



# **School of Planning & Architecture, Bhopal**

## **SCHEME OF EXAMINATION AND SYLLABUS**

**FOR**

## **MASTER OF URBAN DESIGN PROGRAMME**

***THE CONTENTS OF THIS SYLLABUS SHALL COME IN EFFECT FROM THE SESSION 2013-14 AND SHALL BE APPLICABLE TO THE BATCH JOINED IN 2013-14 AND ONWARDS TILL FURTHER MODIFICATIONS AND AMMENDMENTS ARE MADE AFTER MANDATORY APPROVALS.***

# School of Planning and Architecture Bhopal

## SCHEME OF EVALUATION OF MASTER OF URBAN DESIGN PROGRAMME WITH EFFECT FROM AND APPLICABLE TO THE BATCH ADMITTED IN SESSION 2013-14

### I SEMESTER

CODE	SUBJECT	CLASSES			END SEMESTER EVALUATION	CREDITS	EXAM DURATION
		LECTURE	STUDIO/TUTORIAL	TOTAL			
MAUD 0101	DESIGN STUDIO- I & WORKSHOP	4	10	14	VV	14	
MAUD 0102	HISTORY OF URBANITY	4	0	4	WR	4	3
MAUD 0103	URBAN DESIGN- METHODS AND TECHNIQUES	2	2	4	WR	4	3
MAUD 0104	SITE AND URBAN SYSTEM PLANNING	1	3	4	VV	4	-
MAUD 0105A	COMPUTER APPLICATIONS IN URBAN DESIGN	2	2	4	VV	4	-
MAUD 0105B	INDIAN URBANISM						
TOTAL		13	17	30		30	

### II SEMESTER

CODE	SUBJECT	CLASSES			END SEMESTER EVALUATION	CREDITS	EXAM DURATION
		LECTURE	STUDIO/TUTORIAL	TOTAL			
MAUD 0201	DESIGN STUDIO- II(Urban Networks & Systems)	4	8	12	VV	12	
MAUD 0202	THEORY OF CITY FORM	2	1	3	VV	3	-
MAUD 0203	PRACTICE AND LEGISLATION FOR URBAN DESIGN	2	2	4	WR	4	3
MAUD 0204	TRANSPORT PLANNING FOR URBAN DESIGN	2	2	4	WR	4	3
MAUD 205	SUMMER TRAINING OR CASE STUDIES IN URBAN DESIGN		4	4	VV	4	
MAUD 0206A	PLANNING TOOL FOR URBAN DESIGN	2	1	3	VV	3	-
MAUD 206B	URBAN NATURE AND CITY DESIGN						
TOTAL		12	18	30		30	

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**III SEMESTER**

CODE	SUBJECT	CLASSES			END SEMESTER EVALUATION	CREDITS	EXAM DURATION
		LECTURE	STUDIO/ TUTORIAL	TOTAL			
MAUD 0301	DESIGN STUDIO- III (Urban Transformation)	2	10	12	VV	12	
MAUD 0302	Elective-I ( Common Pool)	2	1	3	WR	VV	3
	A . URBAN DESIGN POLITICS						
	B. ARCHITECTURAL CRITICISM						
	C. CITY AND ART						
MAUD 0303	ADVANCED SEMINAR IN CITY FORM	2	1	3	VV	3	3
MAUD 0304	URBAN RENEWAL AND CONSERVATION	2	1	3		3	
MAUD 0305	TECHNIQUES OF SUSTAINABLE DEVELOPMENT	2	1	3		3	
MAUD 0306	HOUSING- POLICIES AND PATTERNS	2	1	3	WR	3	3
MAUD 0307	PRE-THESIS SEMINAR	1	2	3	VV	3	
	TOTAL	13	17	30		30	

**IV SEMESTER**

CODE	SUBJECT	CLASSES			END SEMESTER EVALUATION	CREDITS	EXAM DURATION
		LECTURE	STUDIO/ TUTORIAL	TOTAL			
MAUD 0401	DESIGN THESIS OR RESEARCH THESIS	4	16	20	VV	20	
MAUD 0402	FORMS FOR CONTEMPORARY URBANISM	3	3	6	VV	6	-
MAUD 0403	URBAN DESIGN PROJECT MANAGEMENT	2	2	4	WR	4	3
	TOTAL	9	21	30		30	

NOTATION WR- WRITTEN EXAM VV – VIVA

## **Semester 1**

### **MAUD - 0101 DESIGN STUDIO - I**

The studio is the introduction of the student to the realm of urban design the objective is to expose them to the complexities of the design process. To create an understanding of the role of various physical, social, economic and infra structural components and decision making processes; the contribution of related disciplines associated with the production of the city. The studio will also familiarize the student with urban design terminologies, methods of surveys and site analysis.

