; archaeology in non-orientalist narrative as background of Indian Urbanity



Core Text:  
Ram Sharan Sharma,  
*India's Past*

- Week 3&4-** Study of Archaeology and history of city in India, Ancient and Historic urban revolutions, Ancient Trade Routes. Temple cities, land endowments by royalties to deities. Vijayanagar Chola Madurai Tanjore. Buddhist trade routes and cities in the North, Pataliputra, Vaishali, Kaushambi, Focus on South India



Core Text:  
R. Champakalakshmi  
*Trade Ideology and Urbanization*

## Unit 2 Histories - Medieval and Late Medieval

- **Week 5&6-** Medieval North & Central India Turkish Mughal Delhi Agra Murshidabad Dhaka Gaur Mysore Rajasthan Gujarat Maharashtra and other parts of India. Pilgrimage towns of India. Appreciation of nature of the unique Indian character of Urbanity persisting till date.
- **Week 7&8-** Princely States and small towns in late medieval India. Evolution of North Indian towns and merchant communities from the decline of Mughal dominion consolidation of mature Victorian empire Ganges Valley in the eighteenth century. new empire on this resilient network of towns, rural bazaars and merchant communities; indigenous forms of commerce and politics. social history of the towns under early colonial rule. Appreciation of the nature of urban environment still persisting in small Indian cities.

Towns and Cities of Medieval India



Core Text : Aniruddha Ray  
*Towns and cities of medieval India*



Core Text :  
C. A. Bayly *Rulers, Townsmen and Bazaars: North Indian Society in the Age of British Expansion 1770-1870.*

## Unit 3 History of Colonial Indian Development

- **Week 9&10-** European Cantonments, Hill stations District Headquarters. Emergence of colonial urban society economies and cultures and administrative structures as core of colonial development. Formation of Local governments Municipalities Early Government /Public Works.
- **Week 11&12-** 19th and early 20 century Madras, Calcutta & Bombay . Development of Indian Metropolitan urbanity, Cosmopolitan city, Mercantile city, Industrialisation and introduction of modern engineering services, Municipal Corporations, City Improvement Trusts.



Core Text: Anthony D King  
*Colonial Urban Development: Culture, Social Power and Environment*

Select from several available literature

## Unit 4 Metropolitan & Early Modern India

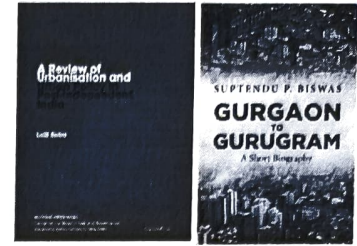
- **Week 13 & 14-** Post independence metropolis, new political environment, refugees and intercity migration, development of unauthorized habitation and land squatting, expansion of city fringe and marginal culture, translocation of Industries and Old multinationals.



Core text : Ramachandran  
*Urbanization and Urban Systems in India*



- **Post- Independence Urbanization Policy.** Planning commission policies for cities in India. Government support for development of cities. Existing metros and new small towns. Emergence of Development Authorities.
- **Case of The character of outer or 'Edge' city in India.**



Core Text: Lal it Batra *A Review of Urbanisation and Urban Policy in Post-Independent India*  
S P Biswas *Gurgaon to Gurugram: A Short Biography*

- **Week 15 & 16-** Recapitulation and revision term papers and Minor Test.

### Recommended Readings:

- 1 Batra, L. (2009) *A Review of Urbanisation and Urban Policy in Post-Independent India*. JNU
- 2 Bayly, C.A. (2012) *Rulers, Townsmen and Bazaars: North Indian Society in the Age of British Expansion 1770-1870*. Oxford University Press.
- 3 Biswas, S.P. (2021) *Gurgaon to Gurugram: A Short Biography*. New Delhi: iRupa Publications.
- 4 Champakalakshmi, R. *Trade Ideology and Urbanization*. Oxford University Press.
- 5 Correa, C. (1989) *The New Landscape: Urbanization in the Third World*. Butterworth Architecture
- 6 Correa, C. (2012) *A Place in the Shade: The New Landscape and Other Essays*. Hatje Cantz
- 7 King, A.D. ( 2010) *Colonial Urban Development: Culture, Social Power and Environment*. Routledge
- 8 Ramachandran R. (1997) *Urbanization and Urban Systems in India*. Oxford University Press.
- 9 Ray, A. ( 2016) *Towns and Cities of Medieval India: A Brief Survey*. Routledge
- 10 Sharma, Ram S. (2005) *India Ancient Past*. Oxford University Press.



**SEMESTER-** I  
**COURSE NAME-** URBAN DESIGN THEORIES - I  
**COURSE CODE-** MUD 112

**Pedagogy and Evaluation:**

Lecture (L) Hrs/Wk	Studio (S) Hrs/Wk	Credits	Internal	Theory Exam Marks	Practical / Viva Voce Marks	Total Marks
2	-	2	25	75	-	100

**Objective:**

The course presents selected important classic ideas of appreciation of City in design terms, as developed mostly in Europe and America. It is to describe how lessons were learned, often from observing and analysing the traditional settlements in qualitative, perceptual and aesthetic terms, to highlight deficiencies of early Modern Urban Planning in recognizing and respecting these aspects that are not necessarily registered in a predominantly quantitative process. The selected and prescribed works are best representative of the each distinct and respective approach. Each of these approaches provide its own tool of application for analysis and design. The course would develop sufficient clarity about alternative approaches to understand the city and to intervene.

**Teaching Instructions:** The course is structured with key works of leading authors, each covering different Ideologies, Theories and Approaches; organised categorically and historically. Texts identified are recommended as a convenient source for preparing the lectures and selective readings to be given to the students

The idea is not to memories the texts but to understand the concepts. The teacher may use the first week to introduce them and distribute selected parts in the form of a reader among the students and discuss them in the second week

**Content:**

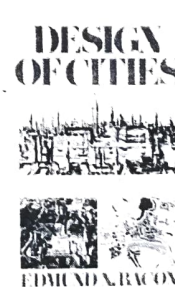
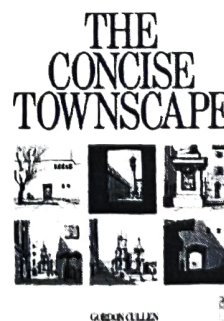
**Unit 1 Empirical Approaches**

- Week 1 & 2 Figure Ground and Streets:** Camillo Sitte's City Building According to Artistic Principles, the earliest modern texts propagating the **Empiricist Approach** of studying the city through drawings of its built for open space system by the method of figure ground drawings- Nolli's Diagram method. Street as the only and most important component of city Study of Streets by Alan Jacob with the application of Nolli's method.
- Week 3 & 4 Townscape and Serial Vision:** Gordon Cullen's approach of seeking visual coherence in built form of settlements as a tool of analysis and application, Edmund Bacon's Eight Elements of Involvement as parameters of good urban form.



**Core Texts:**

1. Alan Jacobs *Great Streets*
2. Stanford Anderson *On Streets*



**Core**

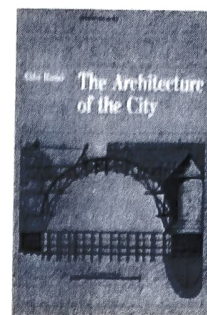
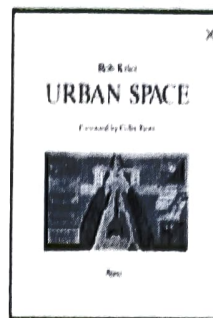
1. Gordon Cullen *The concise Townscape*

**Text :**

## Unit 2 Rationalist and Structuralist Approaches

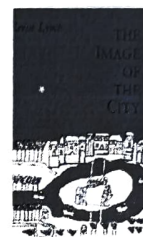
- **Week 5 & 6 Typology & Morphology:** Concept of Type and Typology as a **Rationalistic** tool for analysing and conceptualizing built form as different from modern functional typology of buildings. Ideas of Typology in Durand, Rossi, Krier, Urban Artefact, Focus and Fabric, Monument and Object and Locus Morphology as antithetical to Typology
- **Week 7&8 Image Structure:** The American method of Five points of city structure Path Node Landmark District edge as a convenient tool of analysis for Urban design

## 2. Edmund Bacon *Design of Cities*



Core text:

1. Anthony Vidler *Third Typology*
2. Aldo Rossi *Architecture of the City*
3. Rob Krier *Urban Space*

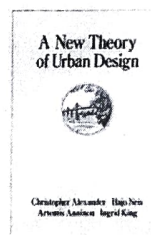


Core Text:

1. Kevin Lynch *Image of the City*
2. Kevin Lynch *Good city Form*

## Unit 3 Wholeness

- **Week 9 & 10 Holistic Scientific Approach :** Conceptualizing city with an eye to wholeness, sense of centre and sense of harmony. Seeking for a scientific mathematical and objective method of holistic design. Learning from Christopher Alexander's explorations. Salingaros's computational development following Alexander.



Core Text:

1. Christopher Alexander *A New Theory of Urban Design*
2. Nikos Salingaros *Principles of Urban Structure*

## Unit 4 Building Codes of Quality Control

- **Week 11 & 12 Old Land Use Structure:** principle based on functional typology as a planners' of organizing city. The origin of modern master planning method and zoning and building bye laws..
- **Andre Duany's Concept of New Urbanism** of creating environments of traditional quality of neighbourhoods and urban precincts with system of Form based codes, and special bye laws.



