

MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR

(A Govt. Aided UGC Autonomous & NAAC A++ Accredited Institute Affiliated to RGPV, Bhopal)

MASTER OF URBAN PLANNING

2022 Batch onwards

Master of URBAN PLANNING – II SEMESTER

670212 – CITY AND METROPOLITAN PLANNING

S.No	Subject Code	Subject Name	Maximum Marks Allotted					Teaching Hours per Week			Total credits	Total marks
			Theory			Practical		Lectures (L)	Tutorials (T)	Practical/ Studios (P/S)		
			End Sem	Mid Sem Test	Assignment / Quiz	End Sem	Studio Work/ Sessional					
1.	670212	CITY AND METROPOLITAN PLANNING	70	20	10	-	-	2	1	-	3	100

Urban Growth and System of Cities

Growth of cities scale, complexity and its impact on national development, cities as engines of growth, cities as ecosystems, resources in cities. City, fringe and the periphery - physical and functional linkages, peri-urban development.

Community and Settlements

Social problems of slums and squatter's communities, urban and rural social transformation and their impact on social life, safety, security; Crimes in urban areas and their spatial planning implications, social structure and spatial planning; Role of socio-cultural aspects on growth patterns of city and neighborhood communities; Social planning and policy, and community participation; Marginalization and concepts of inclusive planning, and gender concerns in planning. Settlement Policy: National Commission on Urbanization, Rural Habitat Policy and experiences from developing countries regarding settlement structure, growth and spatial distribution.

Metro and Mega Cities: Problems and Issues

Growth trends and processes, characteristics, problems, concepts and concerns of urban sustainability, issues related to diversity and unintended growth, economic, social and environmental sustainability, quality of life, inclusivity and equity, climate change, transit-oriented development, participatory planning. Inner city – issues and problems, approach to development. **Human Settlement Planning, Urban Development Policies and programmes** Concepts, approaches, strategies and tools; Policies and programmes at various levels, impact on metro and mega city development.

Land and Real Estate Development

Economic concepts of land, Land Pricing / valuation; Economic principles of land use; demand forecasting for land use: factors affecting land supply and demand; Land development methods, Supply Management, Demand side Management; Real estate markets, type of property development and its impact on supply and demand, method of development, environmental considerations.

Information System and Urban Reforms

Spatial and Non - spatial information systems; Urban reforms and acts and policies.

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COURSE OUTCOME:

The course City and metropolitan Planning will enable the student to:	
CO1	Determine the principal dimensions of urban transformation (economic, social, cultural, physical, environmental, and spatial) and the key interdependencies among these facets of urban change
CO2	Elaborate the role of socio-cultural aspects on growth patterns of city and neighbourhood communities
CO3	Propose sustainable measures of Planning for metro and mega cities.
CO4	Explain land and real estate development impact on Urban land policies, land use and environment.
CO5	Discuss about various information systems and major reforms

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670213- DESIGN OF HUMAN SETTLEMENT

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			Theory			Practical		Lectures (L)	Tutorials (T)	Practical/ Studios (P/S)		
			End Sem	Mid Sem Test	Assignment / Quiz	End Sem	Studio Work/ Sessional					
1.	670213	DESIGN OF HUMAN SETTLEMENT	70	20	10	-	-	2	1	-	3	100

Introduction

Nature of urban design, Role of urban design in the planning process. Social choices and values in design options. Ecological determinants in urban settlement design. Principles of structuring urban spaces, locational criteria of activities and urban uses.

Settlement Design

Imageability of the city, Determinants of urban patterns and forms, density and networks, impact of technology on infrastructure, standards and implications of regulatory control on urban form and design, in relation to renewal and redevelopment of central areas.

Town Design

Issues related to changing practices of planning human settlements as applied to spatial design. Urban design projects, identification, scope and relationship with development plan-case studies. Planning and design parameters for new towns, and selected case studies.

