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<thead>
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<th>Title of Subject</th>
<th>Scheme of Teaching Periods* per Week</th>
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UDC: Urban Design Core Course  
UDS: Urban Design Supporting Course  
UDE: Urban Design Elective Course  
Minimum Marks for Pass:  
Theory: 40%  
Progressive Marks: 50%  
Viva-Voce: 40%  
* Periods: 50-60 Minutes Duration.
## VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELGAUM

### SCHEME OF TEACHING AND EXAMINATION OF II SEM M.ARCH (Urban Design)

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UDC: Urban Design Core Course. UDS: Urban Design Supporting Course. UDE: Urban Design Elective Course
Minimum Marks for Pass: Theory: 40% Progressive Marks: 50% Viva-Voce: 40% * Periods: 50-60 Minutes Duration
Objective:
The course is intended as a comprehensive study of urban form and urban spaces in historical and theoretical terms.

Outline:
1. Introduction to urban design – ideology/theory and the various concerns of the field. Urban Design through history.
3. Study of the evolution of urban form (western context)
   a. 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.)
   b. City as patterns; diagrams; spaces and ideas (organic; grid; political-functional-secularist-socialist diagrams; grand manner; skyline; city edge; urban division; public spaces- various typologies including street and parks; Islamic cities in the Middle East)
   c. Comparison between the various perspectives of studying and analyzing urban form- space; 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 Proxemic theory; Defensible spaces; ideas of community through design; treatment of urban space; future of the city)

References:
1. Spiro Kostof, The City Assembled, Thames and Hudson.
2. Spiro Kostof, The City Shaped, Thames and Hudson.
5. Kevin Lynch, Good City Form, MIT Press.
7. Geoffrey Broadbent, Emerging Concepts of urban Design
**Objective:**
The primary objective of the course is to introduce students to the methods of reading and understanding the physical fabric of a city.

**Outline:**
1. Definition and scope of urban design. Introduction to the process and profession of Urban Design, differences and similarities between urban planning and urban design.
2. Fundamental hypothesis: the study of building typology in relation to the city, Concepts of Aldo Rossi
3. The street, Square, façade & typologies of sections and elevations, the works of Rob Krier
4. City as a visual matter, philosophy of perception, comprehension of the environment through visual examination, Serial vision, place, content, etc based on the concepts of Gorden Cullen. Perception of movement and clarity/legibility in the cityscapes, Concepts of Kevin Lynch
5. Pattern language of Christopher Alexander, City seen as a complex
6. Lattice and the underlying principles expressed in an abstract pattern.
7. Edmund Bacon’s work on city design based on the movement system
8. “Learning from Las Vegas” tools developed for analyzing the traditional urban spaces in a new kind of space

**References**
1. Broadbent, Geoffrey. Emerging Concepts of urban Design
6. Kostof, Spiro, City Shaped: Urban Patterns and Meanings Through History
design the growth and changes occurring in cities. Using theoretical discourses and cases from other countries, it undertakes a critical review of the planning process and development controls in the Indian context.

**Outline:**

2. The concept of planning legislation in India; review of legislations related to city planning and local Town Planning Acts.
3. Plan making process; delineation of planning area; development of visions and policies, assessment of developmental issues for various sectors such as land use, transportation, environment, urban poor, and urban design among others; projection of requirements, developmental proposals; and delineation of zones.
4. Land use zones; sub classification, permissible activities, and prohibited activities; appeals, appellant authority and unauthorized developments.
5. Developmental control tools; TP Schemes and their validity; identification of urban renewal areas; urban renewal process and management; conservation and redevelopment; incentive zoning, TDR and Floating FSI.
6. Resource mobilization; plan monitoring and review; public participation; implementation mechanisms; and zonal level plans.
7. Critical review of the planning process in India.

**References:**

1. UDPFI Guidelines, Institute of Town Planners, India, Ministry of Urban Affairs and Employment, Government of India, New Delhi
6. Master Plans of Bangalore, New Delhi, Mumbai and other metropolitan Indian cities.