Core Text:

1. Stuart Chapin *Urban Land use Planning*
2. Andre Duany *New Urbanism*



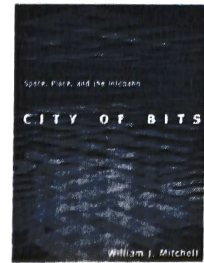


### Week 13 & 14 Deterritorialization Virtualisation.

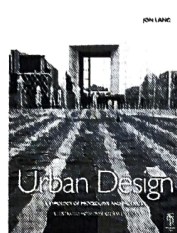
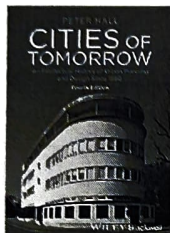
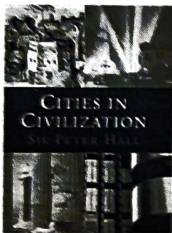
- Traditional Real city and urban processes is giving way to virtual and language of city. City reading is transforming rapidly with rapid change of technology and communication and high mobility of Data. City may now have to be theorized differently in the changing world.

Core Text :

1. William J. Mitchell *City of Bits – Space, Place & the Infobahn*



### Recommended Readings:



- Alexander, C. (1987) *A New Theory of Urban Design*. NY: Oxford University Press.
- Bacon, Edmond N. (1976) *Design of Cities*. Penguin Books.
- Broadbent, G. (1990) *Emerging Concepts in Urban Design*. London: Taylor & Francis Ltd.
- Chapin, F. S., & Kaiser, E. J. (1979). *Urban land use planning*. Urbana, University of Illinois Press.
- Collins & Collins (2006) *Camillo Sitte: The Birth of Modern City Planning: With a Translation of the 1889 Austrian Edition of His City Planning According to Artistic Principles*. Dover Publications Inc.
- Cullen, G. (1971) *The Concise Townscape*. NY: Van Nostrand Reinhold.
- Duany, A. *Charter of the New Urbanism*.
- Hall, P. (1998) *Cities in Civilization*. Pantheon.
- Hall, P. (2014) *Cities of Tomorrow: An Intellectual History of Urban Planning and Design Since 1880*. Wiley-Blackwell.
- Jacobs, A. B. (1995) *Great Streets*. Cambridge Mass.: MIT Press.
- Krier, R. (1979) *Urban Space*. NY: Rizzoli.
- Lang, J. (2005) *Urban Design*. Routledge.
- Lynch, K. (1960) *The Image of the City*. Cambridge : Harvard University Press.
- Mitchell, W. J. (1996) *City of Bits – Space, Place & the Infobahn*. Cambridge Mass.: MIT Press.
- Rossi, A. (1984) *Architecture of the City*. Cambridge Mass.: MIT Press.
- Rowe, C. & Koetter, F. (1979) *Collage City*. Cambridge Mass.: MIT Press.
- Salinger, N. (2008) *Principles of Urban Structure*. Techne Press.
- Spreiregen, P.D. (1965) *Urban Design: The Architecture of Towns and Cities*. NY: McGraw-hill Inc.
- Trancik, R. (1986) *Finding Lost Space*, Ch 4: The Theories of Urban Spatial Design pp.97---124, NY: Van Nostrand.
- Vidler, A (2016) *Third Typology and Other Essays*. Artifice Books on Architecture.



**SEMESTER-** I  
**COURSE NAME-** TECHNIQUES OF PHYSICAL PLANNING  
**COURSE CODE-** MUD 113

**Pedagogy and Evaluation:**

Lecture (L) Hrs/Wk	Studio (S) Hrs/Wk	Credits	Internal	Theory Exam Marks	Practical / Viva Voce Marks	Total Marks
2	-	2	25	75	-	100

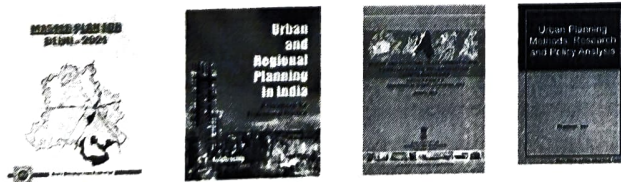
**Objective:**

To provide an understanding of the principles, tools and techniques of city planning as practised in India and the global west. Delhi Master Plan is to be used as a case example for critical analysis of the planning process.

**Content:**

- Unit 1**
- Concepts, Theories and Models of Urban Planning
  - Urban Planning Terminologies and Definitions
  - Institutional structures for urban planning: Town and Country Planning Organization, Department of Town and Country Planning (State level), Development Authorities, Improvement Trust Boards, Urban Local Bodies
  - Constitutional provisions related to urban planning - DPC, MPC; Legislations relating to urban and regional planning: DDA, MMRDA
- Unit 2**
- Concepts of Development Plan, Structure Plans, Master Plan, Zonal Development Plans, Local Area Plans, Urban Renewal, Redevelopment, City Development Plans, Planned Unit Development etc.
  - Concepts of land use, zoning regulations, mixed-use development, SEZ, etc.
- Unit 3**
- Planning Techniques –
    - Surveys and Sampling
    - Evaluation of Planning Requirements
    - Planning Standards and Models
- Unit 4**
- Techniques of preparing base maps including understanding the concepts of scales, components and detailing for various levels of plans like regional plan, city plan, zoning plan, and local area plan.

**Recommended Readings:**



- 1 Aijaz, Rumi (December 2017): "Measuring Urbanisation in India", *ORF Issue Brief*, Issue No. 218
- 2 Bracken, I. (1999) *Urban Planning Methods: Research and Policy Analysis*, London : Methuen.
- 3 Bureau of Indian Standards, *National Building Code of India 2016*, BIS, GOI, New Delhi, 2016.
- 4 Delhi Development Authority, *Delhi Building Byelaws and Development Regulations as per Master Plan of Delhi 2021*, JBA Publishers, Delhi, 2012.
- 5 Delhi Development Authority, *Master Plan for Delhi 2021*, JBA Publishers, Delhi, 2012.
- 6 Keeble L. (1972) *Principles & Practice of Town and Country Planning*. London: The Estates Gazette Ltd.

- 7 Kopardekar & Diwan (1994) *Urban and Regional Planning – Principles, Practice and Law*
- 8 Kulshreshtha, S.K. (2012) *Urban and Regional Planning in India: A Handbook for Professional Practice*, New Delhi: Sage.
- 9 Kulshrestha S.K. (Ed. 2006) *Dictionary of Urban and Regional Planning*. Delhi: Kalpaz Publications,.
- 10 Ministry of Urban Affairs & Employment (G.O.I.), (1996) *Urban Development Plans Formulation and Implementation Guidelines*. New Delhi: ITPI
- 11 Ministry of Urban Affairs & Employment (G.O.I.), (2015) *The Urban and Regional Development Plan Formulation and Implementation (URDPFI) Guidelines*. New Delhi.
- 12 Singh V., Ahmed A., Sharma Y. (2020) *Unified Building Bye-Laws for Delhi 2016*, Society for Fundamental Research and Development, New Delhi.

SEMESTER- II  
COURSE NAME- URBAN DESIGN STUDIO - II  
COURSE CODE- MUD 201

**Pedagogy and Evaluation:**

Lecture (L) Hrs/Wk	Studio (S) Hrs/Wk	Credits	Internal	Theory Exam Marks	Practical / Viva Voce Marks	Total Marks
-	12	12	50	-	50	100

**Objective:**

The course introduces preparing stand-alone urban design scale development with respect to Existing Planning Regulations and without much restrictions.

**Studio Exercise/s:**

- **Design in a Greenfield Site, independent vacant land or in urban extension, with an emphasis on new development prospects.**
- A. Understanding the Legislative Framework
  - (1) Understanding of Master Plan, Zonal Plan, Sub Zonal Plans and Area development schemes.
  - (2) Understanding Zoning Plans, Density Regulations and other Development Guidelines, Bye laws
  - (3) Understanding TCP Regulations in India
  - (4) E.I.A Regulations and guidelines as applicable.
- B. Design Development
  - (1) Finalising the brief and scope of design.
  - (2) Analysis of Site and context, environmental issues and socio-cultural context.
  - (3) Overall Plans, Designs of Open space structure Movement structure Built Form for a community and variety of functions including Residential. Suggested main working scale is 1:1000
  - (4) Control regulations for individual development and projects within the overall plan.
  - (5) Selected components may be resolved at usual architectural scale.
  - (6) Connection with larger context; physical and non-physical may be explored at a higher scale.
  - (7) May explore project implementation strategies.

**Note:** The Project site may be chosen in Delhi or outside Delhi. Study Tour/s of up to 15 days duration maybe conducted and the educational task of the study tour will be assessed along with the studio work.

**Learning Outcome:** Ability of conceptualizing large scale problems and working out realistic, implementable solutions. Ability to extrapolate and experiment with new urban design ideas.



**Recommended Readings, In addition to theory course readings as necessary:**



- 1 Broadbent, Geoffrey (1990) *Emerging Concepts in Urban Space Design*. London: Van Nostrand Reinhold (International).
- 2 Correa, C. (2000) *Housing & Urbanisation*. Bombay: UDRI
- 3 Kanvinde, A.P. *Campus Design in India Experience of a Developing Nation*
- 4 Lynch, K., Hack, G. (1962) *Site Planning*. Cambridge: MIT Press.
- 5 McHarg, Ian L. (1969) *Design with Nature*. Cambridge: MIT Press.
- 6 Moughtin, J.C. (2007) *Urban Design: Street and Square*. Routledge
- 7 Moughtin, J.C. (2016) *Urban Design: Green Dimensions*. Routledge
- 8 Suzuki, H., Cervero, R. & Luchi, K. (2013) *Transforming Cities with Transit; Transit and Land-Use Integration for Sustainable Urban Development*. Washington DC: World Bank Publications
- 9 Watson, D. (ed.) 2003 *Time Saver Standards for Urban Design*. McGraw Hill.

