Dr. Babasaheb Ambedkar Technological University, Lonere, Raigad
Proposed Syllabus for Masters in Architecture
(Urban Design)

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Masters in Architecture-Urban Design

PREAMBLE

The Academic Council of Dr. Babasaheb Ambedkar Technological University aims at bridging the gap between the Industry and the Institute by framing a syllabus on the Guidelines of Council of Architecture, India and fine tuning the same with respect to the requirements of the building industry at the international and national level.

The students have been made sound enough through the Graduation Program, to proceed to Masters in any part of the World and be suitable enough to support any good Architectural office across the globe or raise his / her professional practice.

The Education at Masters Level is oriented to develop students with modern Skills and Techniques, in specialist field of Architecture i.e. Urban Design, Construction Management, Environmental Architecture and General (aspects in Architecture).

The Education is desired to orient and to equip students with modern skills and techniques of designing structures and detail them further with precise constructional details, use of most suitable materials, examine the sustainability attributes and further specify the process of implementation with the value addition of conservation of energy flavored with modern architectural concepts giving justice to the various spaces in their chosen field of specialization (within and around the built form), they are meant to perform.

The architectural institutes shall also educate the students on their responsibility as a professional, to create designs that shall adhere to all the local regulations and laws of the land and should provide updated knowledge of procedures to be followed from work commencement to completion.

The graduate course (B.Arch) shall be of ten semesters (stage I& stage II) and the detailed subject wise pattern shall be strictly adhered to.

The Masters Course (M. Arch) shall be of 4 semesters and detailed subject wise pattern enclosed along with this preamble shall be strictly adhered. The Universities stipulates that maximum students in each class be 20 only and sections may be added for additional intakes

M.Arch (Urban Design):

It is proposed to offer a regular M. Arch postgraduate course in Urban Design of two-year duration open to students with a B.Arch. qualification. This course is designed to enhance the skills of, young aspiring architects to be involved in the active planning and design of urban settlements which are under rapid transformation in India. This course would prepare a student to work within the planning framework in our context with government institutions, non-governmental institutions and other private agencies.

Objectives of Urban Design Course are as follows:

□To prepare the students to develop a holistic view of the city as a basis for designing the city/city components in the third dimension.
$\hfill\Box$ To contribute to the world-wide knowledge bank on urban design through primary/ secondary research, theoretical pursuits and publications.
☐ To contribute to a clearer understanding of cities, particularly of Indian cities, through research, documentation and urban design interventions.

☐ To attain a fundamental understanding of the context of the urban.
☐ To develop successful strategies for the implementation of the urban design principles.
$\ \square$ To work successfully with communities, public / private planning institutions and other stakeholders in the city.
☐ Through elective subjects, seminars, workshops and short-term courses and through collaborations with related disciplines, to develop research material and training modules for professionals and teachers.
☐ Through ensuring feed back into course contents, syllabus and pedagogic methods from all the above methods, to constantly improve the urban design education programme.

	List of							
	Abbreviations							
Sr.No.	Acronym	Full form						
1	TH	Theory						
2	SWT	Sessional Work with Assessment						
3	SV	Sessional Work with Viva						
4	L	Theory Lecture						
5	S	Studio						
6	IA	Internal Assessment						
7	MSE	Mid Semester Exam						
8	ESE	End Semester Exam						

Teaching Scheme:

Each Lecture to be conducted should be of 60 min

duration. Each Studio to be conducted should be of 60

min duration. 1 Credit Point = 1 Hour Lecture (For

Theory subject)

1 Credit Point = 2 Hour Studio

Mandatory Passing Criteria:

All the rules and regulations for Allowed To Keep Terms (ATKT) from Dr. Babashaeb Ambedkar Technological University (DBATU) should apply.

Each student should publish a Research Paper in recognized National / International Journal during the Second Year of Masters. The research paper should be related to the Dissertation topic selected for Semester 4 of the Second year.

The impact factor of the journal should be 1 and above.

Final Degree Class / Division and Marks / Percentage / Credits / Grade needs to be given as average score of all 4 Semesters, with Absolute Grading.

Reporting of Submissions by the students and Institutes:

All students should mandatorily submit the course work to the college, completed in the class at the end of the day through the servers to the college / university.

The evaluation of the work done in the class by the student should be done by the teacher on the same day and data to be maintained on the server.

Use of Computers:

The institutes can allow the use of computers as found suitable.

Study Tours:

Study tours can be organized by the institutes to make the student aware of the various aspects of architecture. At least 1 study tour per year should be organized.

Teaching and learning Process Matrix:

This matrix is to be used by the teachers and students to understand subject in detail. It will unfold the desired skill sets required along with identification of teaching and learning process approach indicators.

It will also help teachers and students to evolve concepts and module development. This is a tool recommended to be followed by subject teachers. It will create learning and understanding process of the subject.

Sr. No.	Subject Heads	Subject -1	Subject -2	Subject-3	Subject -4
	Definitive questions for learning subjects				
1	How does learning occur?				
2	What factors influence learning?				
3	What is role of learning?				
4	How does transfer occur?				
5	What type of learning are best explained by theory / drawing?				
6	How is technology used for learning in Architecture?				

Dr. Babasaheb Ambedkar Technological University, Lonere First Year **Masters in Urban Design Semester-1** Teaching **Subject Subject Evaluation Scheme** Codes CA1 MSE ESE ESE Theory/ Studio CA2 Total Credit Worksh Theory SV/STW op Paper Urban Design 2 50 50 0 0 150 250 5 6 MAUD1911 Studio-1 2 Theory & 4 20 20 40 60 60 200 4 MAUD1912 Methods of Urban Design 2 2 20 20 40 60 60 200 3 Planning MAUD1913 Techniques & Procedures-I 2 10 40 Urban Design 2 10 60 30 150 3 MAUD1914 History 2 Landscape 2 20 20 0 0 60 100 3 Design & Urban MAUD1915 **Ecology** ELECTIVE-0 4 20 20 0 0 60 100 2 3(Any One of 3) MAUD1916A Indian Urbanism Comparative MAUD1916B Urbanism Contemporary Theories of MAUD1916C Urbanism and Architecture 120 1000 **Total 10** 20 140 140 180 420 **20**