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<tr>
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**Objective:** The course is intended as an introductory course to conceptual and theoretical perspectives of urban social theory.
Outline:

1. Introduction to Classical Theoretical Perspectives:
   Karl Marx, Friedrich Engels, Ferdinand Tonnies: Community and Association,
   Emile Durkheim: Social solidarity, Georg Simmel: urban experience, Social
distance, Philosophy of Money  Max Weber: social structure of city and urban
community

2. Contemporary Theoretical Perspectives
   Robert Park: Human Ecology, Symbiotic versus societal organization, Dynamics
and processes of human community: population, material culture (technological
development), nonmaterial culture( customs and beliefs), natural resources of the
habitat, The societal pyramid, Differences between ecology and human ecology
   Louis Wirth: urban theory on urbanism as a function of population density, size
and heterogeneity;
   Ernest Burgess: Concentric Zone Theory, Homer Hoyt: Sector Theory, Harris and
Ullman: Multiple Nuclei Theory
   Political Economy: political and economic forces in a society with reference to
works of Henri Lefebvre, David Gordon, Michael Storper and David Walker,
Manuel Castells, David Harvey, Allen Scott and the ideology of Growth Machine

References:
1. Harvey, David, Spaces of Capital Towards a Critical Geography (Blackwell/Wiley).
2. Lin and Mele (eds.), The Urban Sociology Reader (Routledge).

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<tr>
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<td>Subject</td>
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<td>Progressive Marks</td>
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Goal and Objective:
The goal of this first studio shall be to understand that urban design at its core is a
connective discipline. The objective shall be to understand, organize and synthesize in
visual, tactile and measurable ways sustained improvements in the places that make up
our urban living environment.

Outline:
The studio will incorporate interdisciplinary principles, processes and interactions that are
fundamental to Urban Design. The studio tasks will include the following:
1. Documenting, analyzing and understanding textures and places that make an
urban area,
2. Understanding the nature of interrelation between non formal and formal issues
connected with intervention into urban fabric
3. To identify and learn basic urban design tools
4. To implement the same in a project of either single use or multiuse built structure.
Project I will consist of documenting, analyzing and evolving proposals for urban components like streets, public open spaces, public gathering places, precincts of historically important buildings in the city. The focus will be on understanding the concepts of “Fabric, Texture and Weave”.

Project II will focus on the goals and objectives of “intervention to improve”. The project will identify a specific area in an identified city to understand the process of documenting the true picture of the area and creating scenarios which will clearly demonstrate the needs of intervention to improve. The project will end with the design of multi or single use built forms.

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<tr>
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**Objective:** The course is intended to develop an understanding of key issues of urbanism in India, its dilemmas, ideologies and the new patterns that it has taken with neo-liberalism.

**Outline:** The course covers on issues of Indian urbanism related to polity and colonial legacy, ideology of tenure and exchange, environment and water, daily life and informal sector, gender, art and media in the city. The course would be conducted through readings, discussions and invited lectures covering case studies and published research works.

**References:**
2. Kenneth R Hall (Edit), Structure and Society in early South India, Oxford University Press, 2004
3. Malcolm Miles and Tim Hall (Eds), The City Cultures Reader, Routledge Taylor & Francis Group, 2004
5. Reader compiled by course instructor
<table>
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<td>Subject</td>
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**Objective:** The course is intended to understand GIS as a decision-support tool in urban spatial planning process. It introduces basic, practical understanding of GIS concepts, techniques and real world applications in spatial planning.

**Outline:**
5. Introduction to GIS and its application in Urban spatial planning,
6. Map and Map Analysis,
7. Raster/Vector GIS models,
8. General Coordinate Systems,
9. Map Projections and Transformation,
10. Geo referencing,
11. Spatial Database Development and analysis,
12. Introduction to GIS Software (Arc/Info, ArcView, IDRISI, GRASS, etc),

The course would be conducted through classroom lecture and hands on lab exercises. Students will complete lab exercises using GIS software.

**References:**
1. Reference manuals/ guides to Geodatabase Design and GIS Analysis
2. Various handouts and supplements supplied by the instructors.
Objective:
The course is intended as an introduction to the various issues of urban conservation in terms of feasibility, community participation and heritage charters.