**SEMESTER-** II  
**COURSE NAME-** ADVANCED COMPUTER APPLICATIONS IN URBAN DESIGN  
**COURSE CODE-** MUD 202

**Pedagogy and Evaluation:**

Lecture (L) Hrs/Wk	Studio (S) Hrs/Wk	Credits	Internal	Theory Exam Marks	Practical / Viva Voce Marks	Total Marks
-	4	4	50	-	50	100

**Objective:**

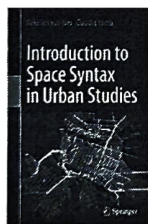
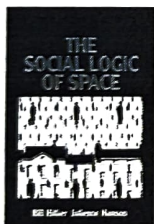
To introduce theories, techniques and advanced computer software related to agent based modelling, object oriented modelling, visual field analysis, etc.

**Studio Exercise/s:**

- Various theories related to understanding of cities through modelling like space syntax, etc.
- Computer based tools for modelling, simulation and decision making for urban design

Practical Application of different software on Urban Design exercises. Short mapping exercises may be given. The Urban Design Studio Project may also be used to demonstrate the learnings.

**Recommended Readings:**



- 1 Burrough, P.A. *Principles of Geographical Information Systems*. Oxford University Press.
- 2 DeMers, Michael N. *Fundamentals of geographical Information System*. Wiley & Sons, Inc.
- 3 Hillier B. and Hanson J. (1984) *The Social Logic of Space*, Cambridge: Cambridge University Press.
- 4 Korte, G. *The GIS Book* (5th ed.) Thomson Learning.
- 5 Nes, Akkelies van & Yamu, C. (2021) *Introduction to Space Syntax in Urban Studies*. Springer
- 6 Robinson, D. (2011) *Computer Modelling for Sustainable Urban Design : Physical Principles, Methods and Applications*. Routledge.

**SEMESTER-** II  
**COURSE NAME-** HISTORY OF WESTERN URBANISM  
**COURSE CODE-** MUD 211

**Pedagogy and Evaluation:**

Lecture (L) Hrs/Wk	Studio (S) Hrs/Wk	Credits	Internal	Theory Exam Marks	Practical / Viva Voce Marks	Total Marks
2	-	2	25	75	-	100

**Objective:**

The course is an introduction and overview to the historical methods of understanding the background and context of development, of urban settlements in the subcontinent. It discusses social, cultural, economic and environmental factors that contribute to the formation of towns and cities in various periods in Indian History through the writings of scholars with diverse perspectives. It begins with an exposition of the history as a method of understanding the 'urban'.

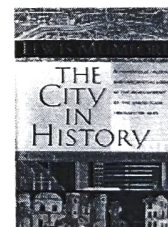
**Teaching Instructions:** The course is structured with key works of leading authors, each covering different Ideologies, Theories and Approaches; organised categorically and historically. Texts identified are recommended as a convenient source for preparing the lectures and selective readings to be given to the students

The idea is not to memorize the texts but to understand the concepts. The teacher may use the first week to introduce them and distribute selected parts in the form of a reader among the students and discuss them in the second week.

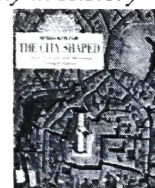
**Content:**

**Unit 1 Classical History of Urbanisation**

- Week 1&2- Philosophy of urbanization.** Significance of City in Human culture and civilization. Positive and negative aspects of urban civilization. The conflicts between tradition and modernity.
- Week 3&4- Pre Industrial Models** City as expression of culture creation of urban structures through space and time. Only Chosen (Selected) examples for understanding nature of European Medieval City Renaissance City and baroque City.



Recommended text: Louis Mumford, *The City in History*



Core text: Spiro Kostof, *City Shaped*.

**Unit 2 History of Modern Urbanisation Ideas**

- Week 5 &6.** An Ideal proposal for Industrial city represents the history of challenges to be addressed while undergoing modernization and technological transformation of city with modern systems of production and consumption.



Core text: Tony Garnier, *The Cite Industrielle*



- **Week 7&8 Quest** for a perfect modern city with ideal condition of life in harmony with nature. The concepts of new town and its anticipation of modern town planning practice almost till date in parts of the world particularly India.

Core text:  
Rosemary Wakeman,  
*Practicing Utopia*

practicing  
utopia

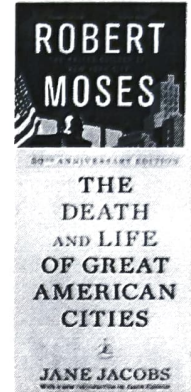


### Unit 3 Capitalist Megacity and Critical Resistance

- **Week 9 & 10.** Robert Moses' Exemplary Role of an administrator in city building in case of development of New York. A model followed by various authorities in developed countries.
- Jane Jacob's opposition to Moses and activism for low rise high density and human sensitive development. Jacobs allegiance to humanistic values of many American modern thinkers.

Core text:  
Pierre Christin,  
Olivier Balez,  
*Robert Moses*

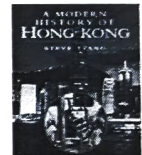
Jane Jacobs,  
*The Death and Life of Great American Cities*



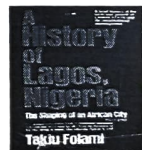
### Week 11 & 12 Large Asian and African Cities

- Hong Kong A cosmopolitan urbanism of an Asian Megacity with a colonial past, a mercantile tradition and a complex political dimension, The city of highest density of population of varied economic stratum.
- Lagos a metropolitan city with large number of people at BPL condition and 65% are urban poor and slum dwellers a city with high pollution level and infested with crime and an unique landform is an urban challenge

Core text: Steve Tsang  
*A modern history of Hong Kong*

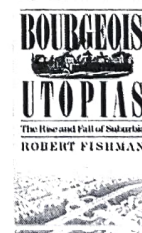


Core text:  
Takiu Folami, *History of Lagos, Nigeria: The Shaping of an African City*



### Unit 4 Week 13 & 14

- Phenomenon of spreading of the cities outward away from the centre in various ways. The different natures of the outer city in different contexts. In extreme cases leading to loss of the centre.

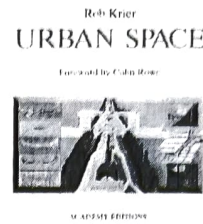
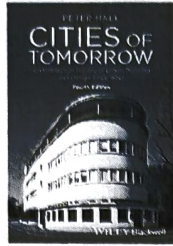
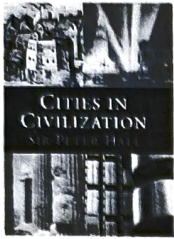


Core Text:  
Robert Fishman  
*Bourgeois Utopia*

### Week 15& 16

- **Recapitulation** and revision of term papers and Minor Test

### Recommended Readings:



- 1 Broadbent, G. (1990) *Emerging Concepts in Urban Design*. London: Taylor & Francis Ltd.
- 2 Christin, P & Balez, O, (2014) *Robert Moses* BAO Publishing
- 3 Folami, T. (1981) *History of Lagos, Nigeria: The Shaping of an African City*. Exposition of Florida
- 4 Garnier, T. (1969) *The Cite Industrielle*. Littlehampton Book Services
- 5 Hall, P. (1998) *Cities in Civilization*. Pantheon
- 6 Hall, P. (2014) *Cities of Tomorrow: An Intellectual History of Urban Planning and Design Since 1880*. Wiley-Blackwell
- 7 Jacobs, J. (1961) *The Death and Life of Great American Cities*. NY: Random House.
- 8 Koolhaas, R. (1997) *Delirious New York: A Retroactive Manifesto for Manhattan*. The Monacelli Press
- 9 Kostoff, S. (1991) *The City Shaped: Urban Patterns and Meanings Through History*. London: Thames and Hudson.
- 10 Krier, R. (1979) *Urban Space*. London: Academy Editions.
- 11 Mumford, L. (1961), *The City in History: Its Origins, Its Transformations, and Its Prospects*. Martin Secker and Warburg, London
- 12 Spreiregen, P.D. (1965) *Urban Design: The Architecture of Towns and Cities*. NY: McGraw-hill Inc
- 13 Tsang, S. (2007) *A modern history of Hong Kong: 1841- 1997*. HK: I.B. Tauris
- 14 Wakeman, R. (2016) *Practicing Utopia – An Intellectual History of the New Town*. University of Chicago Press

**SEMESTER-** II  
**COURSE NAME-** URBAN DESIGN THEORIES - II  
**COURSE CODE-** MUD 212

**Pedagogy and Evaluation:**

Lecture (L) Hrs/Wk	Studio (S) Hrs/Wk	Credits	Internal	Theory Exam Marks	Practical / Viva Voce Marks	Total Marks
2	-	2	25	75	-	100

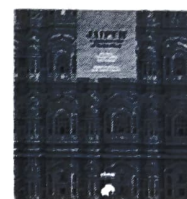
**Objective:**

The course covers contemporary developments in India in terms of significance of Urban design.

**Content:**

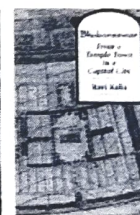
**Unit 1 Pre Independence Colonial and Modern Design and Planning**

- Pre independence early modern cities in India representing distinct Urban Design Characteristics like grid iron planning and urban block patterns. Social and political characteristics.
- Jaipur
- New Delhi



**Unit 2 Pre Independence Colonial and Modern Design and Planning**

- Chandigarh as first high modern city in India
- Notable state Capitals as examples of modern town planning.
- Bhubaneshwar
- Gandhi Nagar



Core Text:

1. Vikramaditya Prakash
2. Ravi Kalia

**Unit 3 Post Independence Urban design**

- Patterns of development in Industrial Townships Steel Plant towns, Mining towns
- Jamshedpur
- Rourkela, Durgapur, Bhilai



Core Text:  
Samir Das

**Unit 4**

- Improvement Trust works in Kolkata Delhi and Madras in 1930's
- Town Planning Schemes
- Improvement trusts
- Patterns of Public Housing

Core text: DDA source.

