KALINGA INSTITUTE OF INDUSTRIAL TECHNOLOGY

Deemed to be University U/S 3 of the UGC Act, 1956

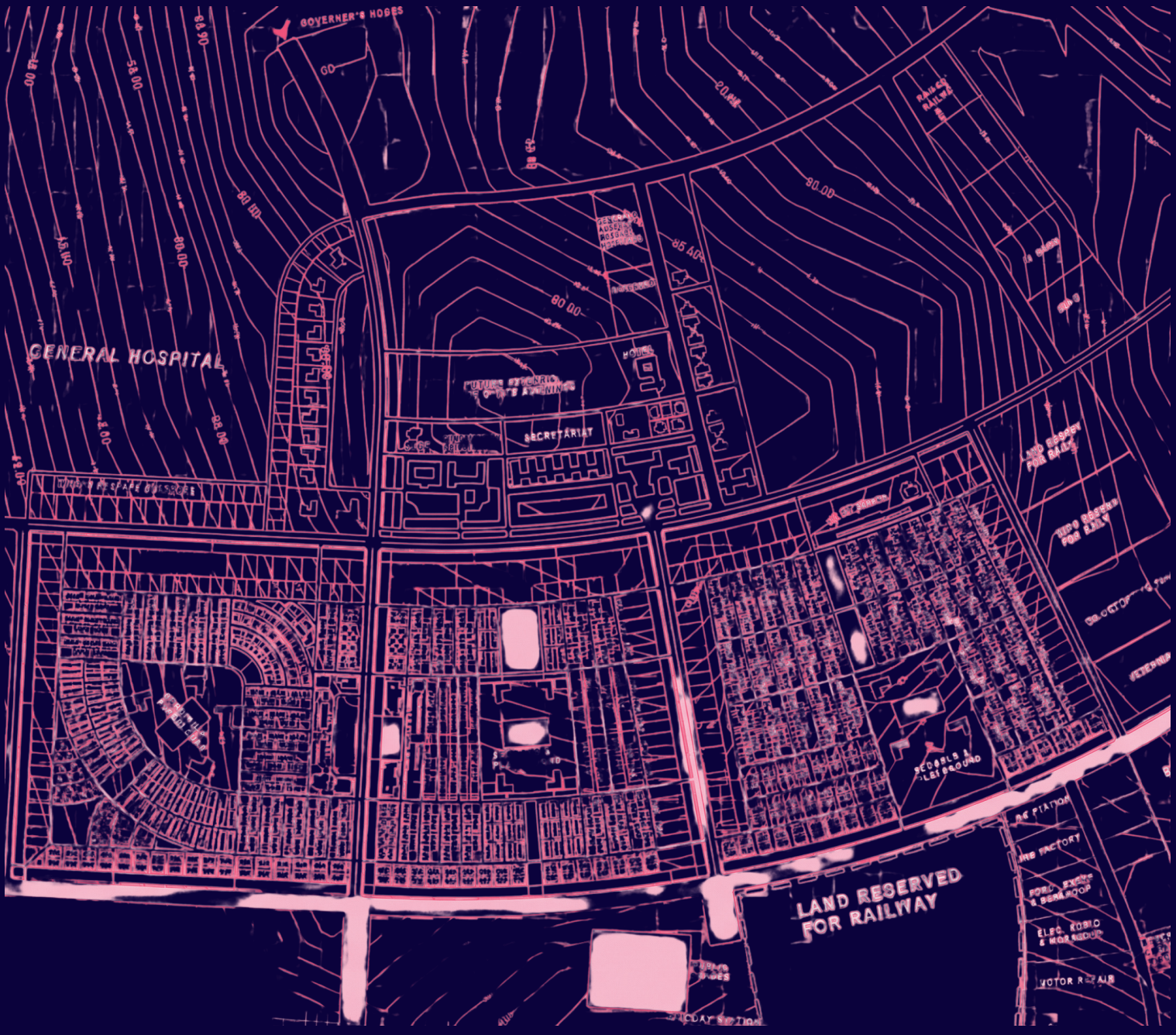
Established : 1997

SCHOOL OF ARCHITECTURE & PLANNING

Master of Urban & Regional Planning (MURP)