Dr. Babasaheb Ambedkar Technological University, Lonere

First Year

Masters in Urban Design

Semester-2

	T == -			T						
Subject	Subject	Teac	hing		Evaluation Scheme					
Codes										
		Theory/	Studio	CA	CA	MSE	ESE	ESE	Total	Credit
		Worksh		1	2		Theory	SV/ST		
		ор					Paper	W		
MAUD1921	Urban Design Studio-2	2	6	50	50	0	0	150	250	5
MAUD1922	Planning Techniques & Procedures-2	2	2	20	20	40	60	60	200	3
MAUD1923	Traffic& Transportation	2	4	10	10	40	60	30	150	4
MAUD1924	Digital Skill For Urban Design	2	4	25	25	0	0	100	150	4
MAUD1925	Research Methodology	2	0	10	10	20	60	50	150	2
	ELECTIVE-3 (Any One of 3)	0	4	20	20	0	0	60	100	2
MAUD1926A	Imagining Cities									
MAUD1926B	Structure as Expression of Urban Morphology.									
MAUD1926C	Art and Science of Conservation									
	Total	10	20	135	135	100	180	450	1000	20

Dr. Babasaheb Ambedkar Technological University, Lonere

Second Year

Masters in Urban Design

Semester-3

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Subject Codes	Subject	Teach		Evaluation Scheme						
		Theory/ Workshop	Studio	CA1	CA2	MSE	Theory Paper	SV/STW	Total	Credit
MAUD1931	Urban Design Studio-3	2	6	50	50	0	0	150	250	5
MAUD1932	Dissertation (Research Paper Writing)	2	4	40	40	0	0	120	200	4
MAUD1933	Urban Bylaws and Planning Legislation	2	4	40	40	20	60	40	200	4
MAUD1934	Development Finance	2	2	10	10	40	60	30	150	3
MAUD1935	Urban Sociology	2	0	10	10	20	60	0	100	2
	ELECTIVE-3 (Any One of 3)	0	4	20	20	0	0	60	100	2
MAUD1936A	Planning Theory									
MAUD1936B	Sustainable Urbanism									
MAUD1936C	Housing Policies and Procedures									
	Total	10	20	170	170	80	180	400	1000	20

Dr. Babasaheb Ambedkar Technological University, Lonere **Second Year Masters in Urban Design** Semester-4 **Subject Codes** Subject Teaching **Evaluation Scheme** Studio CA1 CA2 MSE ESE ESE Total Credit Theory/ Workshop SV/STW Theory Paper **MAUD1941 THESIS** 0 20 100 100 0 300 500 10 **ELECTIVE-**0 4 20 20 0 0 60 100 2 4(Any One of 3) MAUD1942A Urban Infrastructure MAUD1942B Environment Discourses and Political **Ecologies** MAUD1942C **Project** Management MAUD1943 **PROFESSIONAL** 0 0 0 0 0 0 100 100 2 **TRAINING**

Note: Six week training should be done in vacation of third semester and certificate needs to be produced.

120

120

0

0

460

700

14

24

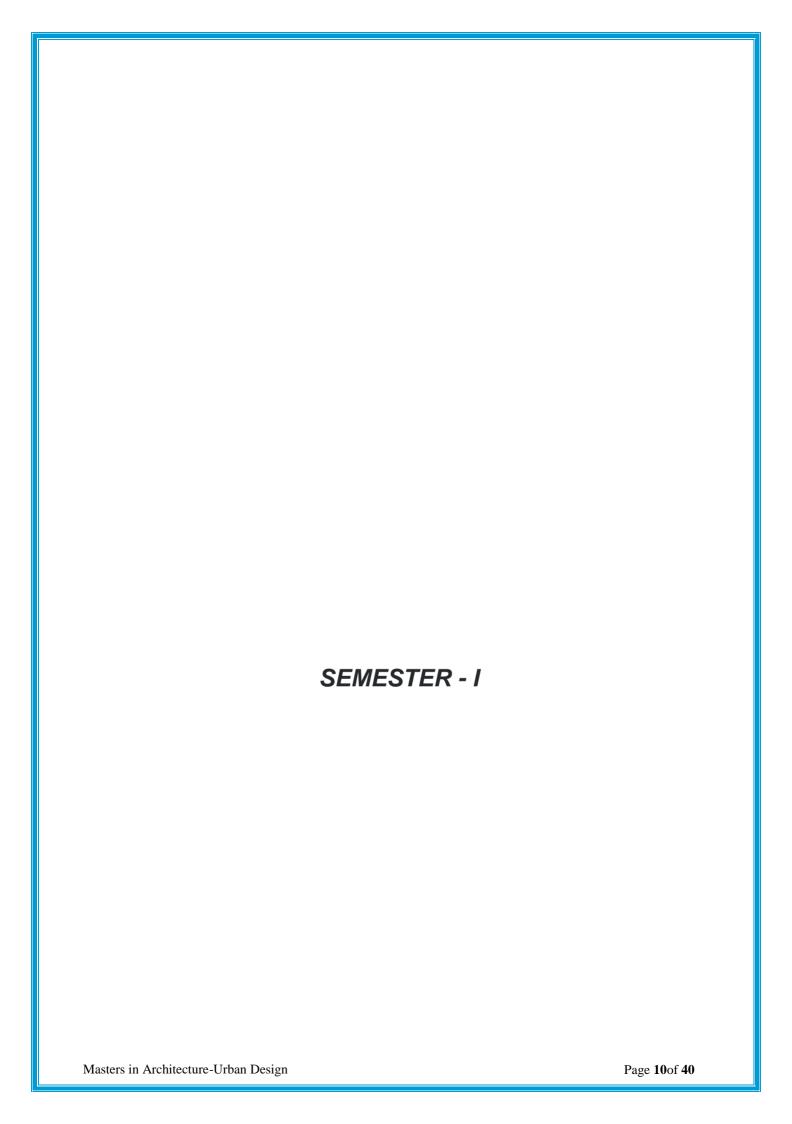
Final Degree class/ Division and Marks/ Percentage/Credit/Grade needs to be given as average score off all 4 semester, with Absolute Grading.

Each Students should publish a Research paper in recognized National / International Journal during the second year of Masters. The research paper should be related to the Dissertation topic selected for Semester 4 of the Second year.

The impact factor of the journal should be 1 and above.

0

Total



SEMESTER -I

URBAN DESIGN STUDIO-1

URBAN DESIGN STUDIO-1								I
Subject Code- MAUD1911								
Teaching			Evaluation Scheme					
Theory	Studio	CA1	CA1 CA2 MSE ESE Paper ESE SV				Total	Credit
02	06	50	50	0	0	150	250	05

Objective:

The aim of the unit is to encourage, intensive design work on important contemporary urban and development challenges, to develop both practical skills and critical thinking. To create an understanding of the role of various physical, social, economic and infrastructural components and decision making processes; the contribution of related disciplines associated with the production of the city.

The studio engages with a morphological and image structure survey / analysis of a selected part of a traditional urban area with detailed studies of urban landscape and streetscape.

It should help in the formulation of urban intervention and frame urban design proposals for the area. The presentation of final proposals would be with three-dimensional models and sketches.