The design tutorial will assist the students in acquiring skills of documentation, analysis and presentation of urban design projects and typological studies. An interactive seminar session with invited professionals may be organized who will demonstrate the design development process of projects, their funding, management, construction and any other relevant issues pertaining to design and development

Study and documentation of urban landscape with three-dimensional models. Emphasis on survey and documentation. on programme interpretation and design.

### **MAUD - 0102 HISTORY OF URBANITY**

The objective of the course is to provide a morphological overview of the general processes of modernization from Post-Industrial Revolution; tracing the transformations beginning with the concepts of the Garden City and City Beautiful movements the rise of the city as machine of the 19<sup>th</sup> century concluding with rise of Modernist urbanism and its influence on Colonial and Post-colonial Indian cities. The subject shall focus on determinants of urbanity and its components. Parallel development in science, economics and socio-political spectrum shall also be taken as background for explaining the chronological overview of the subject.

- Pre-industrial urban form, nature of cities, city models, reasons of transformation in urban form
- The Industrial revolution, its effect of on European urbanism.
- Concepts of Garden Cities or cities in the garden, in Europe and America, influence on the development of mercantile Colonial Towns in India
- City beautiful movement - Chicago, New Delhi, Canberra, Berlin (Albert Speer)
- Industrial colonization and the introduction of Colonial Institutions in urban India
- CIAM and the Modern Movement, Bauhaus, Corbusier's Radiant City
- Urban renewal and post-war reconstruction, the picturesque city. The role of Geddes, Mumford and Jane Jacobs beginning of modern town planning in India, emergence of town planning, zoning and building regulations
- City of the Automobile, American suburbia, Transportation, the building of suburbia, New Town Movement and its influence on post-independent Indian city planning concepts

### **MAUD – 0103 URBAN DESIGN METHODS& TECHNIQUES**

The seminar will study a variety of urban spaces of Indian cities, both historical and contemporary critically analyzing the origins and influences and success or failures of the designs. The major assessment of this subject will be based on final seminar presentation.

The objective of this course is to familiarize students with eminent prevailing ideas in the field of urban design and to confront you with urban challenges that have affected the evolution of cities. The course shall render an understanding of urban design as a dynamic force integral to the evolution of cities. For students to understand the role of an urban designer in the process of city making, this course will sensitize to the inherent qualities and subtle nuances of the built environment. The subject shall cover range of methodological approaches to spatial analysis of the city with an opportunity to analyze, explore and innovate new methods and techniques for understanding our cities. A second goal is to give the students an experience in understanding, interpreting and applying theories and concepts of Urban Design. The subject shall expose students to the language, terminology and context within which most of the urban issues are couched in literature. Another goal is also to develop a basic capacity to critique for

urban design and the normative doctrines that produce them, derived from both theory and empirical evidence. An extensive reading list shall be given to the students at the start of the semester.

- Basic glossary of urban design terms and terminologies
- Specific graphics and representation techniques for urban design
- Concepts of making a base map, cognitive mapping and layering
- Methods of urban design surveys: Qualitative and quantitative
- Determinants of urban form
- Components of urban form
- Morphological dimension of urban design
- Temporal dimension of urban design
- Social dimension of urban design
- Functional dimension of urban design
- Perceptual dimension of urban design
- Visual dimension of urban design
- Growth, scale and form of Indian cities.

### **MAUD - 0104 SITE AND URBAN LANDSCAPE SYSTEMS**

**Theory:** Ecology and urban nature, historical perspective of landscape design, perception of landscape through ages. The theory classes give overview of how systems survive in connection with each other from the complex viewpoint of urban design. Systems are integral to understanding of site planning and any urban linkages, theory classes shall bring various elements of systems in urban environment like housing, natural sites, nature within urban areas, interface of nature and human in cities.

**Studio:** To develop skills that enables an urban designer to deal with large sites in a comprehensive manner from ecological considerations to the design of services and related infrastructure. The studio will choose a suitable site in central India where the students will individually map, evaluate and analyze the site from the knowledge imparted in the theory classes.