2 years Full Time Masters Program

Syllabus



Campus-17, Kalinga Institute of Industrial Technology(KIIT)
Deemed to be University, Bhubaneswar - 751024

School of Architecture and Planning

Kalinga Institute of Industrial Technology
(KIIT) Deemed to be University

Course Structure for

MASTER OF URBAN AND REGIONAL PLANNING (MURP)

MASTER OF URBAN AND REGIONAL PLANNING (MURP)

School of Architecture and Planning, Kalinga Institute of Industrial Technology (KIIT) Deemed to be University

Programme Overview

The Master of Urban and Regional Planning (MURP) offered by the School of Architecture and Planning (KSAP), KIIT Deemed to be University, is a two-year, full-time postgraduate programme approved by the All India Council for Technical Education (AICTE). The programme is designed to prepare competent planning professionals capable of addressing the complex challenges of urbanisation, regional development and spatial transformation through sustainable, inclusive, resilient, and technology-enabled planning approaches.

The curriculum integrates planning theory, planning practice and research, providing a comprehensive understanding of urban and regional planning, infrastructure planning, housing, transportation, environmental planning, land management, governance, geo-informatics, planning legislation and research methodologies. Emphasis is placed on evidence-based planning, spatial analysis, climate resilience, participatory planning and sustainable development in accordance with national priorities and global best practices.

Studio-based learning, field investigations, planning workshops, live consultancy projects, and interdisciplinary collaborations provide students with extensive exposure to real-world planning challenges. Supported by experienced faculty, advanced GIS and planning laboratories, and collaborations with government agencies, development authorities, industry and academic institutions, the programme equips graduates with the knowledge, technical competence and professional skills required for planning practice, research, consultancy and policy-making at local, regional, national and international levels.

The programme fosters critical thinking, ethical professional practice, leadership and lifelong learning, enabling graduates to contribute effectively to the creation of resilient, equitable and sustainable human settlements.

Pedagogy

The programme adopts an Outcome-Based Education (OBE) framework integrating classroom learning with experiential and studio-based pedagogy. Students engage in lectures, planning studios, workshops, seminars, field surveys, GIS-based exercises, live projects, internships, case studies, research assignments, and stakeholder interactions.

Teaching emphasises critical thinking, collaborative problem-solving, design innovation, policy analysis, and evidence-based planning. Continuous assessment through studio reviews, presentations, reports, and project-based learning ensures the development of professional competencies aligned with national and international planning standards.

About KIIT Deemed to be University

Kalinga Institute of Industrial Technology (KIIT) Deemed to be University, Bhubaneswar, is one of India's premier multidisciplinary universities, recognized for excellence in education, research, innovation and societal engagement. Established in 1997, KIIT has evolved into a globally recognized institution offering programmes across engineering, management, law, medicine, architecture, planning, biotechnology, humanities and social sciences. The University emphasizes interdisciplinary learning, international collaborations, innovation-driven research and industry engagement while fostering academic excellence, sustainability and inclusive development.

About KIIT School of Architecture and Planning (KSAP)

The School of Architecture and Planning (KSAP) at KIIT Deemed to be University is committed to excellence in architecture, planning, design, and built environment education. The School emphasizes interdisciplinary learning, design thinking, sustainability, digital technologies and research-driven education to address emerging challenges in urban and regional development.

The Master of Urban and Regional Planning programme combines planning theory with professional practice through planning studios, GIS and Remote Sensing applications, field-based learning, policy analysis and research. Students are encouraged to develop innovative, sustainable and inclusive planning solutions through collaboration with government agencies, industry and communities, preparing them for leadership roles in planning practice, consultancy, research, public policy, and academia.

Organizational Structure and Academic Governance

The programme is administered under the KIIT School of Architecture and Planning through a structured academic framework comprising the Dean, Programme Coordinator, Board of Studies, faculty members, external academic experts, and industry professionals.
The curriculum is periodically reviewed to incorporate emerging developments in planning practice, national policies, AICTE guidelines, and industry requirements. Continuous feedback from students, alumni, employers, and academic experts ensures academic excellence and curriculum relevance.

PROGRAMME EDUCATIONAL OBJECTIVES (PEOs)

The Master of Urban and Regional Planning (MURP) programme aims to prepare graduates with the following objectives:

PEO1. Apply advanced planning knowledge and analytical skills to address complex urban and regional development challenges.