**Recommended Readings:**

Syllabus of M. ARCH. (URBAN DESIGN) w.e.f. Academic Session 2021-22

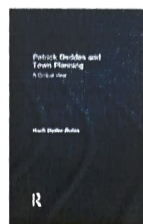
Approved By: Sub- Committee of Academic Council on

and Board of Studies, USAIP on 31st March, 2021

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- 1 Cedric, P. (1990) *Housing and Urbanisation: A Study of India*, Sage, London.
- 2 Correa, C. (1989) *The New Landscape: Urbanization in the Third World*. Butterworth Architecture
- 3 Correa, C. (2012) *A Place in the Shade: The New Landscape and Other Essays*. Hatje Cantz
- 4 Delhi Development Authority (2007) *Master Plan for Delhi, 2001*, DDA, New Delhi.
- 5 Delhi Development Authority (2007) *Master Plan for Delhi, 2021*, DDA, New Delhi.
- 6 Delhi Development Authority *Master Plan for Delhi, 1962*, DDA, New Delhi.
- 7 Hysler-Rubin, N. (2013) *Patrick Geddes and Town Planning: A Critical View*. Routledge.
- 8 Jain, A.K. (2019) *Housing for all*, Khanna Book Publishing Co., New Delhi.
- 9 Ministry of Urban Affairs & Employment (G.O.I.), (1996) *Urban Development Plans Formulation and Implementation Guidelines*. New Delhi: ITPI
- 10 Modak, N.V. (1971) *Town and Country Planning and Housing*. Orient Longman.
- 11 Prashad, D. & Chetia, S (eds.) (2010) *New Architecture and Urbanism: Development of Indian Traditions*. Cambridge Scholars Publishing
- 12 Ramachandran, R. (1989): *Urbanization and Urban Systems in India*. N Delhi: Oxford University Press
- 13 Smailes, Arthur E. (1969): "The Indian City: A Descriptive Model" in *Geographische Zeitschrift*, 57. Jahrg., H. 3, pp. 177-190, Available at: <http://www.jstor.org/stable/27816984>
- 14 Verma, G.D. (2001) *Slumming India*, Penguin, New Delhi

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**SEMESTER-** II  
**COURSE NAME-** PLANNING CITY FOR ENVIRONMENT & SUSTAINABILITY  
**COURSE CODE-** MUD 213

**Pedagogy and Evaluation:**

Lecture (L) Hrs/Wk	Studio (S) Hrs/Wk	Credits	Internal	Theory Exam Marks	Practical / Viva Voce Marks	Total Marks
2	-	2	25	75	-	100

**Objective:**

To provide an understanding of theories relating to environmental planning approaches and paradigms and the legislative mechanisms.

**Content:**

- Unit 1**
- History of Environmental Planning- International agreements, agendas and protocols, Green Agenda and Brown Agenda, Global environmental movement, Brundtland Commission's Report, Agenda 21, Club of Rome Report, UNEP charters, etc.
  - Environmental Planning Techniques- analysis of carrying capacity, ecological footprint and land suitability, vulnerability assessment, pollution modelling, etc.
- Unit 2**
- Statutory Acts, Regulations and Notifications- Environmental Protection Act of India, The National Green Tribunal Act its significance, Forest Act, Wildlife Act, Environmental Policy 2006, Coastal Regulation Zone Act, etc.
- Unit 3**
- Environmental Impact Assessment- Definition, methods, procedures – formats, important clearances, time frame, legal framework of EIA. Social Impact Analysis.
- Unit 4**
- Issues of Urban Environment, Environmental approaches to Urban Design- Case studies of application of concepts at various scales – regional, settlement and buildings (emphasis on urban eco systems green buildings, pollution control, energy use, water harvesting, waste treatment, solid waste management etc.) Relevant Case studies of EIA.

**Recommended Readings:**



- Brande & Vale, R. (1991) *Green Architecture: Design for a Sustainable Future*. Thames and Hudson Ltd.
- Dober, Richard P. (1969) *Environmental Design*. Van Nostrand Reinhold Co.
- Farr, D. (2007) *Sustainable Urbanism: Urban Design With Nature*. Hoboken, NJ: Wiley
- March, W.M. (1991) *Landscape Planning: environment Applications*. NY: Wiley and Sons.
- Moughtin, J.C. (2007) *Urban Design: Street and Square*. Routledge
- Moughtin, J.C. (2016) *Urban Design: Green Dimensions*. Routledge
- Rademacher, A. & Sivaramakrishna, K. (Eds) *Ecologies of Urbanism in India – Metropolitan Civility and Sustainability*. Hong Kong: Hong Kong University Press
- Russ, T.H. (2009) *Site Planning and Design Handbook*. McGraw-Hill Education
- Sustainable Urban Development*. Washington DC: World Bank Publications
- TERI (2011) *Mainstreaming Urban Resilience Planning in Indian Cities – A Policy Perspective*.
- TERI (2012) *Mainstreaming Climate Resilience in Urban Areas-A Case of Gorakhpur City*.
- Tolley, R. (Ed) (2003) *Sustainable Transport*. Woodhead Publishing Ltd.
- Wachter, S.M. and Birch, E.L. (2008) *Growing Greener Cities: Urban Sustainability in the Twenty First Century*. Philadelphia: University of Pennsylvania Press.





**SEMESTER-** II  
**COURSE NAME-** URBAN MOBILITY  
**COURSE CODE-** MUD 214

**Pedagogy and Evaluation:**

Lecture (L) Hrs/Wk	Studio (S) Hrs/Wk	Credits	Internal	Theory Exam Marks	Practical / Viva Voce Marks	Total Marks
2	-	2	25	75	-	100

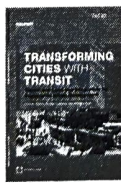
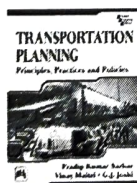
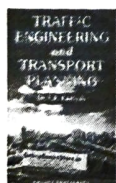
**Objective:**

To provide an understanding of the transportation needs, systems and planning to ensure mobility. The course introduces the students to issues related to traffic & transportation in cities and various planning tools & mechanisms used to provide urban mobility.

**Content:**

- Unit 1**
  - Importance and role of transport in urban design, Accessibility vs. Mobility
  - Interdependence of Urban Land Use, Land Form and Transportation, TOD, etc.
  - Types of Urban Mobility Systems- Pedestrian and NMV, IPT to public transport systems – BRT, MRTS, LRTs, etc.
  - Transport planning policies- National Urban Transport Policy, TOD: Definition, concepts and key components; Principles of TOD, planning norms and standards of TOD, pre-requisites of TOD, financing of TOD projects, role of stakeholders
- Unit 2**
  - Travel Demand Management- Trip generation, trip distribution, modal split and trip assignment, trip destination
  - Urban Transportation surveys: Definition of study area, zoning, types of surveys, Forecasting traffic in relation planned land use.
- Unit 3**
  - Transportation infrastructure- Principles of planning and design of road network and engineering classification of roads, intersections and elevated roads, pathways and pedestrian infrastructure
- Unit 4**
  - Issues of Walkability, Universal Access, Social, Economic and Environmental challenges to urban mobility

**Recommended Readings:**



- 1 Kadiyali, L.R. (2017) *Transport Engineering*. New Delhi: Khanna Book Publishing Co.
- 2 Sarkar, P.K., Maitri, V. and Joshi, G.J. (2014) *Transportation Planning: Principles, Practices and Policies*. New Delhi: Prentice Hall India
- 3 Saxena, S.C. (1989) *A Course in Traffic Planning and Design*. New Delhi: Dhanpat Rai and Sons.
- 4 Verma, A. and Ramanayya, T.V. (2014) *Public Transport Planning and Management in Developing Countries*, CRC Press, London: Taylor and Francis
- 5 Suzuki, H., Cervero, R. & Luchi, K. (2013) *Transforming Cities with Transit; Transit and Land-Use Integration for Sustainable Urban Development*. Washington DC: World Bank Publications
- 6 Ministry of Urban Development, Government of India (2006); *National Urban Transport Policy*.
- 7 UNEP (2013); *NMT Infrastructure in India: Investment, Policy and Design*.
- 8 *Parameters for the National Mission on Sustainable Habitat (NMSH) – Report of the Sub-Committee on Urban Transport*.
- 9 UTTIPEC Guidelines



**SEMESTER-** II  
**COURSE NAME-** URBAN NARRATIVES\*  
**COURSE CODE-** MUD 221

**Pedagogy and Evaluation:**

Lecture (L) Hrs/Wk	Studio(S) Hrs/Wk	Credits	Internal	Theory Exam Marks	Practical / Viva Voce Marks	Total Marks
--	4	4	50	--	50	100

**Objective:**

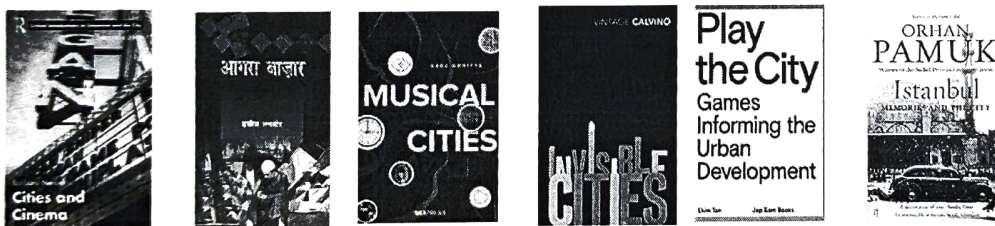
To appreciate how the idea of city is incorporated and represented in humanities, entertainment and gaming. How Gaming is used for understanding city.