- Introduction to site planning & Ecology, Site planning principles
- Ecological factors in site evaluation
- Site resource systems
- Physiography, geomorphology, hydrology, microclimate, vegetation, wild life
- Cultural resources
- Urban vegetation, planning & maintenance
- Ecological planning processes
- Road layout and parking
- Site grading and drainage
- Sewerage, water supply and electricity

The focus areas of site planning studio shall be:

- Inter-relationship of plan form- land form
- Open space-built space relationship
- Management built and open spaces
- Ecological responses & constraints
- Urban design form & guidelines and contextual design
- Programme development
- Circulation, services and allocation of infrastructure
- Landscape design and planning
- Other issues such as conservation, urbanization etc.

## **ELECTIVES IN FIRST SEMESTER**

### **MAUD - 0105 A COMPUTER APPLICATIONS IN URBAN DESIGN**

Introduction to computer software, such as Geographical Information Systems and other softwaresystems as tools for documentation, mapping, analysis and presentation for urban design, site planning schemes; explaining their theoretical base, practiced by on hands-on training on the studio problem or other assignments. Introduction to presentation softwares like Google Sktech, Revit etc shall be also covered in the classes. The assignment shall be preferably linked with parallely running design studio.

### **MAUD 0105B INDIAN URBANISM**

This subject shall cover urbanity, which is specific to Indian context. The subject shall cover socio-cultural aspects of historical as well as modern India referring to non-physical dimensions urban design. This class shall be based on discussion and debate format. Use of films, dramas, and newspaper articles shall be encouraged in classroom.

- Introduction to Urbane India, people, culture and society.
- Pre-independence and post-independence India, differences-similarities
- Typifying Indian cities through various examples like Mumbai, Delhi, Ahmadabad, Bangaluru-urban life, realities etc.
- Rural India vs. Urban India, State vs. Nation, differences, stereotypes.
- Urbanization indicators, urbanism in India.
- Dimensions of Urban identity in India, Various schools of thoughts of urbanization in India
- Nehruvian and Gandhian ideas on urban-rural India.
- Urban life world of India, urban anthropological city types in India
- National Commission on urbanization of India-recommendations
- Concepts of rural-urban continuum and dichotomy

Lectures through extensive reading of the literature on urban issues of India.

The subject shall culminate into end term paper written by student on the chosen topic with periodic discussions with concerned faculty.

## Semester 2

### MAUD 0201 DESIGN STUDIO – II (URBAN NETWORKS & SYSTEMS)

This semester will expose students to the actual city, in an urban sense. The idea behind this studio is to study urban environment and how to systematize complex urban settings. Any city is composed of multiple urban components and actors; the aim of the studio is to find out these components and actors through first hand experience of city. Various methods of city analysis are to be used in the studio, e.g. layering, networking, collage, etc to understand the complexity of our cities. The studio will also take into account the current development pattern in the selected city and also include various stakeholders to make interventions meaningful and contextual.

The selection criteria shall be based on the multiplicity of the urban components and how they are connected to each other. Cities with temporal layering such as historical and modern shall serve as appropriate choice for the studio. Various factors like historicity, socio-political patterns, economic dynamism, polarization of groups, ecological and environmental and global influences can be taken as determinants for selecting the city. The city shall be preferably within India to understand the immediate urban surrounding where students are going to get first hand experience.

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. The networks and systems studio will focus on understanding city's complexity from the viewpoints of three main determinants: Infrastructure, housing pattern and urban history and how these determinants works in networking of various urban conditions of past and present.

### MAUD 0202 THEORY OF CITY FORM – I

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. The subject shall expose students to various types of models of city from through history. Determinants of urban form can be derived from various theoreticians like Kevin Lynch, Rossi, and William AJ Morris. There will be a Seminar to enquire into the range of tools that contribute to city form, planning regulations, sprawl, zoning, informal settlements etc.