Future of Urban design

Issues in urban design, Efficient environments, Segregation and integration of activities and people, Creativity in city planning

COURSE OUTCOME:

The course design of Human settlements will enable the student to:	
CO1	Discuss the ecological determinants in urban settlement design. Principles of structuring urban spaces, locational criteria of activities and urban uses.
CO2	Compare the urban patterns and forms, density and networks, impact of technology on infrastructure, standards and implications of regulatory control on urban form and design, in relation to renewal and redevelopment of central areas.

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CO3	Explain the issues related to changing practices of planning human settlements as applied to spatial design.
CO4	Discuss urban design projects, identification, scope and relationship with development plan-case studies. Planning and design parameters for new towns, and selected case studies.
CO5	Explain contemporary approaches, priorities in urban conservation and nature reserves, integration of historical monuments and areas in the development process.

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670214- URBAN DEVELOPMENT FINANCE & PROJECT PLANNING

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			Theory			Practical		Lectures (L)	Tutorials (T)	Practical/ Studios (P/S)		
			End Sem	Mid Sem Test	Assignment / Quiz	End Sem	Studio Work/ Sessional					
1.	670214	URBAN DEVELOPMENT FINANCE & PROJECT PLANNING	70	20	10	-	-	2	1	-	3	100

Overview of Development Finance

Introduction to urban development finance. Economic Development. Finance Commissions- functions, relationship between Central, State and Urban Local Government. Finance Commissions & its function. Decentralization & fiscal decentralization.

Municipal Finance

Urban reform, Sources of revenues; Equities; Loans; Debt financing; City challenge fund, Pooled finance development fund, National urban infrastructure fund, Municipal Bonds, Miscellaneous sources; Structure of finances, fiscal problems and issues of financial management, implications of 74th Constitution Amendment Act for municipal finance, expenditure pattern, Bilateral and multi-lateral lending intuitions mobilizing resources for a project - financial resources, land resources, project resources, and other resources. Municipal Development Fund.

Investment Planning and Financing Mechanism

Financing of urban development, infrastructure and services – mechanisms and instruments, subsidy reduction, cost recovery, public private partnerships; Financial appraisal, investment appraisal; Financial Risk – Sources, Measures and perspectives on risk, Sensitivity analysis.

Introduction to Project Management and Planning

Definition of Project , Project Management – Definition and its importance; Stages of Project Life Cycle; Causes of Project Delay; Role of Project Manager; Attributes of a Successful Project Management. Introduction to Project Planning- Process, Investment Phase; Project Work (Work Breakdown Structure), Manpower and Organisation, Project Finance, Information System; Process of Project Formulation and constraints; Breakeven Analysis; Sensitivity Analysis; Project Budgeting; Project Scheduling - definition and steps; Network techniques and activity on Arc/Node; Forward Pass and Backward Pass; Critical Path and Slack; PERT; concept of Gantt Chart

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Project Appraisal, Monitoring, and Evaluation

Project Appraisal (Introduction to Project Appraisal - Types of Feasibility, Financial and Economic Appraisals), Project Monitoring (Project Monitoring and criteria for decision making; Parameters and Tools of Control; Use of Network Analysis in Project Monitoring; Reporting and Corrective Actions; Resource Management and Project Reporting), Project Evaluation (Methods, tools, time frame and results)

COURSE OUTCOME:

The course Urban Development Finance & Project Planning will enable the student to:	
CO1	Discuss Constitutional Provision for Local Finance, Municipal Finance, Innovations in Local Resource mobilisation and Local Government fiscal regime.
CO2	Compare the different roles of State as a resource manager, controlling state and reforming state in context of governance.
CO3	Explain the local governance framework at sub provincial level and resource mapping of local governments with special emphasis on municipal governments in our country.
CO4	Estimate financial risks for project investments relating to spatial planning.
CO5	Recommend appropriate methods for Technical and Financial Feasibility Analysis of different projects.