**Studio Exercise/s:**

- **Exploratory Exercises to understand and analyse how city is represented in any two of the following fields:**

- Literature- Western and Indian as part of fictions and classics
- Visual Arts- public art, fine arts, design, cartoon and animation, photography, etc.
- Performance Arts- Performing arts Theatre, Cinema in City and City in Cinema;
- City and music- Sonic qualities of urban environment
- Gaming and Virtual Augmented and Immersive Reality, etc.

**Recommended Readings:**



- 1 Calvino, Italo, (1972) *Invisible Cities*, Martin Secker & Warburg Ltd
- 2 Mennel, B. (2008) *Cities and Cinema (Critical Introductions to Urbanism and the City)*. Routledge.
- 3 Pamuk, Orhan (2006) *Istanbul- Memories and the City*, Faber & Faber
- 4 Sara Adhitya (2017) *Musical Cities- Listening to Urban Design and Planning*. UCL Press.
- 5 Tan, Ekim (2018) *Play the City: Games Informing the Urban Development*. Onomatopoe
- 6 Tanvir, Habib (2006) *Agra Bazar*. Seagull Books.

**SEMESTER-** II  
**COURSE NAME-** FUNDAMENTALS OF CONSERVATION \*  
**COURSE CODE-** MUD 222

**Pedagogy and Evaluation:**

Lecture (L) Hrs/Wk	Studio(S) Hrs/Wk	Credits	Internal	Theory Exam Marks	Practical / Viva Voce Marks	Total Marks
--	4	4	50	--	50	100

**Objective:**

To introduce the Philosophies and Theories related to Architectural Conservation Practice.

**Studio Exercise/s:**

Exploratory Exercises to understand, discuss and analyse the following aspects of Architectural Conservation:

- **Archaeological Operation and Construction of history.**
  - A. Construction of the Past Archeology & History
  - B. Historicisms, Historical and Historic –Alois Reigl
  - C. Concept of Authenticity vs Originality, Significance and Value
  - D. Material and Techniques
- **Identification of situations and conditions of sense of loss**
  - A. Sense of Loss individual and collective, Threats
  - B. Sense of Possession and Sense of Belonging
  - C. Distinction between Sense of Loss and Desire for the past
  - D. Archaeological Monuments and Memento
  - E. Conservation Process versus Heritage Objects Practices Ideas.
- **Inspection of monuments and preparing of preliminary reports for conservation work.**
  - A. Resistance and Protection, Prevention and Maintenance.
  - B. Inaction to 'Conservation' – Ruskinian views of Architecture and conservation, The English Tradition
  - C. Monument appreciation and protection-ASI
  - D. Repair Restoration – SPAB and William Morris
  - E. Inspection of buildings and Diagnosis of problems
- **Combined final report and presentation.**
  - A. Historical practice of architectural repair, Italy Continental Europe
  - B. Conjecture Invention and Extension – Viollet- Le- Duc's work
  - C. Renewal and Recreation Wholes and Parts, objects, methods, processes
  - D. Indian, East Asian ideas, approaches and practices
  - E. Restoration as Modern creative artistic practice.- Concept of Tratteggio Cesare Brandi

**Recommended Readings:**



- 1 Feilden, B. (2023) *Conservation of Historic Buildings (3rd Ed)*. Routledge
- 2 Jukka Jokiletho, J. (2017) *A History of Architectural Conservation*. Routledge
- 3 Marshall, J. (1993) *Conservation Manual*. Asian Educational Services



**SEMESTER-** II  
**COURSE NAME-** URBAN SOCIOLOGY & POLITICS\*  
**COURSE CODE-** MUD 223

**Pedagogy and Evaluation:**

Lecture (L) Hrs/Wk	Studio(S) Hrs/Wk	Credits	Internal	Theory Exam Marks	Practical / Viva Voce Marks	Total Marks
--	4	4	50	--	50	100

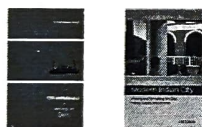
**Objective:**

To understand and analyse the political structure of Indian city with an objective to situate the role of urban design in the process of production and management of city.

**Studio Exercise/s:**

- **Exploratory Exercises to understand, discuss and analyse the following aspects of social and political life of city. Reports, seminars and presentation of case examples may be used.**
  - A. City as a human network, Social access
  - B. Informality and city
  - C. Space as contested domain – public/ private, concept and production of everyday space, etc.
  - D. Power Structure in City- Roles of Government, Public Representatives, Public associations, Residents Associations, Merchants Unions, etc.

**Recommended Readings:**



- 1 Lal, Vinay (ed) (2013) *The Oxford Anthology Of The Modern Indian City: Volume I: The City In Its Plenitude*. OUP.
- 2 Lal, Vinay (ed) (2013) *The Oxford Anthology of the Modern Indian City: Volume II: Making and Unmaking the City-Politics, Culture, and Life Forms*. OUP.
- 3 Singh, Khushwant (2001) *City Improbable: An Anthology of Writings on Delhi*. Viking

**SEMESTER-** II  
**COURSE NAME-** OPEN ELECTIVES \*- Online SWAYAM MOOC Courses\*\*  
**COURSE CODE-** MUD 224

**Pedagogy and Evaluation:**

Lecture (L) Hrs/Wk	Studio(S) Hrs/Wk	Credits	Internal	Theory Exam Marks	Practical / Viva Voce Marks	Total Marks
--	--	4	--	--	--	100

\* A Student is required to opt for Any One of the Four Elective courses.

\*\* In case a student opts for Online SWAYAM MOOC Courses, he/she is required to submit the name, credits, duration, date of exam, etc. of the SWAYAM MOOC course to the Dean/ Director of the School/ Institute for Approval at a specified time of the Semester. The course must offer credits equal to or more than 4 credits, but only 4 credits shall be considered towards credits earned. The student shall inform the Dean/ Director of the School/ Institute the name, credits, duration, date of exam, etc. of the Online MOOC Course Registered for. The same shall be intimated to the Controller of Examinations. The student is required to register for the final proctored exams conducted by SWAYAM and attend in-person at designated centres on specified dates. The student is required to submit a copy of the SWAYAM Certificate towards earning the credits. In case a students fails to earn the credits for any reason, he/she would be allowed to opt for any of the Offline Elective courses ONLY in the subsequent year, when the course is offered.



**SEMESTER-** III  
**COURSE NAME-** URBAN DESIGN STUDIO - III  
**COURSE CODE-** MUD 301

**Pedagogy and Evaluation:**

Lecture (L) Hrs/Wk	Studio (S) Hrs/Wk	Credits	Internal	Theory Exam Marks	Practical / Viva Voce Marks	Total Marks
-	12	12	50	-	50	100

**Objective:**

The objective of the course is to engage with an Indian City with adequate complexity in terms of challenges of development and sustenance, with the intention of understanding the complex structure and phenomenon that operate therein. Recognizing inadequacy of large plans in terms of articulation of the public realm, inadequate attention to cultural particularity and lacunae of authorities to manage the city. Subsequently to prepare an Urban Design proposal exploiting opportunities for creating new public spaces, seeking scope of wider engagement with people and governments and to address the issues identified. Transformative changes and additions, solutions of identified urban problems in physical terms including degeneration.

**Studio Exercise:**

- **Comprehensive detailed studies of a selected small town or part of a metropolitan city.**
- **Recording Environment, Regional, Historical and Cultural context as per the case.**

- Urban Design Analysis
- Preparing Existing Structure Plan Set.
- Identifying Issues, Problems and Potentials through analysis.
- Understanding of City municipal management and existing planning provisions, Financial aspects.
- Identifying scope and needs of Development, Regeneration, Restoration, Conservation.
- Exploring the concept for intervention.

• **Vision Proposal and detailed Design Intervention**

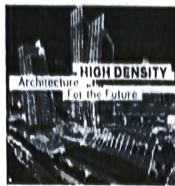
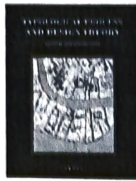
- Proposed Structure Plan with methods tailored to the specific case
- Laying out of overall Policy Guidelines
- Making Specific Plans
- Identifying Urban Design Projects/ proposals
- Working out future Management Plans and consequent statutory provisions
- Brown field Projects and Guidelines and controls and laws.
- Concept and strategy of implementation
- Aspect of Community involvement as stakeholders.
- Administrative responsibilities at Municipal levels
- Interrelationship with Planning Authorities.

**Note:** The Project site may be chosen in Delhi or outside Delhi. Study Tour/s of up to 15 days duration maybe conducted and the educational task of the study tour will be assessed along with the studio work.

**Learning Outcome:**

Comprehensive understanding of the role and scope of Urban design and Urban designer in City building and maintenance.

**Recommended Readings, In addition to theory course readings as necessary:**



- 1 Attilio, Petruccioli. (1998) *Typological Process and Design Theory*
- 2 Eduard, B. (2010) *High Density Architecture for the Future*. Links International
- 3 Farr, D. (2007) *Sustainable Urbanism: Urban Design With Nature*. Hoboken, NJ: Wiley
- 4 Gosling, D. & Maitland, B. (1984) *Concepts of Urban Design*. NY: St. Martin's Press.
- 5 Kostof, Spiro (1991) *The City Shaped: Urban Patterns and Meanings through History*. Boston Mass.: Little Brown.
- 6 Krier, R. (1979) *Urban Space*. London: Academy Editions.
- 7 Moughtin, J.C. (2007) *Urban Design: Street and Square*. Routledge
- 8 Moughtin, J.C. (2016) *Urban Design: Green Dimensions*. Routledge
- 9 Russ, T.H. (2009) *Site Planning and Design Handbook*. McGraw-Hill Education
- 10 *Sustainable Urban Development*. Washington DC: World Bank Publications
- 11 Trancik, R. (1986), *Finding Lost Space: Theories of Urban Design*. John Wiley & Sons.
- 12 Watson, D. (ed.) 2003 *Time Saver Standards for Urban Design*. McGraw Hill.