The studio will be divided to the following four modules:

- Documentation and presentation techniques of a precinct.
- Documenting the same precinct from infrastructure and urban managements and point.
- Documenting the same precinct statistically and as a human network, through ownership, use cycles, association value etc.
- Identification of problems and issues. Compiling the documentation as a report.
- Conceptual Design Scheme.

The design tutorial will assist the students in acquiring skills of documentation, analysis and presentation of human networks urban design projects and typological studies.

The Design Workshop:

The studio needs to have an inbuilt Design workshop/s. This is a seminar course conducted by invited professionals who may demonstrate the design development process of project, funding and management issues.

This is an interactive session in which students will directly interact with the professionals after the presentation. Projects may vary in scale and content and should preferably raise urban level or fundamental design issues.

Sessional Work:

For this subject students will be assessed based on their processes of documentation, methods of analysis and the basic understanding of the urban design process along with the content.

Minimum Assignment/s submissions towards Sessional Work & Oral Examinations shall include:

- Comprehensive report of documentation, studies and analysis done by students in groups of four or five each. (Not less than A2 / Half Imperial–size)
- Design portfolio showing design decision process and conceptual design done by students in groups of four or five each. (A1 or max. A0 size / Full imperial size)

Learning Outcome:

Students will appreciate, understand and analyze real site conditions in an urban area, learn survey and documentation techniques, assessing needs and programming for design intervention.

THEORY & METHODS OF URBAN DESIGN

	Semester-	I						
Subject Code- MAUD1912								
Teaching		Evaluation Scheme						
Theory	Studio	CA1	CA1 CA2 MSE ESE Paper ESE STW				Total	Credit
02	04	20	20	40	60	60	200	04

Objective:

The unit helps in introducing concepts, theories and methods of inquiry that are useful for urban design discourse and reflective practice, aiming at better programming and design. It will explore ways of reading, experiencing, comprehending, analyzing, and representing, the urban context.

It will do so by introducing students to existing modes of reading cities through the perceptual/cognitive theories framed by Kevin Lynch and Christopher Alexander, behavioral theories by Amos Rapoport, psycho-geographical theories by Guy Debord, and other noted theoreticians. It should equip the students to innovate in reading and analyzing urban settlements depending on the urban context they wish to engage.

The course should also help the students to comprehend and appreciate the evolution and formation of morphologies of urban settlements.

Course Content:

- a) Concepts of place and space
- b) Urban design terminologies and definitions
- c) Methods of urban design surveys, documentation and representation
- d) Cognitive mapping contemporary and traditional
- e) Space analysis
- f) Determinants of urban form
- g) Components of urban structure
- h) Concepts of layering
- i) Size, shape and form of cities
- j) Typological studies
- k) Architectural expression

Sessional Work:

Assignment/s need to explore various urban design methodologies, their theoretical background, their understanding of urban form & space and their applications.

Minimum Assignment/s submissions towards Sessional Work& Oral Examinations shall include:

- Each student will study urban design methodologies in terms of its background, its conception, its details, its reflection on urban form & space, and its relevance in today's context, etc. (A2/half imperial size report by individual student)
- Assignment to be designed by the tutor to understand its application in an appropriate context. (A2/ half imperial size report by individual student)

Learning Outcome:

Students are exposed to different methodological approaches, technologies and foundation theories of urban design.

References:

- 1. Broadbent, Geoffrey. Emerging Concepts of urban Design Bacon, Edmund, N. Design of Cities
- 2. Gosling, David & Maitland, Barry, Concepts of Urban design Morris, Anthony, J.E. History of Urban Form
- 3. Kostof, Spiro, The City Assembled: The Elements of Urban Form Through History Kostof, Spiro, City Shaped: Urban Patterns and Meanings through History

PLANNING TECHNIQUES & PROCEDURES -1

PLANNI	PLANNING TECHNIQUES & PROCEDURES -1								
Subject Co	Subject Code- MAUD1913								
Teaching		Evaluation Scheme							
Theory	Studio	CA1	CA2	MSE	ESE Paper	ESE	Total	Credit	
			STW						
02	02	20	20	40	60	60	200	03	

Objective:

The aim of the course is to explore the range nuances and methods to understand the morphology of the city drawn broadly from disciplines of urbanism, geography, planning and legislative mechanisms. The course also seeks to investigate into theories of place making and the contribution of technology and economy leading to an understanding of what is "urban" today. It also seeks present planning and institutional framework available in the country, state and with local governments, Introduction to present legal framework for planning, introduction to type of plan prepared by various levels of governments, etc

Course Outline:

- History and principles of planning in the international and national context,
- Present planning and institutional framework available in the country, state and with local
- Governments,
- Introduction to present legal framework for planning,
- Introduction to type of plan prepared by various levels of governments, etc

Sessional Work:

There will be a Seminar done by an individual student that will enquire into the range of tools that contribute to urban morphology, development regulations, and urban processes, non-formal settlements, etc. Seminar should necessarily explore the theoretical understanding of these various aspects.

Minimum Assignment/s submissions towards Sessional Work & Oral Examinations shall include:

- Report based on seminar topic (A4 size) with appropriate case references need to produced individually. (Number of words = 4000to5000)
- Power point presentation of the seminar topic

Learning Outcome:

To expose students in theoretical discourses related to City Space, Economics, and Politics &Governance using current practices and knowledge.

URBAN DESIGN HSITORY

URBAN I	URBAN DESIGN HSITORY Semester- I									
Subject Co	Subject Code- MAUD1914									
Teaching	Teaching Evaluation Scheme									
Theory	Studio	CA1	CA2	MSE	ESE Paper	ESE	Total	Credit		
			STW							
02	02	10	10	40	60	30	150	03		

Objective:

The unit explores the evolution of ideas and principles of urban design by focusing on the relationship between societal change and the formal organization of the urban environment. Historical, theoretical and critical lines of arguments will be pursued by examining urban places and spaces in their making, use and change, ranging from early civilizations to the present. The course also reviews the history and heritage of human settlements in India from ancient times to date. It also examines current trends in contemporary architecture planning and urban design practices in India and abroad.

The course is intended as a comprehensive study of urban form and urban spaces in historical and theoretical terms.