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670215- STATISTICS & POPULATION STUDIES

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			End Sem	Mid Sem Test	Assignment / Quiz	End Sem	Studio Work/ Sessional					
1.	670215	STATISTICS & POPULATION STUDIES	70	20	10	-	-	2	1	-	3	100

Sampling methods

Theory of probability, random variables, and distribution of sample statistics. Some important sampling distributions

Projection Statistical inference

Estimation of population parameters, and testing of hypotheses. Elementary association models: Chi-square test; simple linear regression and correlation. Time-series Analysis. Index Numbers. Statistics available for spatial analysis: An appraisal.

Basics of Population Studies

Introduction, Scope, method, subject matter and relevance for spatial planning, sources of demographic data. Interrelations: Population change, socio-economic dimension of development, and pattern of human settlements.

Population and spatial distribution

Population, composition and spatial distribution; population structure and composition, spatial distribution causes and implications of spatial differentiation. Analysis of labor force, mortality and fertility, Life table technique, relevance for spatial planning. Theory models and measurement of internal migration, Internal migration and urban growth. Population estimation and projection techniques relevant for regions and settlements. Indian population census data an appraisal.

COURSE OUTCOME:

This course Statistics and population studies will enable the student to:	
CO1	Equip students with a comprehensive understanding of statistical methods and their application in population studies, emphasizing their relevance in spatial planning and analysis.

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CO2	Understand and analyze time-series data for understanding trends, seasonality, and forecasting and interpretation of index numbers for measuring changes in variables over time.
CO3	Discuss the scope, methods, and relevance of population studies in spatial planning.
CO4	Learn and apply population estimation and projection techniques relevant to regions and settlements, utilizing Indian population census data for analysis and appraisal.

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670216- ELECTIVE I-URBAN HERITAGE CONSERVATION

S.No	Subject Code	Subject Name	Maximum Marks Allotted					Teaching Hours per Week			Total credits	Total marks
			Theory			Practical		Lectures (L)	Tutorials (T)	Practical/ Studios (P/S)		
			End Sem	Mid Sem Test	Assignment / Quiz	End Sem	Studio Work/ Sessional					
1.	670216	ELECTIVE I- URBAN HERITAGE CONSERVATION	70	20	10	-	-	2	1	-	3	100

Introduction to Urban Heritage

Typology / classification, inventories, mapping; Human habitation in historical context; Heritage as a motivating force in sustainable urban conservation and development.

Heritage Conservation

Natural heritage conservation - typologies, policies for conservation, regulatory measures, community participation; Concept of Historic Urban Landscapes; Built heritage conservation ; Historic urban infrastructure.

Integration of historic monuments

Areas / cores / urban systems in the developmental process and land use, regulatory measures and community involvement; Intangible cultural heritage and development: issues.

Heritage and Tourism, Policies and Programmes, Legislation

Cultural and heritage-based tourism - nature, potential and prospects, marketing aspects; Acts and laws recognizing conservation / regeneration; Heritage toolkit; Implications of 74th Constitution Amendment Act.

Design in Human Habitation

Imageability of the city; Urban Regeneration, renewal, rehabilitation, revitalization, reconstruction and redevelopment - concepts, interventions, tools.

COURSE OUTCOME:

The course Urban Heritage Conservation will enable the student to:	
CO1	Generate inventories and process of mapping Urban Heritage in historical context.
CO2	Create a database of heritage buildings and its typologies present in an historical precinct.
CO3	Prepare heritage management plan for a small heritage zone

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CO4	Formulate strategies and policies for a heritage zone.
CO5	Apply different degrees of intervention in conservation for an urban historical precinct.