**SEMESTER-** III  
**COURSE NAME-** URBAN GOVERNANCE, ADMINISTRATION & LEGISLATION  
**COURSE CODE-** MUD 311

**Pedagogy and Evaluation:**

Lecture (L) Hrs/Wk	Studio (S) Hrs/Wk	Credits	Internal	Theory Exam Marks	Practical / Viva Voce Marks	Total Marks
2	-	2	25	75	-	100

**Objective:**

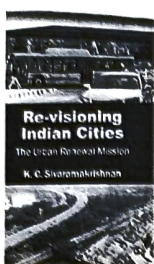
To provide an understanding of the urban governance policies, administrative structure(s) and legislative frameworks that exist with emphasis on the Indian experience.

**Content:**

- Unit 1**
- Statutory powers and responsibilities of Central Government, State Governments and Union Territories with respect to Urban Development and the role of implementing agencies
  - 73rd and 74th CAA, 12th Schedule and their implications on urban governance and Urban Local Bodies (ULBs) – Types, Composition, Statutory Powers, functions and source of funds of ULBs
  - Statutory powers of the Local Bodies and Local Authorities
  - Importance of Participatory Processes in democratic governance, Wards Committees; Ward/Area Sabhas, Mohalla Sabhas in Delhi
- Unit 2**
- Administrative and Legal Frameworks in Urban Design- Acts related to Urban Development- Town Planning Acts, Land Acquisition, Urban Land Ceiling Act, DUAC, DDA, Environmental Act, Arbitration, ASI-NMA, etc.
  - Appraisal of legislation for Public-Private partnership in Urban Development and Infrastructure projects
  - Planning regulations and building by-laws, URDPFI, Development Control Rules and Regulations
- Unit 3**
- Newer Urban Development Models- PPP/Cross Subsidy, Leasing/ Rental, Land Pooling and Amalgamation, PRT (Plot reconstitution techniques), land readjustment, Transfer of Development Right, etc.
- Unit 4**
- Recent trends in the incentivisation of “Action-based Research” resulting in several community engagement projects
  - Learnings from National level programmes in urban development such as JNNURM, HRIDAY, AMRUT, SMART CITIES MISSION (SCM), PMAY- HFA, other- GOI Programs and their approach towards participatory planning.



## Recommended Readings:



- 1 All urban development policy and programme documents available from the website of the Ministry of Housing and Urban Affairs (formerly Ministry of Urban Development and Ministry of Housing and Urban Poverty Alleviation), Government of India (<http://mhupa.gov.in>) and individual sites of the urban development Missions
- 2 Baud, I., and Wit, J. (2008) *New Forms of Urban Governance in India: Shifts, Models, Networks and Contestations*. New Delhi: Sage.
- 3 Bureau of Indian Standards (2005) *National Building Code of India*, Bureau of Indian Standards, New Delhi
- 4 DDA Mixed Use Regulations 2017
- 5 Delhi Development Authority (2007) *Master Plan for Delhi, 2021*, DDA, New Delhi.
- 6 Desai, R. (2012) Governing the Urban Poor: Riverfront Development, Slum Resettlement and the Politics of Inclusion in Ahmedabad, *Economic and Political Weekly*, Vol. 47, No. 2, pp. 49-56.
- 7 Diwakar, D. (2016) Resettlement of Urban Poor in Chennai, Tamilnadu: Concerns in R and R Policy and Urban Housing Programme, *Journal of Land and Rural Studies*, Vol. 4, No. 1, pp. 97-110.
- 8 For data related to population of India, refer to the Census of India data sets available at <http://censusindia.gov.in/>
- 9 Freire, M. and Stren, R. (2001) *The Challenges of Urban Government: Policies and Practices*, World Bank, Washington, D.C.
- 10 Gandhi, S., and Pethe, A. (2017) Emerging Challenges of Metropolitan Governance in India. *Economic and Political Weekly*, Vol. 52, No. 27, pp. 55-65.
- 11 Gupta A., and Sivaramakrishnan, K. (2010) *The State in India after Liberalization*, Routledge, New York.
- 12 Jenkins, R., Kennedy, L., Mukhopadhyay, P., and Pradhan, K. (2015) Special Economic Zones in India: Interrogating the Nexus of Land, Development and Urbanization, *Environment and Urbanization Asia*, Vol. 6, No. 1, pp. 1-17.
- 13 Ministry of Urban Affairs & Employment (G.O.I.), (1996) *Urban Development Plans Formulation and Implementation Guidelines*. New Delhi: ITPI
- 14 Ministry of Urban Affairs & Employment (G.O.I.), (2015) *The Urban and Regional Development Plan Formulation and Implementation (URDPFI) Guidelines*. New Delhi.
- 15 Ministry of Urban Development (2008), National Urban Sanitation Policy. MoUD, Government of India.
- 16 MOHUA- TOD Guidelines 2020
- 17 MOHUA-Gazette Notification-Land Pooling Policy, 2018
- 18 NIUA (2011), *HPEC Report on Urban Infrastructure*, NIUA, Ministry of Urban Development.
- 19 PEARL (Peer experience and reflective learning) portal of Ministry of Urban Development, GOI.
- 20 R.B. Bhagat (September 2014) 'Urban Policies and Programmes in India: Retrospect and Prospect' in *YOJANA*, pp. 4-8
- 21 Rakesh Mohan committee (2011), *Working Group Report on Financing Urban Infrastructure for XII Plan*.
- 22 Singh V., Ahmed A., Sharma Y. (2020) Unified Building Bye-Laws for Delhi 2016, Society for Fundamental Research and Development, New Delhi.
- 23 Sivaramakrishnan, K. (2011) *Re-visioning Indian Cities: The Urban Renewal Mission*, Sage, Delhi.
- 24 Sivaramakrishnan, K. (2013) Revisiting the 74th Constitutional Amendment for better Metropolitan Governance, *Economic and Political Weekly*, Vol. 31, No. 13, pp. 86-94.
- 25 Sivaramakrishnan, K. C., and Maiti, A. (2009) *Metropolitan Governance in India, An Overview of Selected Cities*, East West Center, Honolulu.
- 26 Urban Statistics 2019

**SEMESTER-** III  
**COURSE NAME-** HOUSING – DEVELOPMENT & POLICY  
**COURSE CODE-** MUD 312

**Pedagogy and Evaluation:**

Lecture (L) Hrs/Wk	Studio (S) Hrs/Wk	Credits	Internal	Theory Exam Marks	Practical / Viva Voce Marks	Total Marks
2	-	2	25	75	-	100

**Objective:**

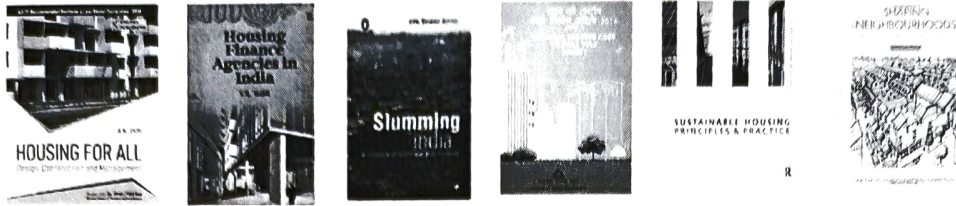
To develop an understanding of the dynamics of traditional and contemporary housing and the emerging housing scenario in India.

**Content:**

- Unit 1**
- Overview of housing scenario in India, types of housing, Social Housing, Private Housing, Cooperative Housing, Mass Housing, Incremental housing and social housing programmes, etc.
  - Traditional housing stock- its layout and design, social and economic considerations, environmental features, present condition, transformations issues and remedies. Relevance of traditional neighbourhood and housing design in present context.
  - Rent control laws, subdivision of property and its effect on traditional housing
- Unit 2**
- Housing as an economic commodity – Demand, Supply and Distortions in housing market, Housing Affordability and Finance, role of various housing finance institutions like NHB, HUDCO, LIC etc. Role of real estate developers and private builders in the housing sector, housing as an investment, private public partnership and foreign direct investment their impact on the housing market, Social impact of planned housing
  - Slums and squatter settlements, Approaches to Slum Redevelopment, rehabilitation and improvement, Tenure Regularisation (Rights Approach and Titles Approach), Incremental Approach to tenure
  - Basic Services Improvement/ Slum Networking, PPP Models of Slum Redevelopment
- Unit 3**
- Critical overview of the contribution of Central and State Governments, HUDCO, State Housing Boards, DDA, etc. in the production, control and management of housing
  - Various Housing policies, programmes and missions in India - National Urban Housing and Habitat Policy (NUHHP), JNNURM, Rajiv Awas Yojna, Pradhan Mantri Awas Yojana-Housing for All (PMAY-HFA)
- Unit 4**
- Housing norms, design and standards, units of housing design, layouts, densities and neighborhood units; infrastructure and community facilities.
  - Sustainable housing, upcoming theories and efforts in the field of housing.