PEO2. Integrate planning theory, policy, geospatial technologies, infrastructure systems, governance, and socio-economic analysis in preparing sustainable development

PEO3. Demonstrate leadership through research, consultancy, innovation, entrepreneurship, and lifelong professional learning.

PEO4. Uphold professional ethics, environmental stewardship, inclusiveness, and social responsibility while contributing to resilient communities.

PROGRAMME OUTCOMES (POs):

Upon successful completion of the programme, graduates will be able to:

PO1. Apply advanced knowledge of urban and regional planning principles.

PO2. Analyse complex planning issues using scientific and evidence-based approaches.

PO3. Prepare sustainable, resilient, and inclusive planning solutions.

P**O4.** Conduct planning research using qualitative and quantitative methods.

PO5. Apply GIS, Remote Sensing, planning support systems, AI, and spatial analytics.

PO6. Integrate environmental, social, economic, and governance dimensions into planning practice.

PO7. Collaborate with multidisciplinary teams and stakeholder environments.

PO8. Communicate planning proposals through reports, drawings, presentations, and public consultations.

PO9. Demonstrate professional ethics and responsible planning practice.

PO10. Manage planning projects considering policy, finance, implementation, and governance.

PO11. Promote innovation, entrepreneurship, and smart planning solutions.

PO12. Engage in lifelong learning and continuous professional development.

PROGRAMME SPECIFIC OUTCOMES (PSOs)

Upon successful completion of the programme, graduates will be able to:

PSO1. Prepare development plans at neighbourhood, city, regional, and metropolitan scales using participatory planning approaches.

PSO2. Apply GIS, Remote Sensing, geo-spatial analytics, and emerging digital technologies for evidence-based planning.

PSO3. Develop integrated solutions for transportation, housing, infrastructure, environmental management, disaster resilience, and urban governance.

PSO4. Undertake professional consultancy, research, and policy development for sustainable, smart, and inclusive urban and regional development.

Curriculum Structure and Progression

Semester	Focus
Semester I	Planning Foundations
Semester II	Regional Planning and Infrastructure
Semester III	Advanced Planning and Dissertation Proposal
Semester IV	Dissertation and Professional Practice

Assessment

The programme follows continuous evaluation through assignments, studio work, field reports, presentations, seminars, internal assessments, end-semester examinations, jury evaluations and dissertation viva voce as per the academic regulations of KIIT Deemed to be University.

Curriculum Revision Policy

The curriculum shall be reviewed periodically by the Board of Studies of the School of Architecture and Planning, KIIT Deemed to be University, in consultation with academic experts, industry professionals and statutory guidelines to ensure its continued relevance to contemporary planning education and professional practice.

COURSE STRUCTURE

SEMESTER I

	Theory					
Sl. No.	**Course Code**	**Subject**	**Contact periods**			**Credit**
			L	T	P	
1.	MURP112	History of Human Settlement & Planning Principles	2	0	0	2
2.	MURP123	Planning Theory and Techniques	3	0	0	3
3.	MURP133	Housing & Environmental Planning	3	0	0	3
4.	MURP143	Socio-Economic base for Planning	3	0	0	3
5.	MURP153	Transport Planning	3	0	0	3
	Sessionals					
6	MURP166	Planning and Design Studio-I	0	0	8	6
7.	MURP171	Geo Informatics for Planning	0	0	1	1
8.	MURP181	Demography & Statistical Applications	0	0	1	1
		Total	14	0	10	**22**

SEMESTER II

	Theory					
Sl. No.	**Course Code**	**Subject**	**Contact periods**			**Credit**
			L	T	P	
1.	MURP212	Planning for Regions	2	0	0	2
2.	MURP222	Regional Infrastructure	2	0	0	2
3.	MURP232	District Planning and Rural Development	2	0	0	2
4.	MURP242	Land Markets and Management	2	0	0	2
5.	MURP252	Elective	2	0	0	2
		I. Urban & Rural Sociology				
		II. Poverty and Development				
	Sessionals					
6.	MURP2610	Planning Studio- II (With Field Study)	0	0	12	10
		Total	10		12	**20**