Course Outline:

- 1. Introduction to urban design ideology/theory and the various concerns of the field. Urban Design through history
- 2. Introduction and Study the evolution of city form- morphology (Urban form and Urban Process). Various theoretical views associated with nature of city form Normative and positive theories; Cosmic, Machine and Organic Models; Descriptive and functional theories; Alternative theoretical postulations.
- 3. Study of the evolution of urban form (western context)
 - Chronological Urban space through history (The Early Cities, Medieval Towns, Renaissance, Form of modern city; early cities of capitalism, City beautiful movement, Modern Movement, cities in the garden, Cites of theory and sweat equity &highway.)
 - City as patterns; diagrams; spaces and ideas (organic; grid; political functionalsecularist- socialist diagrams; grand manner; skyline; city edge; urban division; public spaces- various typologies including street and parks; Islamic cities in the Middle East)
 - o Comparison between the various perspectives of studying and analyzing urban formspace; conservation and the life of urban form.
- 4. Understanding Urban Process (rise and fall of cities; disaster; destruction; haussmanization; incremental changes; urban renewal)
- 5. Modern and post-modern urbanist theories (Utopia; Lynch's ideas of good city form; Imageability and Memory, public and private domains; Suburbs and periphery; Privacy, Territoriality and Proxemics' theory; Defensible spaces; ideas of community through design; treatment of urban space; future of the city)
- 6. A critical understanding of changing attitudes towards urbanism and urban spaces
- 7. A critical examination of current trends in contemporary architecture and planning in India

Sessional Work:

The assignments will study a variety of public spaces both historical and contemporary critically analyzing the origins and their derivatives to explore the relationship between its form and their derivatives.

Minimum Assignment/s submissions towards Sessional Work & Oral Examinations shall include:

• Each student will study minimum five urban spaces from different context& theoretical background, to understand its form, its origins, its derivatives and its diagrams. A2/ half imperial report to be produced individually for term work.

Learning Outcome:

Students are equipped to be exposed to the historical evolution of urban space and understanding of the morphological dimensions of public spaces.

References:

- 1. Spiro Kostof , The City Assembled , Thames and Hudson. Spiro Kostof , The City Shaped, Thames and Hudson.
- 2. Jon Lang, Urban Design Typology and procedures, Architectural Press
- 3. A.E.J. Morris, History of Urban Form, Longman Scientific and Technical. Kevin Lynch, Good City Form, MIT Press.
- 4. Edmund Bacon, Design of Cities.
- 5. Geoffrey Broadbent, Emerging

LANDSCAPE DESIGN & URBAN ECOLOGY

LANDSC	LANDSCAPE DESIGN & URBAN ECOLOGY								
Subject Co	Subject Code- MAUD1915								
Teaching			Eva	luation Sch	neme				
Theory	Studio	CA1	CA1 CA2 MSE ESE Paper ESE STW					Credit	
02	02	20	20	0	0	60	100	03	

Objective:

This unit helps the student to gain knowledge on urban landscape; theories and practices. Through this the participants will comprehend the relationships between architecture, urban design, landscape design; simultaneously developing a historical perspective on the subject, both internationally and locally. This can be done through the study of case and best practices in the field.

The course also introduces the students to learn methods to analyze sites in relation to topography, vegetation, bio-diversity, etc. and other ecological conditions. The emergent patterns through these exercises should inform the design of the built environment.

This course is supplemented by a studio where the students are taught to implement these methods and respond by framing sensitive design strategies.

Course Outline:

- a) Introduction to site planning & Ecology, SitePlanning philosophy
- b) Ecological factors in site evaluation
- c) Site resource systems
 - a. Physiographic
 - b. Geology and soils
 - c. Hydrology
 - d. Micro-climate
 - e. Vegetation
 - f. Wild life, terrestrial and aquatic
- d) Cultural resources
- e) Urban vegetation, planning & maintenance
- f) Ecological planning processes, theories and approaches
- g) Site grading and drainage
- h) Sewerage, water supply and electricity
- i) Surveys and overlays

The studio will choose a suitable site where the students will map, evaluate and analyze the site from the knowledge imparted in the theory classes and will produce a site plan for an appropriate design program having multiple activity/functional zones.

Sessional Work:

For this subject students will be assessed based on their process/es of documentation, methods of analysis and the judicious understanding of the site planning process along with the content.

Minimum Assignment/s submissions towards Sessional Work & Oral Examinations shall include: Comprehensive report of appropriate data collection, documentation, studies and analysis done by students in groups of two or three. (not less than A2 / Half Imperial—size)

Siteplanningportfolioshowingplanning&designdecisionprocessandconceptualdesigndone by students in groups of two or three each. (A1 or max. A0 size / Full imperial size)

Learning Outcome:

Students will be enabled to deal with varying site-based natural and ecological systems with reference to urban design projects and the city at large.

Suggested Reading/References:

- 1. Kevin Lynch, Good City form, MIT Press, Cambridge
- 2. Kevin Lynch and Gary Hack, Site Planning, MIT Press, Cambridge
- 3. Peter Jacobs and Douglas Way, Visual Analysis of Landscape Development, Harvard press Gary O. Robinette (Ed), Landscape Planning and Energy Conservation, Van-Nostrand Reinhold

ELECTIVE-1

ELECTIV	ELECTIVE-1							
Subject Co	Subject Code- MAUD1916							
Teaching			Eva	luation Sch	neme			
Theory	Studio	CA1	CA1 CA2 MSE ESE Paper ESE				Total	Credit
	STW							
00	04	20	20	0	0	60	100	02

This Elective course is designed on the vision and the strength of course in each individual institution. This elective will be attended by all the students.

Suggested List of Topics:

- Indian Urbanism,
- Comparative Urbanism,
- Contemporary Theories of Urbanism and Architecture