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1.	670217	ELECTIVE I- GOVERNANCE & MANAGEMENT IN PLANNING	70	20	10	-	-	2	1	-	3	100

670217- ELECTIVE I-GOVERNANCE & MANAGEMENT IN PLANNING

UNIT 1- Public governance in India, concepts and principles, the emergence of the good governance paradigm, overview of urban governance structure in India, governance for town planning, national goals and political system affecting development management, emerging concepts of decentralization and privatization, role of government, elected representatives, executive and judiciary, industry, citizens, communities and non-governmental organizations, democracy and participatory processes in plan making, Constitutional provisions and amendments.

UNIT 2- Definition and concepts in organization, factors affecting organizational structure administrative context of town planning organizations in India, organizational theories and their effectiveness, planning organizations in India at national, state and local level, powers, functions and role of ULBs, improvement trusts, town planning departments, development authorities and para-statal organizations.

UNIT 3- Basic elements of management, planning, organization, staffing, coordination and monitoring and its relevance of town planning sector, importance of leadership development, communication and motivation for good management, need for modernization of management processes in town planning, e-governance mechanisms, citizen's charter, etc., emerging contours of the reform agenda, concept of 'new public management'.

UNIT 4- Role of the private sector, public-private partnerships, joint ventures, organizational reforms and privatization, outsourcing and contracts, role of financing agencies and linkages with other agencies (domestic and international).

COURSE OUTCOME:

This course will enable the student to:	
CO1	Generate knowledge on concepts, principles and aspects of good governance .
CO2	Understand the role of decentralized urban planning in promoting balanced regional growth.

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CO3	Explore various organizational factors and assess their effectiveness within planning organizations at national, state, and local levels.
CO4	Assess the role of the private sector, public-private partnerships, joint ventures, and their significance in organizational reforms within town planning.

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670218 – SEMINAR (Social research/ report writing)

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			End Sem	Mid Sem Test	Assignment / Quiz	End Sem	Studio Work/ Sessional					
1.	670218	SEMINAR (Social research/ report writing)	-	-	-	60	40	-	-	3	3	100

The students are required to present a seminar ensuring the following criterion.

- Identification of topics of interest having relevance to the planning profession.
- Book reviews and journal article reviews to establish the body of work existing in the selected area of work.
- Exposure to multiple viewpoints and colloquial arguments by the stakeholders, decision makers, urban managers, advocates, technocrats, user groups, etc. on the same topic.
- Identification of key issues related to the area of work.

COURSE OUTCOME:

This course will enable the student to:	
CO1	Develop independent critical thinking and research abilities
CO2	Compare relevant case studies and literature relevant to the topic.
CO3	Evaluate the current practices adopted in context of the selected topic
CO4	Recommend solutions for the identified key issues related to the area of work.
CO5	Prepare a document enlisting significant tools, techniques, issues and alternatives related to the selected topic.

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670219- STUDIO- City Level Planning

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			Theory			Practical		Lectures (L)	Tutorials (T)	Practical/ Studios (P/S)		
			End Sem	Mid Sem Test	Assignment / Quiz	End Sem	Studio Work/ Sessional					
1.	670219	STUDIO-City Level Planning	-	-	-	120	80	-	-	9	9	200

City Development Plan (Group assignment)

A City is a multi-dimensional, dynamic and futuristic space. Understanding the city involves appreciating this multi direction and including them in the city making process. The job of a physical planner does not merely understand the current conflict in development but to emerge from this and to come out with a vision for the city. To arrive at this vision, a planner needs to understand the dynamics of various components of the city and how and what level interventions can be made to achieve that vision. A group of students are expected to study a city in terms of its present problems and issues and project a futuristic vision in terms of scenario building.

COURSE OUTCOME:

This course will enable the student to:	
CO1	Prepare a Base Map of the study area through primary surveys and updating secondary data
CO2	Prepare socio-economic profile of the area through surveys
CO3	Prepare physical and social infrastructure mapping and mapping of regional networks and linkages.
CO4	Analyse the Gap in infrastructure and policies for the identified issues.
CO5	Prepare a detailed Project report for the City Development Plan