The course is structured around three modules; first two shall familiarize students with built and unbuilt determinants and the third module shall bring the combination of both in terms of built form

#### What is City?

- The idea of urban, urbanization and urbanism
- Notions of a city, urban society and culture through selected writings
- Theorizing city: Lewis Mumford, Kevin Lynch, Rossi, etc. and other urban writings from literature etc.
- City models: city of faith, city as organism, city as machine etc ( examples based on these three models to be explored in detail by students)
- Urban actors in the city

#### City Space

- Concepts of place and space - social construction of space, an overview
- Space as contested domain - public private, concept and production of everyday space
- Spaces of modernity vs spaces of social justice, post-modernity and the city
- Notions of space and place with reference to indigenous cities

#### Urban Form:

- Urban form creation-process of formation, change and transformation of various city forms.
- Determinants of urban form
- Types of Indian city forms
- Urban design as bridge between urban planning and architecture

### **MAUD 0203 PRACTICE AND LEGISLATION FOR URBAN DESIGN**

- The meaning, significance and objectives of planning legislation; constitutional basis and provisions relating to land, its development and use.
- Evolution of planning legislation in India. Overview of legal tools for urban planning & development, (Town and Country Planning, Improvement Trust and Development Authorities etc.)
- Objectives, contents and procedures for preparation and implementation of Regional plans, development plans, Town Planning Schemes, Area Plans etc.
- Legislation for land acquisition and land ownership including rural and urban land ceiling Acts and their implications on development.
- Legislation on Conservation of natural resources including Mining and Forestry Acts, Conservation and Management of Ancient Monuments and Archaeological sites and ruins.
- Overview of Development Control Regulations- zoning, sub-division regulations, building regulations and bye laws.
- Role and responsibility of planning consultants, professional ethics, code of conduct and scale of professional charges. Role in interdisciplinary groups;
- Formulation of project proposal and outlines; consultancy agreements and contracts.

### **MAUD 0204 TRANSPORT PLANNING FOR URBAN DESIGN**

- Overview of transportation systems and modes, design and operating characteristics.
- Classification of roads, road geometries and road components, traffic volume, origin destination, spot speed, speed and delay, parking and pedestrian issues. Design and preparation of layout for road intersections, rotaries and signalized intersections
- Traffic and transportation surveys- Study area definitions, surveys and their types, sampling of travel methods, survey techniques;
- Use of analytical models for transportation planning- programming and scheduling, processing of travel data, analysis and interpretation of traffic studies; introduction to transport planning process; trip generation, trip distribution, trip assignment, model split, land use transportation models;
- Traffic Management- existing organizational and legal framework, traffic and environmental management techniques; review of the existing traffic management schemes in case cities.

### **MAUD 0205 PROFESSIONAL TRAINING OR CASE STUDIES IN URBAN DESIGN**

#### **PROFESSIONAL TRAINING**

- Each student shall have to undergo professional training for a period of at least 6 weeks in an establishment approved by the class coordinator and professor In charge.
- The practical training will commence during the summer break between second and third semester.
- A student will be required to submit a performance report from the firm/organization under whom training is undertaken as well as a detailed report on the work carried out by him during the training.
- Scope of services for different projects like master plan for urban area, zonal district plan, sector/ neighborhood; layout, group-housing schemes, commercial centers, industrial estates, etc. Consultancy agreements and safeguards, urban design programme development, fees and scales of professional charges, coordination of various authorities

- The Internal assessment marks for the practical training will be awarded to each student by the Prof. in charge in consultation with the course coordinator on the basis of the performance report from the firm/organization under whom the training was carried out. The external Jury will award the marks for the practical training on the basis of viva-voce examination of the student on the work rendered by the student during training.

### **CASE STUDIES IN URBAN DESIGN**

- The objective of this course is to make student understand the advanced level of documentation and analysis of complex urban conditions. This course will also serve as initiation into probable topics and thrust area identification for their thesis in fourth semester.
- Students will have to select and analyze an urban precinct, district which has its chronological changes in terms of built form, culture, politics etc. They are required to map the present conditions, bring out current issues and problems of the area and present a report in the form of drawings, maps, photographs, graphics etc by critically analyzing existing scenario. Students can also select an ongoing urban/ environmental/regional planning/ design project anywhere in India or abroad and carry out a study through critical appraisal by conducting actual site visits and surveys. The study period shall not be less than 6 weeks. The external Jury will award the marks on the basis of viva-voce examination of the student on the work rendered during case study.

### **ELECTIVES IN SECOND SEMESTER**

#### **MAUD 0206 A PLANNING TOOLS FOR URBAN DESIGN**

The aim of the course is to expose the student to the principles of planning and critically evaluate different planning processes prevalent in India and abroad. A critical overview of the any major metropolitan Indian city Master Plan is to be used as a case example to understand planning processes and its impact on the production of the city.

An overview of statistical and survey techniques used to in the preparation of a planning and urban design programmes 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 their 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

#### **MAUD 0206 B URBAN NATURE & CITY DESIGN:**

To place urban design within the framework of environmental issues as well as to provide an overview of efforts to mitigate the negative inputs from development.