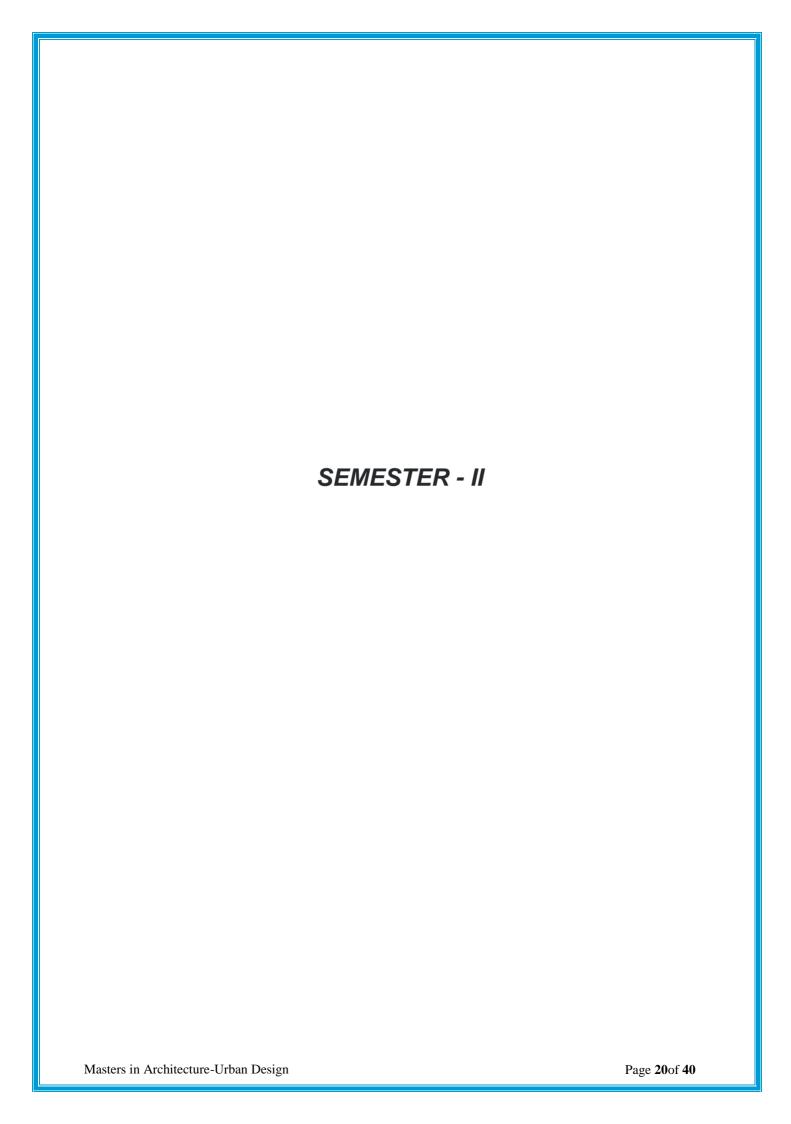
Or any other relevant topic under the above category.

Sessional Work:

Term work could be decided by the respective tutor conducting a specific elective. Sufficient number of assignments to be conducted and the same to be designed in such a manner that student's critical understanding of the urbanism and its various aspects and its issues could be assessed.

Learning Outcome:

The students are equipped to read and understand the contemporary issues related to urbanism so to understand the comprehensive nature of Urban Design



URBAN DESIGN STUDIO-II

URBAN I	URBAN DESIGN STUDIO-II							
Subject Co	Subject Code- MAUD1921							
Teaching Evaluation Scheme				neme				
Theory	Studio	CA1	CA1 CA2 MSE ESE Paper ESE SV			Total	Credit	
02	06	50	50	0	0	150	250	05

Objective:

The studio would help students identify broad urban design principles, based on any urban issue that the institution might choose to address. These principles would be generated through an intense process of site mapping, analyzing and identify patterns in a chosen urban context.

The studio should simultaneously explore and innovate on techniques of representation for these complex urban conditions.

The principles abstracted through the study should be used to frame urban design programs and projects. The studio should finally assist the students with the technique of place making for the given project.

Course Outline:

The first part of the studio will be an introduction to urban design city study, analyzing the various factors that determine the morphology of the city and the referencing of selected sites to the study. As far as practicable the project should be a live problem carried out with the active participation of the client.

Sessional Work:

For this subject students will be assessed based on their processes of documentation, methods of analysis, theorization and articulation of the design problem and the design response.

Minimum Assignment/s submissions towards Sessional Work & Oral Examinations shall include:

- Comprehensive report of documentation, studies and analysis done by students in groups of four or five each. (not less than A2 / Half Imperial—size)
- Design portfolio-1 showing theorization and articulation of design problem, design decision process, master plan & design strategies done by students in groups of four or five each. (A1 or max. A0 size / Full imperial size)
- Design Portfolio-2 showing design demonstration by an individual student for a part of from the master plan. (A1 or max. A0 size / Full imperial size)

Learning Outcome:

Students are enabled to conceive urban design projects preferably for live and real urban conditions, thereby understanding client dynamics as well as tangible deliverables.

PLANNING TECHNIQUES AND PROCEDURES -II

PLANNI	NG TECHN	NIQUES A	ND PROCI	EDURES -	II		Semester-	II
Subject Co	Subject Code- MAUD1922							
Teaching	Teaching Evaluation Scheme							
Theory	Studio	CA1						Credit
STW								
02	02	20	20	40	60	60	200	03

Objective:

The course should help the student comprehend the interaction between types and intensities of land use, transportation and broader dynamics of transformation in the physical environment.

Introduce students to survey research process: primary and secondary sources of data, techniques of data collection, analyzing and presenting physical and socio-economic data, questionnaire design, and administration of field as methods of identifying urban and regional problems, setting of goals, objectives and priorities, performance standards, spatial standards and standards for utilities. The students should also learn about the classification of regions, regionalization and deliberation technique for various types of regions; cluster and factor analysis methods.

Aerial photography: basic principles and techniques of photo grammetry, photo interpretation and remote sensing. Collection of data by photo-interpretation and remote sensing techniques, analysis and interpretation of these data and compilation of interpreted data for the metric maps, specific applications in urban and regional planning, housing, urban design and landscape analysis.

Analysis for understanding the structure of urban areas and demographic analysis, land value and density patterns, locational attributes of activity areas and locational dimensions of population groups. Forces of concentration and disposal, social area analysis, etc.

Preparation of urban and regional development plan various approaches comprehensive planning; systems approach to planning case studies identifying use of techniques.

Course Content:

An overview of statistical and survey techniques used to in the preparation of a planning and urban design programs explaining the basic definitions and informing the student of the various methods, techniques and processes of planning, focusing on the latest methods of assessing and gathering information.

- Concepts and theories of planning and their applications as Master Plans, Development Plans, Structure Plans etc.
- Planning terms and the definitions
- Concepts of Zonal Plans, Area Development Plans, Development Schemes, Urban Renewal, Redevelopment, City Development Plans, Planned Unit Development etc.
- Concepts of land use, zoning regulations, mixed use development, Special Economic Zones
- Planning surveys and sampling, evaluation of planning requirements
- Planning standards and models
- Overview of Legal and statutory aspects of Planning, Town Planning Acts.
- Land acquisition Act and process, Land Pooling and other schemes related to green field projects, Transfer of Development Rights
- Public participation in planning process

Sessional Work:

Minimum Assignment/s submissions towards Sessional Work & Oral Examinations shall include:

- Sufficient number of tutorials in the class to review students understanding of the subject.
- Critical report writing on any one of the planning tool for urban design (A4 size report up to 1500 words with appropriate figures, images, diagrams, etc.)

Learning Outcome:

Students are equipped with necessary information on town planning theories, principles, techniques and methodologies.

TRANSPORTATION AND TRAFFIC

TRANSP	ORTATIO		Semester-	II				
Subject Co	Subject Code- MAUD1923							
Teaching	Teaching Evaluation Scheme							
Theory	Studio	CA1	CA1 CA2 MSE ESE Paper ESE					Credit
02	04	10	10	40	60	30	150	04

Objective:

The unit presents both fundamental and advanced traffic and personal/public transport strategies for better urban design.