SEMESTER III

	Theory					
Sl. No.	**Course Code**	**Subject**	**Contact periods**			**Credit**
			L	T	P	
1.	MURP 312	Planning Legislation & Professional Practice	2	0	0	2
2.	MURP 322	Research Methodology	2	0	0	2
3.	MURP 332	Project Planning	2	0	0	2
4.	MURP 342	Elective	2	0	0	2
		I. Urban Regeneration & Conservation Techniques				
		II. Resettlement and Rehabilitation				
	Sessionals					
5.	MURP 3510	Thesis / Dissertation & Planning Seminar	0	0	12	10
		Total	8	0	12	**18**

SEMESTER IV

Sl. No.	**Course Code**	**Subject**	**Contact periods**			**Credit**
	Sessional					
1.	MURP 4120	Thesis / Dissertation	0	0	20	20
		Total	0	0	20	**20**

Description of Coding:
MURP: Represents Master of Urban and Regional Planning
First Digit: Represents Semester
Second digit: Represents serial no. of that particular subject
Third digit: Represents Credit

Total No. of Credits: 80
Total No. of Teaching Hours: 86

DETAIL COURSE SYLLABUS

SEMESTER I

MURP 112 HISTORY OF HUMAN SETTLEMENT & PLANNING HISTORY

Course Outcomes

At the end of the course, students will be able to:

- **CO1** Explain the evolution of human settlements and the historical development of planning thought from ancient civilizations to the contemporary period.
- **CO2** Interpret the contributions of major planning thinkers and planning theories in shaping modern urban and regional planning practices.
- **CO3** Analyze the physical structure, land use patterns, urban form, and planning processes used in the preparation of development plans.
- **CO4** Evaluate different planning approaches and planning systems for addressing contemporary urban and regional development challenges.

Contents

Module 1: Evolution of Human Settlements and Planning History

1. Evolution and significance of human settlements in the modern context.
2. Historical determinants of settlement growth and development.
3. Characteristics of settlements during the ancient, medieval, Renaissance and Industrial periods.
4. Origin and evolution of planning; impact of the Industrial Revolution on urban and regional planning.
5. Contemporary urbanisation in India: metropolitan growth, metropolitan regions, demographic transition, rural–urban migration and emerging planning challenges.

Module 2: Planning Thought and Evolution of Planning Theories

1. Evolution of planning thought and its influence on urban development.
2. Contributions of Ebenezer Howard, Patrick Geddes, Tony Garnier, Lewis Mumford, Le Corbusier, Kevin Lynch, Jane Jacobs, Ian McHarg and other notable planning thinkers.
3. Changing concepts of cities and urban form in response to technological, economic, environmental and social transformations.
4. Contemporary planning paradigms and their relevance to sustainable urban and regional development.

Module 3: Urban Structure, Land Use and Planning Process

1. Physical characteristics and components of the urban environment.
2. Urban land use, spatial structure and relationships among different parts of the city.
3. Land Use Information System (LUIS), GIS-supported land use planning and spatial information systems.
4. Models of the planning process and goals of land policy.
5. Planning instruments: Structure Plan, Master Plan, Zonal Development Plan, Local Area Plan, Town Planning Scheme and Action Plan—their purpose, contents and applications.

Module 4: Planning Approaches and Contemporary Planning Systems

1. Systems approach to planning.
2. Rational planning, advocacy planning, collaborative planning and participatory planning.
3. Strategic spatial planning and integrated planning approaches.
4. Comparative evaluation of planning approaches for addressing contemporary urban and regional development challenges.
5. Emerging trends in planning practice, including sustainable development, resilience and smart urban governance.

Reference Books:

1. Hall, P. Cities of Tomorrow: An Intellectual History of Urban Planning and Design in the Twentieth Century.
2. Mumford, L. The City in History.
3. Gallion, A.B. & Eisner, S. The Urban Pattern.
4. Hall, T. Urban Geography.
5. Howard, Ebenezer. Garden Cities of Tomorrow.
6. Lynch, Kevin. The Image of the City.
7. Rangwala, S.C. Town Planning.
8. Ministry of Housing and Urban Affairs. Urban and Regional Development Plans Formulation and Implementation (URDPFI) Guidelines (Latest Edition).
9. Levy, J.M. Contemporary Urban Planning.