## Recommended Readings:



- 1 Barton, H., Grant, M. & Guise, R. (2010) *Shaping Neighbourhoods: For Local Health and Global Sustainability*. Routledge.
- 2 Cedric, P. (1990) *Housing and Urbanisation: A Study of India*, London: Sage.
- 3 Clapham, David F., Clark William A.V. and Gibb, Kenneth (2012) *SAGE Handbook of Housing Studies*. SAGE.
- 4 Desai, Renu (2012) 'Governing the Urban Poor: Riverfront Development, Slum Resettlement and the Politics of Inclusion in Ahmedabad' 47(2) in *Economic and Political Weekly*
- 5 Edwards, B. & Turrent, D. (eds) (2000) *Sustainable Housing: Principles and Practice*. NY : Routledge
- 6 Hardoy, J.E. and Satterthwaite, D. (1989) *Squatter Citizen: Life in the Urban Third World*, Routledge, London.
- 7 Housing Act / H.M.O.S
- 8 Jain, A.K. (2019) *Housing for all*, Khanna Book Publishing Co., New Delhi.
- 9 Jenkins, P., Smith, H. and Wang, Y.P. (2007) *Planning and Housing in the Rapidly Urbanizing World*, Routledge, London.
- 10 Kohli, V.K. (2007) *Housing Finance Agencies in India*, Deep and Deep, New Delhi.
- 11 Mathur, G.C. (1993) *Low Cost Housing in Developing Countries*. New Delhi: Oxford
- 12 MoHUPA, GOI (2007) *National Urban Housing and Habitat Policy 2007*
- 13 MoHUPA, GOI (2011) *Guidelines for affordable housing in partnership (Amended)*
- 14 Neuwirth, R. (2006) *Shadow Cities: A Billion Squatters*. A New Urban World. Routledge
- 15 Patel, Sheela (2013), 'Upgrade, Rehouse or Resettle? An Assessment of the Indian Government's Basic Services for the Urban Poor (BSUP) Programme' in *Environment and Urbanisation*, 25:1, 177-188
- 16 Sharma, K. (2000) *Rediscovering Dharavi*. Penguin India
- 17 Tiwari, Piyush and Rao, Jyoti (2016) 'Housing Markets and Housing Policies in India', *ADB Working Paper Series No. 565*, Asian Development Bank Institute.
- 18 UN-HABITAT (2012) "Going Green, A Handbook of Sustainable Housing Practices in Developing Countries", UN-HABITAT
- 19 UN-HABITAT (2012) "Sustainable Housing for Sustainable Cities", UN-HABITAT
- 20 Urban, F. (2011) *Tower and Slab: Histories of Global Mass Housing*. Routledge
- 21 Verma, G.D. (2001) *Slumming India*, Penguin, New Delhi



**SEMESTER-** III  
**COURSE NAME-** URBAN SERVICES & INFRASTRUCTURE PLANNING  
**COURSE CODE-** MUD 313

**Pedagogy and Evaluation:**

Lecture (L) Hrs/Wk	Studio (S) Hrs/Wk	Credits	Internal	Theory Exam Marks	Practical / Viva Voce Marks	Total Marks
2	-	2	25	75	-	100

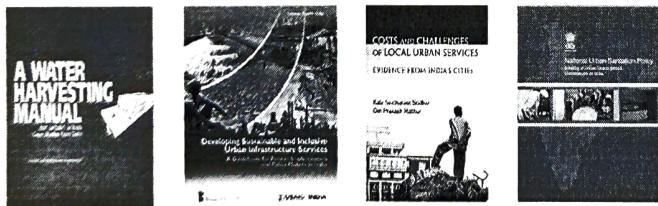
**Objective:**

To impart foundational knowledge of multi-dimensional and complex issues related to key urban services such as water supply, sewerage, solid waste, energy and roads and the institutional framework for design, delivery and maintenance.

**Content:**

- Unit 1**
  - Overview of urban infrastructure and services in Indian cities
  - Government's initiatives; Initiatives in 5-year plans
  - Infrastructure Policy & Regulation; Land procurement
- Unit 2**
  - Water supply challenges and technology, Water conservation, demand management and pricing
  - Wastewater management; treatment technology and reuse
  - Stormwater management
  - MSW management: collection, transportation and disposal, innovative technological interventions, etc.
- Unit 3**
  - Standards, Design criteria and layouts for urban roads incorporating various urban services. Electrical-Grid/HT/LT, Communication, Security and Information Systems
  - BIS and other International Standards
- Unit 4**
  - Various Institutional frameworks for design, delivery and maintenance, Role of ULBs, Service Delivery models, etc.

**Recommended Readings:**



- Center for Science and Environment, *A Water Harvesting Manual for Urban Areas: Case Studies from Delhi*, CSE, New Delhi, 2000
- Center for Science and Environment, *Do-it-yourself: Recycle and Reuse Wastewater*, CSE, New Delhi, 2008.
- Indo-US FIRE-D (2011), *Developing Sustainable and Inclusive Urban Infrastructure Services*, Ministry of Urban Development, Government of India and USAID.
- Joel Ruet, Stephanie Tawa Lama-Rewal (ed) (2009) *Cities and the Urban Imperative Governing India's Metropolises*. India: Routledge.
- Kala, S. & Mathur, O.P. (2009). *Costs and Challenges of Local Urban Services- Evidence from Indian Cities*. Oxford University
- Ministry of Urban Development (2008), *National Urban Sanitation Policy*. MoUD, Government of India.
- NIUA (2011), *HPEC Report on Urban Infrastructure*, NIUA, Ministry of Urban Development.
- PEARL (Peer experience and reflective learning) portal of Ministry of Urban Development, GOI.
- Rakesh Mohan committee (2011), *Working Group Report on Financing Urban Infrastructure for XII Plan*.

**SEMESTER-** III  
**COURSE NAME-** URBAN HERITAGE \*  
**COURSE CODE-** MUD 321

**Pedagogy and Evaluation:**

Lecture (L) Hrs/Wk	Studio (S) Hrs/Wk	Credits	Internal	Theory Exam Marks	Practical / Viva Voce Marks	Total Marks
--	4	4	50	--	50	100

**Objective:**

This course introduces the Ideas of Urban Heritage and Urban Conservation

**Studio Exercises:**

- **Heritage Zone Identification, Establishment of Heritage Value**
  - A. Age and Historical Value, Historic Value and Use Values.
  - B. Identification and Protection of Monuments and sites in Modern India
  - C. Cultural Heritage and Natural Heritage
  - D. Tangible Heritage Intangible Heritage Value Concepts
  - E. Heritage Zones Identification
  - F. Recognition of Conservation Zones and State sanction. Govt. policies SADAs
- **Actions of Protection and Intervention** - Preparation of Heritage Zone Plans, intervention proposals and working out of Regulations and controls
  - A. Listing of Urban heritage
  - B. Heritage building, Heritage Bye laws and controls
  - C. Government, Development Authorities and Municipal recognition
  - D. Revitalization, regeneration, and redevelopment of historic areas and cities
  - E. UNESCO World Heritage Sites and Cities. Heritage Nominations, HCN,
  - F. State Initiatives JNNURM, HRIDAY, etc
  - G. Heritage & Tourism
  - H. Interventions such as reuse, rehabilitation, upgradation, retrofitting,.

**Recommended Readings:**



- 1 *Athens Charter of Conservation, Venice Charter of Conservation*
- 2 *Heritage Zone Reports, INTACH*
- 3 *State of Built Heritage in India- The Case of the Unprotected , INTACH 2022.*
- 4 *World Heritage Cultural Landscapes: A Handbook for conservation and management, UNESCO 2009*
- 5 *Urban Heritage in Indian Cities NIUA 2015.*
- 6 *Operational Guidelines for HRIDAY, New Delhi, India: Ministry of Urban Development, Govt. of India, 2015.*



**SEMESTER-** III  
**COURSE NAME-** INCLUSIVE CITIES AND PLACEMAKING \*  
**COURSE CODE-** MUD 322

**Pedagogy and Evaluation:**

Lecture (L) Hrs/Wk	Studio (S) Hrs/Wk	Credits	Internal	Theory Exam Marks	Practical / Viva Voce Marks	Total Marks
-	4	4	50	-	50	100

**Objective:**

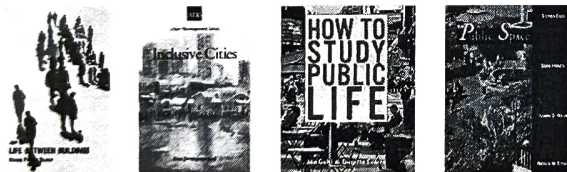
To understand the idea of inclusive cities and significance of placemaking in Indian cities so that the city reflects and encompasses the diversity and needs of all inhabitants.

**Studio Exercises:**

Exploratory Exercises to understand and analyse diverse aspects related to:

- **Understanding the Concept of Inclusive cities**
  - A. The spatial, social and economic dimensions of urban equity and inclusion
  - B. Issues related to urban poor, informal settlements, slums, other vulnerable groups, etc.
  - C. Learning from local and global initiatives
  - D. Role of ICT in urban accessibility, etc.
- **Placemaking as a tool for equity and inclusion**
  - A. Concept of public space and Importance of quality of place
  - B. Concept of Placemaking – Role and benefits, stakeholders, etc
  - C. Strategies for placemaking, relevance, process
  - D. Community-based Placemaking, institutional frameworks, etc.
  - E. Tactical Urbanism, etc.

**Recommended Readings:**



- 1 Burton, E., Mitchell, L. (Ed.) (2006) *Inclusive Urban Design-Streets for Life*. Oxford: Elsevier Ltd.
- 2 Carr, S. et al. (1992) *Part I: Public Space and Public Life*. *Public Space*, pp. 1-84. New York: Cambridge University Press.
- 3 Gehl, J (2011) *Life Between Buildings: Using Public Space*. Washington: Island Press
- 4 Gehl, J & Svarre, B. (2013) *How to Study Public Life: Methods in Urban Design*. Washington: Island Press
- 5 Low, S. (2014) *Spatializing Culture: An Engaged Anthropological Approach to Space and Place*. Routledge
- 6 McKinsey Global Institute (2010) *India's Urban Awakening: Building Inclusive Cities, Sustaining Economic Growth*. McKinsey Global Institute)
- 7 Ministry of Urban Development, GOI, 2015, *Smart City Mission Guidelines*
- 8 Project for Public Spaces, Inc (2012) *Placemaking and the Future of Cities*. UN-HABITAT Sustainable Urban Development Network (SUD-Net)
- 9 Schneekloth, L.H. & Shibley R.G. 'Introduction: The Tasks of Placemaking Practice' In *Placemaking: The Art and Practice of Building Communities* (New York: John Wiley & Sons, Inc., 1995): 1-18.
- 10 Schreiber, Franziska & Alexander Carius (2016) 'The Inclusive City: Urban Planning for Diversity and Social Cohesion' In *Worldwatch Institute (Ed.): State of the World: Can a City Be Sustainable?* Washington D.C.: Worldwatch Institute, pp. 123-141.
- 11 Steinberg, F. & Lindfield, M.(2011) *Inclusive Cities*. Mandaluyong City, Philippines: Asian Development Bank.