Besides basic engineering and design principles for roads and streets, it explores transport policy and planning choices at the local scale in relation to multi-modal optimization programs and projects.

Emphasis is on the full integration of local transport parameters into urban design, as well as on comprehensive strategies towards environmental innovation. It is also intended as an introduction to the issues related to traffic and transportation in cities. In addition, it is intended to provide an overview of the transportation planning process.

Course Outline:

- 1. Concepts of urban infrastructure, social and physical infrastructure.
- 2. Urban Form, Size and implications on services. Layout of urban area, siting of services and land use and efficiency. Basics of service network Water supply, sewerage/drainage and waste management.
- 3. Urban Social infrastructure; qualitative and quantitative techniques of assessing requirements, planning amenities and institutions.
- 4. Financing of infrastructure needs of city; national and international agencies involved in infrastructure provisions.
- 5. Introduction: Scope of urban transport planning, interdependency of land use and traffic system, traffic system approach to urban transportation.
- 6. Stages in Urban Transportation: Trip generation, trip production, trip distribution, modal split and trip assignment.
- 7. Urban Transportation surveys: Definition of study area, zoning, types of surveys, Forecasting traffic in relation planned land use. Principles of planning ad design of road network and engineering classification of roads, intersections and elevated roads.
- 8. Land Use Transport models: Lowry model, Garin-Lowry Model, applications in India.
- 9. Public Transportation modes: Systems in India, problems and prospects, present practices in urban transportation. Metro, mono, and high capacity buses. System selection.
- 10. Intersection Design: Elements of intersection maneuver area, types of intersections, flyover, grade separators, subways, underpass, and suitability of each type. Rotary and its design, Roundabouts, etc.

Sessional Work:

The internal assessment should preferably be related to the design studio surveys or on-site information for which specific surveys can be conducted during the site surveys for the design studio.

Learning Outcome:

Students are informed of urban infrastructure both social and physical, transportation systems, standards policies and techniques for design of pedestrian spaces, parking and other modes of travels, etc. along with their relationship with urban design.

References:

- 1. Kadiyali L.R. Traffic Engineering and Transportation Planning, Khanna Publications. Dimitriou H.T. Urban Transport Planning and Developmental Approach, Routledge, London. Michael J Bruton, An Introduction to Transportation Planning, Hutchinson, London.
- 2. Black John, Urban Transport Planning and Design, Crown Helm Ltd, London. Papacostasand Prevendours, Transportation Engineering and Planning, PHI Publication. Khisty and Lal, Transportation Engineering PHI publication.
- 3. CPHEERI Manual on Water Supply and Sewerage, New Delhi.
- 4. T.P.Salvats, Environmental Engineering and Sanitation, Wiley and Sons, NewYork

DIGITAL SKILL FOR URBAN DESIGN

DIGITAL	SKILL FO	OR URBAN	N DESIGN				Semester-	II
Subject Co	Subject Code- MAUD1924							
Teaching			Eva	luation Sch	neme			
Theory	Studio	CA1	CA1 CA2 MSE ESE Paper ESE STW				Total	Credit
02	04 25 25 0 0 100					150	04	

Objective:

The objective is to introduce relevant computer application such as geographical information system and other software systems including 3D computation tools for documentation, mapping, analysis and presentation for urban design tasks, site planning etc, explaining their theoretical base, practiced by hands on training on the studio problem or other assignments.

Course Contents:

- Introduction to GIS and its applications in Urban design
- Turning Geographic information into GIS data
- GIS data procurement
- Creating maps- symbology and visualization advanced mapping application, annotations, web map ping etc.
- Common analytical tasks
- Working with data-raster data, CAD data and hydrology data
- Practical urban design exercises.

Learning outcome:

The students are equipped with the use of multiple computation techniques, relevant software and application for analysis, conceptualization and communication of urban design schemes.

RESEARCH METHODOLOGY

RESEAR	CH METH	ODOLOG	Y				Semester-	II
Subject Co	Subject Code- MAUD1925							
Teaching			Eva	luation Sch	neme			
Theory	Studio	CA1	CA1 CA2 MSE ESE Paper ESE STW				Total	Credit
02	00	10	10	20	60	50	150	02

Objective:

The course would expose the students to various structures of knowledge, cultural theory which would equip them into framing methodologies to structure and explore their area of concern.

The course would have a dual purpose of not only assisting the students towards understanding the methods of research in exploring the urban field and articulating their concern but also to structure the synopsis of their thesis.

ELECTIVE-II

ELECTIV	VE-II						Semester-	II
Subject Co	Subject Code- MAUD1926							
Teaching			Eva	luation Sch	neme			
Theory	Studio	CA1	CA2	MSE	ESE Paper	ESE	Total	Credit
						STW		
00	04	20	20	0	0	60	100	02

Objective:

This Elective course is designed on the vision and the strength of course in each individual institution. This elective will be attended by all the students.

Suggested List of Topics:

- Imagining City
- Structure as expression of urban morphology.
- Art and Science of Conservation,

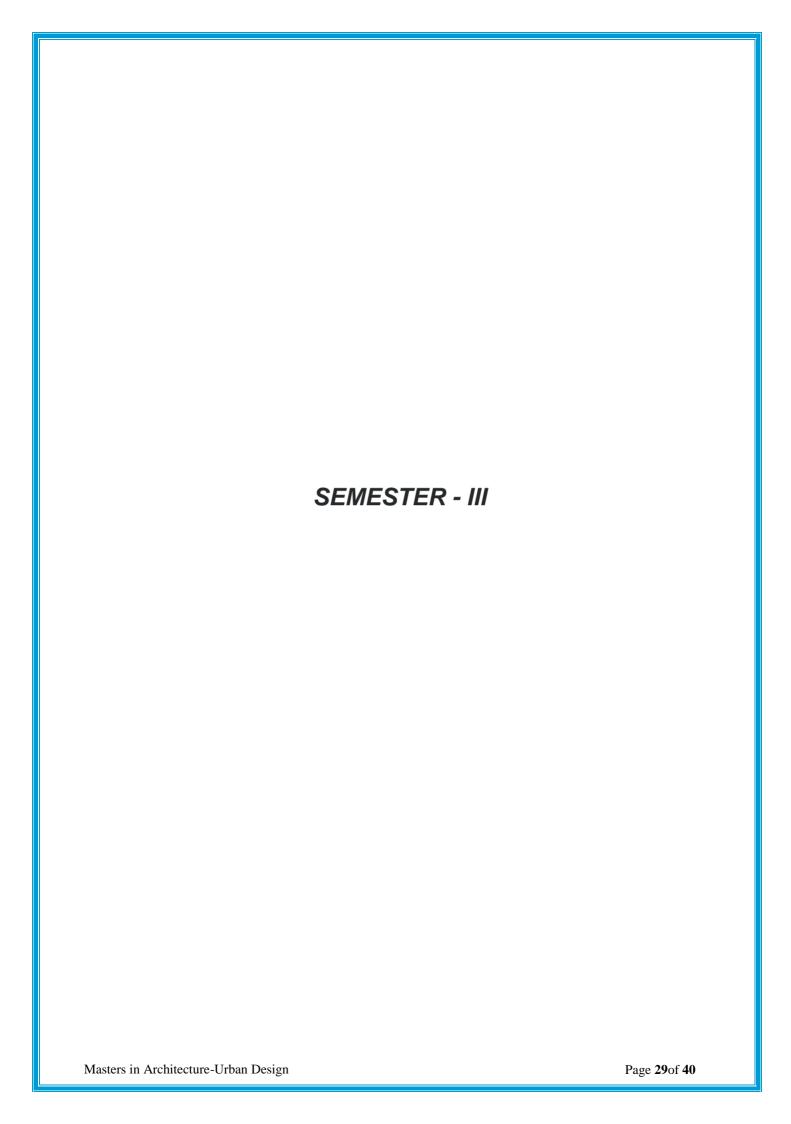
Or any other relevant topic under the above category.