- Environment and Ecology: an introduction, notions of carrying capacity, Human-nature interaction
- Degradation of forests, Land and water, housing resources and its impact on urban environments, city design, management of resources.

- Environmental issues with respect to current problems like global warming, climate change-how urban design play role in this dynamic natural world.
- Government policies, environmental laws and programmes
- Politics of environment in cities and urban areas
- Cities and natural processes
- Ancient historical concepts of “city as one with nature”.
- Ecological-Economical discourse with respect to development
- Case studies of meaningful urban design responding to nature and ecology

## **Semester 3**

### **MARC 0301 DESIGN STUDIO – III (URBAN TRANSFORMATIONS)**

The studio exercise will focus on inner city regeneration. Inner city issues, urban renewal, conservation, socio-religious structure in the inner city, etc to be explored in this studio through design intervention.

**OR**

Any urban site transformations in complex situations examining issues related to critical programme development, urban conservation, economic and environmental considerations, and infrastructure development, social and political forces.

The involvement of user groups and decision-making agencies as a part of the project formulation and appraisal should be encouraged. Brown field sites may also be chosen for the exercise.

### **MARC 0302 COMMON POOL ELECTIVE**

#### **A. URBAN DESIGN POLITICS**

This is a course about the ways that urban design contributes to the distribution of political power and resources in cities. "Design," in this view, is not some value-neutral aesthetic applied to efforts at urban development but is, instead, an integral part of the motives driving that development. Though many urban designers and architects often seem to regard "good design" as somehow independent from social and political factors affecting its production and use, design efforts are influenced by politics in at least two important ways. First, urban design proposals may be subject to challenge by a variety of groups during the planning process. Second, political values, whether tacit or explicit, are encoded in the resultant designs. The course investigates the nature of the relations between built form and political purposes through close examination of a wide variety of situations where public and private sector design commissions and planning processes have been clearly motivated by political pressures, as well as situations where the political assumptions have remained more tacit. We will explore cases from both developed and developing countries.

#### **B. ARCHITECTURAL CRITICISM**

The seminar offers students insights into the methods of architectural criticism, as cities are representation of architecture they built, negotiate and nurture. The course comprises theoretical reflection, discussions of architectural objects with respect to cities. In a first phase, theoretical foundations will be established based on reading and discussing historical and theoretical texts as well as selected reviews on specific buildings. Students will prepare writings of architectural criticism over the course of the semester.

#### **C. CITY AND ARTS**

Every city is represented in its visual, performing and literary arts. The city is either a constant backdrop or the central character in all valid artistic productions which deal with urban situations. A city's socio-cultural and morphological transformations remain documented in its literature, paintings, plays and films and in spite of inevitable changes in its urban fabric over time, certain images remain embedded in the public memory of place, which are associated with the very identity of the city. In this elective, learning from diverse arts pertaining to cities, would reveal cities in their various aspects and equip a designer to take up critical design initiatives with a perception of the presence of the past and the future and the presence of the particular, the locus.

## **MAUD 0303 ADVANCED SEMINAR IN CITY FORM**

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.

The course is structured around three modules:

### **1. 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

### **2. Development of modern 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

### **3. Post Modern City in transition**

- From the geographies of modernity to post-modernity and beyond, the case example of any Megalopolis 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
- Concepts of Global City etc.

## **MAUD 0304 URBAN RENEWAL AND CONSERVATION**

Urban renewal and conservation are critical to the recycling and revival of certain city areas, the objective of the course is to equip the students to deal with developments in existing cities.

- Historic overview of urban renewal
- Development strategies for regeneration of inner city areas, recycling, renewal, etc.
- Case studies of urban renewal, adaptive reuse and Brown Field projects in India and abroad
- Infrastructure up gradation, economic regeneration, financing and management of urban renewal schemes
- Introduction to conservation, heritage, concepts of historic zones and world heritage sites
- Principles of conservation and successful practices in conservation in India and abroad
- Importance of Charters, Archaeological Acts, Conservation Acts and Legislation
- Concepts and approaches to urban conservation in India, UK and Europe
- Heritage tourism and conservation
- Institutional framework for urban conservation in India

## **MAUD 0305 HOUSING POLICIES & PATTERNS**

Housing constitutes almost one half of our cities, is produced in a variety of ways and is a reflection of a settlements ethnic, social and economic groups; the objective of the course is to develop an understanding of the dynamics of traditional and contemporary housing and the emerging housing scenario in India.