Outline:
1. Introduction to conservation of historic and inner city areas. Concepts of conservation in India and other countries.
2. Socio-Economic development, tourism infrastructure development, and role of urban development.
3. Institutional aspects of conservation- Charters, World heritage legislation and sites, Conservation Acts and legislation and available institutional frame work of conservation in India.
4. Conservation area practice, adaptive reuse, up gradation programs in old areas, infill design and regeneration of inner city areas.
5. Conservation management, community participation, economic regeneration, financing and implementation of frame work for redevelopment and revitalization projects.
6. Case studies in India and abroad to illustrate the above mentioned concepts and approaches.

References:

Objective:
The course is intended as an introduction to the infrastructure needs of an urban environment and fundamental concepts which cater to such needs. 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.
Outline:
1. Concepts of urban infrastructure, social and physical infrastructure.
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.
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.
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

References:
5. Papacostas and Prevendours, Transportation Engineering and Planning, PHI Publication.
Objective:
This elective will emphasise the importance of integrating the urban design agenda into the city planning process. It will focus on impacts of development controls on urban form and space and illustrate methods and tools to address and incorporate urban design in city planning, from the policy level to plan implementation. Cases and examples of design policy and implementation mechanisms from India and abroad will be used.

Outline:
1. Role of urban design in city planning; historic overview and case examples of policy; visioning process; urban design plans, policies and developmental strategies.
2. Case studies of impact of development controls and zoning; analysis of urban design issues; current innovations in development regulations; alternative types of zoning.
3. Implementation of urban design plans, policies and concepts - tools and methods; local-level plans; design guidelines; design review and concept of design review boards.
4. Role of Government, private parties and other stakeholders; participatory design.

Pre-requisite: 10 UDS 13 - City Planning Process in India

References:
2. Master Plans of Bangalore, New Delhi, Mumbai and other metropolitan Indian cities.
Objective:
The course is an introduction to the design of research projects. The course follows the scientific and quasi scientific approach to research design within the social sciences framework.

Outline:
2. Conceptual foundations of research design, purpose of research design, research design as variance control. Maximization of experimental variance. Concepts, constructs and variables. Types of variables.

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**Goal and Objectives:**
The overall goal of this studio shall be to incorporate and test ideas inculcated in the parallel streams of theories and principles. Objectives shall be; 1. To identify and categorize various non formal issues which are relevant in the process of designing an urban environment. 2. To understand the process of making a physical planning proposal viable with available techniques of financing and feasibility. 3. To understand the role of various interest groups in the realization of urban design scheme.

**Outline:**

1. The studio shall begin with documenting implemented urban design as a case in understanding the process followed in each of schemes. Documentation shall be an intensive exercise with teams of two who will identify the project (across India) and illustrate the entire process of design as well review the present status of the project and realization of stated objectives.

2. The main studio project shall be chosen within an area of a city (or even a small city) which is undergoing rapid changes triggered by an identifiable event or policy. The studio shall debate the needs of conserving the overall character of the chosen area with an in depth analysis on the social-cultural issues. Design of the proposed built element shall be preceded by a comprehensive urban design scheme which shall be detailed.

3. Projects like; tourism development; conservation of natural and built heritage; intervention in an urban area which has not been able to maintain its cultural moorings due to market forces shall be attempted.
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**Objective:**
The course is an introduction to the policies, market, finance and delivery of housing to various segments of urban population. Basically, however it shall be an exercise in the design of a large scale housing project either as a Greenfield project or an intervention into an existing fabric of the city.

**Outline:**
1. Evolution of housing policies in India, introduction to housing need; demand and supply process; estimation of housing need and demand; review of housing policies in various planning periods in India; Basic concepts in understanding housing markets; market price and valuation; policies which affect the housing market; review of existing housing finance and institution of housing finance.

2. Concepts of housing layouts; issues of density, open spaces, community spaces and accessible open areas. House types and their implication on layout. Technology and delivery of housing; private and public role in housing market. Low income and marginal income housing schemes and institutions involved in the production. Design guidelines for marginal housing schemes for varied socio economic groups.

**Reference:**
Objective: The course is intended to introduce concept of people’s participation in urban design project

Outline:
1. Concept and importance of people’s participation/planning, types and relevance, existing system and scope
2. Identification of stake holders, issues and interactions, institutionalization of people participation.
3. Individual/NGO/CBO efforts in peoples planning with example, national and international.
4. Role of urban designer in process of people participation in urban design project, example.

Reference:
1. Report-seminar on good urban governance new Delhi 2001-2002, Nagarapalika journal, reports. etc

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