Sessional Work:

Term work could be decided by the respective tutor conducting a specific elective. Sufficient number of assignments to be conducted and the same to be designed in such a manner that student's critical understanding of the urbanism and its various aspects and its issues could be assessed.

Learning Outcome:

The students are equipped to read and understand the contemporary issues related to urbanism so to understand the comprehensive nature of Urban Design



URBAN DESIGN STUDIO - III

URBAN I	URBAN DESIGN STUDIO-III							
Subject Co	Subject Code- MAUD1931							
Teaching Evaluation Scheme								
Theory	Studio	CA1	CA1 CA2 MSE ESE Paper ESE SV				Total	Credit
02	06	50	0 50 0 0 150					05

Objective:

In this semester the studio should allow the students to engage with various actors and agencies, learn to communicate with them, and devise pragmatic and localized programmatic strategies on complex urban issues. The aim would be to provide a practice orientation to the studio. It is in this studio that the students can learn to formulate urban design possibilities through a process of continuous interaction with these actors and agencies.

Sessional Work:

For this subject students will be assessed based on their processes of documentation, methods of analysis, theorization and articulation of the design problem and the design response.

Minimum Assignment/s submissions towards Sessional Work & Oral Examinations shall include:

- a. Comprehensive report of documentation, studies and analysis done by students in groups of four or five each. (not less than A2 / Half Imperial-size)
- b. Design portfolio-1 showing theorization and articulation of design problem, design decision process, master plan & design strategies done by students in groups of four or five each. (A1 or max. A0 size / Full imperial size)
- c. Design Portfolio-2 showing design demonstration by an individual student for a part of from the master plan. (A1 or max. A0 size / Full imperial size.

DISSERTATION 1(Research Paper Writing)

DISSER	TATION 1	(Research	Paper Wri	ting)			Semester-	Semester- III Total Credit	
Subject Co	Subject Code- MAUD1932								
Teaching			Eva	luation Sch	neme				
Theory	Studio	CA1	A1 CA2 MSE ESE Paper ESE					Credit	
	STW								
02	04	40	40	0	0	120	200	04	

Objective:

The Thesis is divided into two parts one that is initiated in semester III and the second demonstrated in semester IV. In the first part students are required to put forth theoretical arguments and raise critical issue, which would help them create a method to observe, map, analyze and frame possibilities of interventions or initiate transformation in a particular urban condition. The first part of the thesis would assist the students to simultaneously be able to create the structure of the argument of the thesis that would culminate in the form a written report.

URBAN BYLAWS AND PLANNING LEGISLATION

URBA	N BYLAW	S AND PL	ANNING L	EGISLAT	TION		Semester-	III
Subject Co	Subject Code- MAUD1933							
Teaching			Eva	luation Sch	neme			
Theory	Studio	CA1	A1 CA2 MSE ESE Paper ESE					Credit
02	04	40	40	20	60	40	200	04

Objective:

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

The course include the study of the Constitution of India and subsequently the study of Urban Land Ceiling Act, Rent Control Act, Land Acquisition Act, , Environment Protection Act, Co-operative Society Act, Apartment Ownership Act, Maharashtra Town and Regional Planning Act and the National building Code, RERA and any other important/relevant act.

It also includes the study of Development Control Rules and Regulation, including special regulations for TDR, protection to heritage and conservation, etc.

DEVELOPMENT FINANCE

DEVELO	PMENT F	INANCE					Semester-	III
Subject Co	Subject Code- MAUD1934							
Teaching	Teaching Evaluation Scheme							
Theory	Studio	CA1	CA1 CA2 MSE ESE Paper ESE STW			Total	Credit	
02	02	10	10	40	60	30	150	03

Objective:

The course would introduce the students to the economic, financial frameworks, and the attendant institutional frameworks of project and property development in both the public and private sectors. It should inform the students of the present mode of financing projects and discuss their strengths and weakness through the relevant case studies.

It should also introduce the students to the fundamental concepts and principles of investing and financing of real estate projects. They would understand the macro-economic fundamental that assist in the creation of an apt environment for real estate investments environment while also appreciate the micro level details of a real estate project.

The students should be encouraged to create financial mechanisms for their own projects being parallel conceived in the Design Studio.

URBAN SOCIOLOGY

URBAN S	SOCIOLO	GY					Semester-	III
Subject Co	Subject Code- MAUD1935							
Teaching			Eva	luation Sch	neme			
Theory	Studio	CA1	CA2	MSE	ESE Paper	ESE STW	Total	Credit
02	00	10	10	20	60	00	100	02

Objective:

The objective of the course is to create an understanding of the reproduction of contemporary culture in the post-colonial city resulting from interdisciplinary participation drawn from sociology, history, cultural studies and political analysts.

Course Content:

The course is structured around three modules:

i) Culture and Society

- Overview of cross-cultural influences in city development
- City as a human network social structure and urban form
- Social access territoriality, exclusion and inclusion, minority groups and the disadvantaged, children and the geographies of disability
- Urban life-style diversity and spaces of consumption
- Contemporary culture the metropolitan experience

ii) Post-colonial city

- Urbanism, colonialism and the world economy
- Cities of uneven economic development, nature of structural reform
- The politics of globalization and liberalization and their manifestations in the post-colonial city
- Memory violence and urban space, case examples of South Asian cities

iii) City in transition

From the geographies of modernity to post-modernity and beyond, the case example of Los Angels and contemporary development trends across the world

- Discoveries and implications of the post-metropolis, globalization and transnational urbanism
- Contemporary trends in the Asian city, conflicts, contestations and hybridization within the multilayered urbanities of Indian cities

Sessional Work:

The Seminar, through case studies will seek to establish an understanding of the process of layering – to read the current city backwards. Assignment to be judged for student's ability to theorize and articulate his/her thought/reading of the context.