- Overview of housing scenario in India, types of housing, demand and shortage
- Traditional housing stock, its contemporary condition and transformations
- Rent control laws, subdivision of property and its effect on traditional housing

- Social housing scenario and the role of the State Governments & NGO's
- Slums and squatter settlements, schemes for rehabilitation and improvement
- Social impact of planned housing
- Role of real estate developers and private builders in the housing sector, comparison with other Asian cities
- Housing as an investment, private public partnership and foreign direct investment their impact on the housing market
- Critical overview of the contribution of Central and State Governments, HUDCO, State Housing Boards, Development Authorities, etc. in the production, control and management of housing
- Housing policy and future housing scenario in India.

## **MAUD 0306 TECHNIQUES OF SUSTAINABLE DEVELOPMENT**

Concern for the protection of the natural environment and the techniques for sustainable development applied to urban design, planning and architecture is of critical importance today and indispensable in the future, the aim of the course is to inform the student of the latest theories and techniques available as tools for design and development Create awareness of the legislative mechanisms for environmental protection and Environmental Impact Assessment (EIA) methods and procedures.

Students shall be judged on the basis of end term seminar in this subject. Periodic assessment shall be scheduled to keep the constant progress of the seminar.

- Overview of International and National policies and Programmes - Stockholm Conference,
- Bunntdland Commission, Earth Summit, Agenda 21, Habitat I & II etc. and emerging issues
- Strategies and concepts of sustainable development for resource conservation as relevant to settlement planning & design
- Definitions of environmental planning terms
- Environmental Planning techniques - analysis of carrying capacity, ecological footprint and land suitability, vulnerability assessment and microzonation, pollution modeling, eco city development etc.
- 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.)
- Statutory Acts, regulations and Notifications (coastal zone regulations, pollution control Act etc.)
- Definition of Environmental Impact assessment, methods of EIA, procedures - formats,
- Important clearances, time frame, legal framework of EIA

## **MAUD 0307 PRE THESIS SEMINAR**

### **Description of Pre-Thesis Seminars**

The Urban Design thesis provides students with an opportunity to undertake independent research in urban design at an advanced level while also enabling graduates to apply principles of urban design at an advanced level; generate proposals and solutions to complex urban design issues in a variety of urban settings; and demonstrate an ability to critique urban design propositions.

This thesis is a self-directed exploration of an urban design topic of the students' choice, which may be submitted for examination in the form of a **Research Thesis Alone OR a Written Dissertation with a Design Proposal**. Both types of products are presented to an external jury for final review where students are expected to position their work in the context of contemporary urban design theory and to defend their research conclusions and/or design propositions with context to application of the contemporary urban design theory and practice.

The students will work on and complete the written master thesis independently. In the process, they will develop their own position and viewpoint with regard the concept-, planning-, or design-oriented theme that they have drawn from their research and practical experience. The students will choose the theme

themselves and develop a research proposal on it (the enquiry might be carried out by design or by research methods) and eventually concluding in a design or a written thesis and it should correspond to the advanced level of knowledge gained in the subject area Urban Design.

**It may be research or application-oriented. The scope of work should include showing how a solution can be reached. The master thesis should be based on a theme that generates integrated planning-based, strategic-conceptual and/or design-based constructional-spatial results.**

The thesis presentation given by the students should place the theme of the master thesis in a scientific, design-based, planning context.

### **Teaching and learning forms:**

Self-directed and independent academic work with the support of the examiners; intermediate reviews

### **Aim:**

Students should be capable of independently developing a design project. The final design project formulates an adequate problem statement, addresses methodological issues, and processes the necessary and relevant data in order to come up with a well argued answer to the problem statement in the form of a design proposal, accompanied by a report.

The final project is an outstanding part of the curriculum in which synthesis of curriculum elements; professional experience and contextual application come together.

### **STAGE-I**

- Identifying the areas of your own interest in urban design?
- In the contemporary or specific urban design theories
  
- Identifying current issues of urban design with respect to Indian cities
  
- Role of Urban Designer and the kind of approach required to the various issues and application of theory and
- enquiry with respect to Indian cities and context
  
- Conventional steps, stages and concept and framing a thesis/research proposal and making a literature review

Suggested method of inquiries for **stage –I**

Defining the types of research thesis....