**SEMESTER-** III  
**COURSE NAME-** URBAN LAND ECONOMICS & REAL ESTAE DEVELOPMENT \*  
**COURSE CODE-** MUD 323

**Pedagogy and Evaluation:**

Lecture (L) Hrs/Wk	Studio (S) Hrs/Wk	Credits	Internal	Theory Exam Marks	Practical / Viva Voce Marks	Total Marks
-	4	4	50	-	50	100

**Objective:**

To provide an overview of the Constitutional and general legal context through which Urban land is owned, developed, delivered and managed. It also covers the legislative and policy framework within which the Real Estate sector operates with special emphasis on sustainable practices.

**Studio Exercises:**

Exploratory Exercises to understand and analyse diverse aspects related to:

- **Land Economics**

Economic concept of land, Theories of Property Rights and its meaning, Institutional aspect of land economics, Concept of Fringe, peri-urban and urban land and the Role of Actors, Agents and Institutions in these Markets.

- **Legislative Framework for Urban Land**

Land policy and housing policy and their impact on land market, economic reforms and urban land reforms, Apartment legislations, Rent control Act, Land Acquisition, The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013: Social Impact Assessment, Requirement of consent in the case of certain acquisitions, compensation, rehabilitation and resettlement. The Real Estate (Regulation and Development) Act, 2016, Environmental Audit in Real Estate, Carbon Trading in Real Estate Development, energy issues, etc.

**Recommended Readings:**

- 1 GOI *The Real Estate (Regulation and Development Act, 2016.*
- 2 GOI, (2007) *Model Guidelines for Urban Land Policy*, TCPO, New Delhi.
- 3 MOHUA-Gazette Notification-Land Pooling Policy, 2018
- 4 Shirley Ballaney, Shirley & Patel, Bimal (2009) *Using the 'Development Plan—Town Planning Scheme' Mechanism to Appropriate Land and Build Urban Infrastructure*. India Infrastructure Report.
- 5 Various Acts

**SEMESTER- IV**  
**COURSE NAME- URBAN DESIGN THESIS**  
**COURSE CODE- MUD 401**

**Pedagogy and Evaluation:**

Lecture (L) Hrs/Wk	Studio (S) Hrs/Wk	Credits	Internal	Theory Exam Marks	Practical / Viva Voce Marks	Total Marks
--	20 *	20	50	--	50	100

\* The Urban Design Thesis studio hours are to be divided into two components:-

- Studio Faculty Contact – 8 hrs
- Self- Study– 12 hrs  
(drawing work, library research, site visits, data collection, and other related activities)

**Objective:**

The course is an independent work of student on a self-chosen topic. It should have demonstration of all the skills learned in previous three semesters and application of all the knowledge gathered in identifying and addressing an urban design challenge.

Teaching Instructions: Thesis work will carry on in continuation of the research work done in Semester III- Thesis Research Seminar. Thesis shall be conducted as a studio course, with all the faculty members as advisors to each student. The studio coordinator shall act as the Thesis Coordinator.

**Studio Exercise/s:**

- Urban Design Thesis type may include specific project model, Large Urban Architecture project, LAP and similar plans, Public Policy model, Public Participation model, Thematic Model, Exploration in development of urban systems for identified physical or non-physical urban aspects with multiple or standard solutions.
- Procedural methodology for each thesis would be defined by individual student and would be topic-specific. No common structure may be imposed unless absolutely necessary.
- Deliverables to be according to Thesis objectives.

**Recommended Readings:**

- 1 Oliver, P. (2008) *Writing your Thesis*, Sage, New Delhi.
- 2 Watson, Donald (ed.) 2003 *Time Saver Standards for Urban Design*. McGraw Hill.

**SEMESTER-** IV  
**COURSE NAME-** DEVELOPMENT PRACTICE, PROJECT MANAGEMENT & FINANCE  
**COURSE CODE-** MUD 411

**Pedagogy and Evaluation:**

Lecture (L) Hrs/Wk	Studio (S) Hrs/Wk	Credits	Internal	Theory Exam Marks	Practical / Viva Voce Marks	Total Marks
2	-	2	25	75	-	100

**Objective:**

To provide an understanding of the role of project planning and finance management in urban development projects. Various methodologies, policies and financial frameworks are discussed with case examples. The course offers working knowledge for procuring, managing and executing urban design projects professionally. Case studies of successful urban development projects, Urban Infrastructure Management may be used.

**Content:**

- Unit 1**
- Development project - Meaning and significance of project formulation, monitoring and evaluation; Development Models, Parameters and components of project formulation; Life cycle of a project; Stages of project formulation and their significance: identification of a project
  - Feasibility analysis, techno-economic analysis, Project appraisal, Integrated impact assessment
  - Types of Contracts, Tendering Process, Bid, Contract Documents, Statutory Approval Processes. etc. Project clearances
- Unit 2**
- Project funding, Financial Institutions for Urban Development Financing.
  - Project finance procurement and Implementation approach - SPVs & PPPs
- Unit 3**
- Project Management network techniques of project management, network logic, rules, forms of network, Critical Path Method (CPM) & Project Evaluation and Review Technique (PERT), Scheduling, LOB, Risk analysis techniques
  - Stakeholder management
- Unit 4**
- Typical DPR Structures
  - Special projects such as Special economic zones, export processing zones, townships etc. Case studies of successful projects and planning schemes are encouraged to be used as learning models.

**Recommended Readings:**

- Aiyer, V.G.R. (1978) *Public Finance-with Special Reference to India*. Jaipur: Rawat Publications.
- Chandra, Prasanna (2002) *Projects Planning, Analysis, Financing, Implementation and Review*. Sage Publishers, New Delhi.
- Goel, B. B. (1987) *Project Management: a development perspective*. Deep and Deep Publications, New Delhi.
- M.Shaghil & M.Mushtaq (1993) *Project Formulation Concept & Approach*. Printwell, Jaipur
- Mankar, V.G. (1992) *Public Finance- Theory and Practice*. Himalaya Publishing House, Bombay.
- Mohanty, P.K. (2016) *Financing Cities in India: Municipal Reforms, Fiscal Accountability and Urban Infrastructure*. N Delhi: Sage.
- Pummia, B.C.; Khandelwal, K.K. (1987) *Project Planning and Control with PERT and CPM*. N Delhi: Laxmi Publications (P) Ltd.
- Thakur, D. (1992) *Project Formulation and Implementation*. N Delhi: Deep and Deep Publication



**SEMESTER-** III  
**COURSE NAME-** THESIS RESEARCH SEMINAR  
**COURSE CODE-** MUD 302

**Pedagogy and Evaluation:**

Lecture (L) Hrs/Wk	Studio (S) Hrs/Wk	Credits	Internal	Theory Exam Marks	Practical / Viva Voce Marks	Total Marks
--	6	6	50	--	50	100

**Objective:**

This course is in preparation for the Urban Design Thesis course in the fourth semester. Normally the topic identified in this course would be carried on for thesis. The course explores methods of research in the field of Urban Design.

**Studio Exercise/s:**

• **Research Tasks related to the following:**

- (1) Identifying a Research Topic, with an intent to continue the same in Urban Design Thesis in semester IV.
- (2) Establishing relevance and need.
- (3) Setting research goals, scope and objectives as per individual topics.
- (4) Identifying secondary and primary research requirements
- (5) Identifying nature of knowledge and data to be gathered.

• **Presentation of Findings in Studio and First Report.**

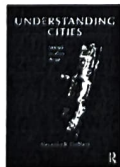
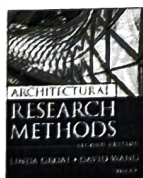
- (1) Analysis of data and preparation of background of thesis
- (2) Generation of hypothesis or proposition or specific objective for thesis
- (3) Identifying frameworks by choice of relevant theoretical tools
- (4) Working out methods of applying the frameworks for analysis or production.
- (5) Final report.

**Note:** Design thesis is not to be done primarily in a textual written format but the work shall accompany the necessary textual matter. Design thesis may require recording of various iterations and may even be targeted to produce multiple solutions. The nature of research shall keep in consideration the mode of thesis which needs to be selected in the following semester.

**Learning Outcome:**

The student would be prepared to start working on the thesis main body immediately in the following semester.

**Recommended Readings:**



- 1 Cuthbert, A. (2011) *Understanding Cities: Method in Urban Design*. NY: Routledge.
- 2 Farthing, S. (2015) *Research Design in Urban Planning: A Student's Guide*. New Delhi: SAGE
- 3 Groat, Linda N. & Wang, D. (2013) *Architectural Research Methods*. NY: Wiley and Sons.
- 4 Knight, A. & Les Ruddock, L. (eds.) (2009) *Advanced Research Methods in the Built Environment*. NY; John Wiley & Sons.
- 5 Machi, L.A. and McEvoy, B.T. (2012) *The Literature Review, Six Steps to Success*, Sage, New Delhi.