Minimum Assignment/s submissions towards Sessional Work & Oral Examinations shall include:

- a. Report based on seminar topic (A4 size) with appropriate case references need to produced individually. (Number of words = 4000to5000)
- b. Power point presentation of the seminar topic

Learning Outcome:

Students are informed of contemporary urban processes and characteristics of urbanism from the post-colonial period to the present day including theories and discourses across related fields and disciplines.

ELECTIVE-III

ELECTIV	Semester- III							
Subject Code- MAUD1936								
Teaching			Eva					
Theory	Studio	CA1	CA2	MSE	ESE Paper	ESE STW	Total	Credit
00	04	20	20	0	0	60	100	02

Objective:

This Elective course is designed on the vision and the strength of course in each individual institution. This elective will be attended by all the students.

Suggested List of Topics:

- Planning Theory
- Sustainable urbanism
- Housing policies and procedures

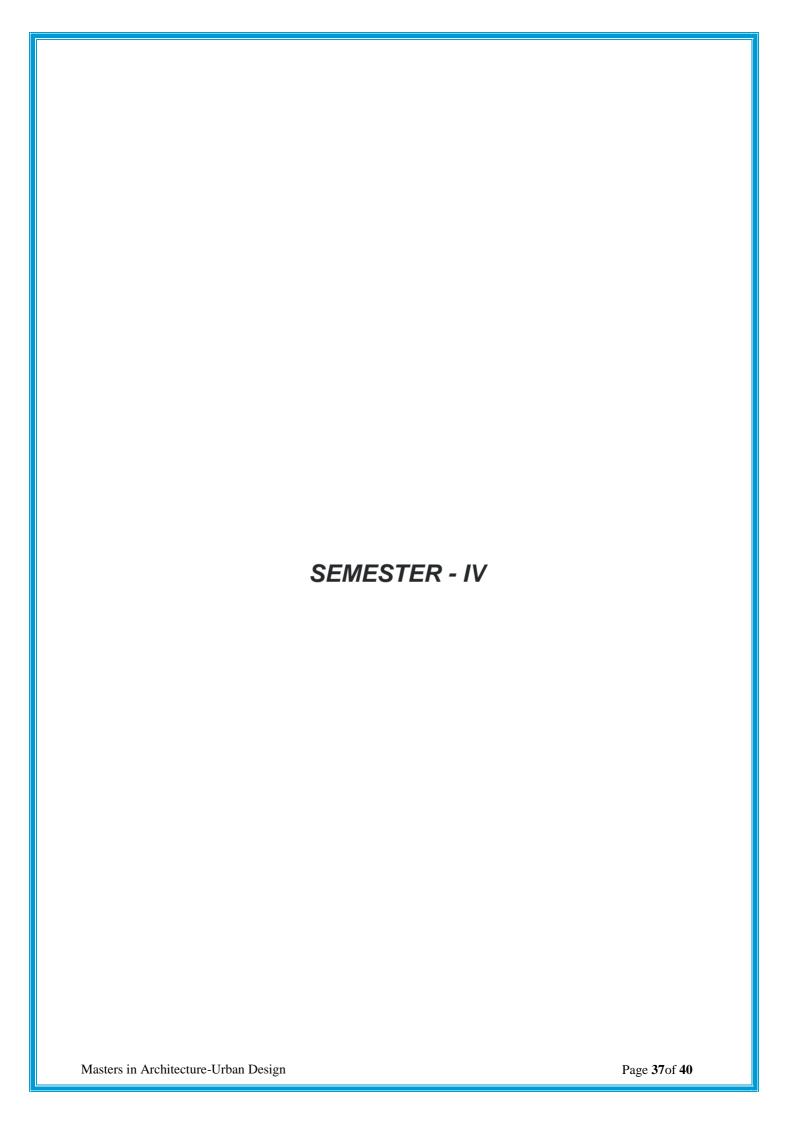
Or any other relevant topic under the above category.

Sessional Work:

Term work could be decided by the respective tutor conducting a specific elective. Sufficient number of assignments to be conducted and the same to be designed in such a manner that student's critical understanding of the urbanism and its various aspects and its issues could be assessed.

Learning Outcome:

The students are equipped to read and understand the contemporary issues related to urbanism so to understand the comprehensive nature of Urban Design



THESIS (Urban Design)

THESIS (Semester- IV							
Subject Code- MAUD1941								
Teaching		Evaluation Scheme						
Theory	Studio	CA1	CA2	MSE	ESE Paper	ESE SV	Total	Credit
00	20	100	100	0	0	300	500	10

Objective:

In this semester the students are required to demonstrate their urban design proposal based on principles and methods that have been framed in the earlier semester. The students should be assisted in evolving a representational system for communicating the proposal that would be done through periodic reviews with their guide/guides. This would be additional to the written report that is a part of the submission of the earlier semester.

ELECTIVE-IV

ELECTIVE-IV								Semester- III	
Subject Code- MAUD1942									
Teaching		Evaluation Scheme							
Theory	Studio	CA1	CA2	MSE	ESE Paper	ESE STW	Total	Credit	
00	04	20	20	0	0	60	100	02	

Objective:

This Elective course is designed on the vision and the strength of course in each individual institution. This elective will be attended by all the students.

Suggested List of Topics:

- Urban Infrastructure
- Environment Discourses and Political Ecologies
- Project Management

Or any other relevant topic under the above category.

Sessional Work:

Term work could be decided by the respective tutor conducting a specific elective. Sufficient number of assignments to be conducted and the same to be designed in such a manner that student's critical understanding of the urbanism and its various aspects and its issues could be assessed.

Learning Outcome:

The students are equipped to read and understand the contemporary issues related to urbanism so to understand the comprehensive nature of Urban Design

PROFESSIONAL TRAINING

PROFESS	Semester- IV							
Subject Code- MAUD1943								
Teaching		Evaluation Scheme						
Theory	Studio	CA1	CA2	MSE	ESE Paper	ESE SV	Total	Credit
00	0	0	0	0	0	100	100	02

Objective:

- This includes Professional Training to be undertaken for Six weeks
- The Oral Assessment of the same will be held at the end of Semester IV.
- The training should be done in vacation of third semester and certificate needs to be produced