- Student picks up a topic (urban design theory) and tries to test and examine its relevance in various Indian cities in Indian context.
- Student finds a gap in a urban design theory and tries to form a solution on it through testing the solutions on a selected site. (design based)
- Use of urban design theories and techniques in renewal and regeneration of some areas. (design based)
- Pick up an urban design theory and develop it for further study and research through experiments and studies conducted.
- Attempt to make an offshoot of indigenous urban design theories inspired from the conventionally accepted ones.( either design or research based)

### **STAGE-II**

- Framing the issue or research question
- Approach and way of inquiry into probable domains (Indian cities/specific precinct)
- Literature search/identified case studies
- Writing the proposal for designed /research based thesis

### STAGE-III

Introductory design / research based thesis proposal containing:

- Research/Design question
- Literature review ( theories and projects)
- Identified methodology ( basic level)
- Identified sites/demonstration areas
- Work schedule ( device your schedule based on the requirements identified/needed by your research methodology )

### STAGE-IV

- Final research/design based thesis proposal

Mode and format of presentation to be decided at the respective stages by the external and internal faculties.

## **Semester 4**

### **MAUD 0401 THESIS BY DESIGN**

The design thesis is an independent topic explored and defined by the student in the previous semester. Students continue to take forward the thesis areas, leading to the development of a clear design proposal to be supervised by a faculty team and evaluated by an external jury.

The tutorial will assist the students to strengthen the theoretical base of the thesis and analyze relevant successful design demonstrations through case studies.

**OR**

### **MAUD 0401 THESIS BY RESEARCH**

The thesis by research is an independent research on a topic defined by a student, to be completed in the form of a comprehensive report under the supervision of an advisor and evaluated by an external jury. The tutorial will assist the student in research methodologies, conducting of surveys, identifying case studies etc. Types of research: descriptive vs Analytical, applied vs fundamental, quantitative vs qualitative, conceptual vs empirical research Introduction to urban research, Research design methodology, Descriptive research, Explanatory research, diagnostic, experimental research

### **MAUD 0402 FORMS FOR CONTEMPORARY URBANISM**

The course examines contemporary concerns and emerging theories in the construct of the city, recent urban initiatives, sustainable development, smart growth, ecosystem approach urban regeneration etc. The course will critically review philosophies and projections made in urban design, architecture and planning projects and the views of social and political scientists, economists etc. for the future of urbanism and city dynamics. The word contemporary here signifies the urban form for present as well as future cities. The intent is to identify the issues of present and immediate future faced by architecture and urban design.

By studying the organization of flows and the articulation of public spaces within various projects, we will attempt to lay a definition of 'urbanity' in these propositions using analytical diagrams. We will also study concrete design techniques employed by various architects, such as the abolition of buffer spaces, the development of long-distance perspective view lines, the redesign of infrastructure systems, enclave formations and iconic buildings etc. The subject will explore how certain „kind“ of urbanism fails or reinvent itself in various forms of manifestations.

The seminar focuses exclusively on texts and projects of a particular lineage of architects and planners, from India and the West through a series of concrete, discrete, tangible interventions. They include among others J.L. Sert, L. Kahn, F. Maki, L. Martin, J. Stirling, L. Quaroni, W. Chalk, H. Hollein, R. Koolhaas, E. Zenghelis, M. de Sola-Morales, R. Moneo, Charles Correa, Achyut Kanvinde, Ranjit Sabikhi, B.V. Doshi and others.

The seminar will focus on critical analysis of contemporary and projected urban initiatives with an emphasis on India and Asian cities, studied through case studies. This presentation will serve as the foundation for a term paper, which is to include both text and drawings.

### **MAUD 0403 URBAN PROJECTS & SYSTEMS MANAGEMENT**

With the introduction of large urban design and development projects in India, particularly under public-private partnerships, the importance of project planning its role in management and execution has become critical to its success. The objective of the studio is to educate the students of the various methodologies, policies and financial frameworks

- Introduction to project planning, theories, concepts and management
  - Overview of the various methodologies of planning
  - Project formulation, definition
  - Norms, standards, aspects and methods of project appraisal
  - Concepts of Project management, systems, frameworks and techniques
  - Implementation strategies, scheduling, activities, progress reviews, corrective actions etc
  - Economic and financial feasibility concepts and methods
  - Project funding, economic feasibility and methods of recovery
  - Mandatory legal and environmental approvals
  - 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.