MURP 123 PLANNING THEORY AND TECHNIQUES

Course Outcomes

At the end of the course, students will be able to:

CO1 Explain the evolution, concepts, principles and theoretical foundations of urban and regional planning.

CO2 Interpret classical and contemporary planning theories, planning models and urban development concepts in diverse planning contexts.

CO3 Apply appropriate planning methodologies, survey techniques and spatial data collection methods for planning studies.

CO4 Analyze spatial, physical and socio-economic datasets using planning techniques and analytical methods for informed decision-making.

CO5 Evaluate development plans and planning standards using URDPFI guidelines, development controls and planning regulations.

CO6 Develop planning strategies and planning proposals by integrating planning theories, analytical techniques and planning standards.

Contents

Module 1: **Definitions and terms of town and country planning**

1. Definitions of town and country planning, Classical and contemporary paradigms of planning, sustainability and rationality in planning, Components of sustainable urban and regional development
2. Theories of urbanisation including Concentric Zone Theory, Sector Theory, Multiple Nuclei Theory and other contemporary theories; Land Use and Land Value Theory of William Alonso; Ebenezer Howard's Garden City Concept; Green Belt Concept; Compact City, Smart Growth, New Urbanism, Transit-Oriented Development (TOD), and Sustainable Urbanism.
3. City as a physical, social, economic, ecological and political system.
4. Emerging Concepts: Global City, Inclusive City, Safe City, Smart City, Resilient City, Healthy City, Climate-responsive City, City of the Future, Future of the City, Shadow Cities, Divided Cities; Models of Planning: Advocacy and Pluralism in Planning; Systems Approach to Planning: Rationalistic and Incremental Approaches, Mixed Scanning and Middle Range Planning, Advocacy Planning, Action Planning, Equity Planning, Collaborative Planning, Communicative Planning and Strategic Spatial Planning.
5. Types of Development Plans including Perspective Plan, Regional Plan, Development Plan, Structure Plan, Master Plan, Zonal Development Plan, Local Area Plan (LAP), Town Planning Scheme (TPS), and Action Plan.
6. Goal formulation, objectives, scope and limitations; Plan-making process, planning methodology, scenario planning, stakeholder participation, monitoring and evaluation framework**,** and case studies.

Module 2: Survey Techniques and Mapping

1. Database for physical surveys (including land use, building use, density, building age, etc.) and socio-economic surveys; survey techniques; land use classification/coding; expected outputs; GPS-based surveys, Mobile GIS applications, Participatory GIS (PGIS), and UAV/Drone-assisted spatial surveys.
2. Techniques of preparing base maps—concepts of scales, components and detailing for various levels of plans (regional, city, zone and local area plans); digital mapping techniques and GIS-based base map preparation.

Module 3: Analytical Methods

1. Spatial analysis techniques including land suitability analysis, overlay analysis, network analysis, spatial interaction analysis and accessibility analysis.
2. Analytical tools including SWOT analysis, Multi-Criteria Decision Analysis (MCDA), statistical analysis, correlation and regression techniques, GIS-based spatial analysis and planning support systems.
3. Interpretation of survey data and preparation of planning proposals through evidence-based planning techniques and decision-support systems.

Module 4: Planning Standards

Spatial standards, performance standards, benchmarks and variable standards; URDPFI Guidelines (2014), National Building Code (latest edition), Development Control Regulations, zoning regulations, Transit-Oriented Development (TOD) Guidelines, Sustainable Development Goals (SDGs), and contemporary planning standards applicable to urban and regional development.

Reference Books:

1. Faludi, Andreas. Planning Theory.
2. Hall, Peter & Tewdwr-Jones, Mark. Urban and Regional Planning.
3. Levy, John M. Contemporary Urban Planning.
4. Allmendinger, Philip. Planning Theory.
5. Roberts, Margaret. An Introduction to Town Planning Techniques.
6. Government of India. Urban and Regional Development Plans Formulation and Implementation (URDPFI) Guidelines, 2014.

Online Resources

1. Ministry of Housing and Urban Affairs (MoHUA): https://mohua.gov.in
2. Town and Country Planning Organisation (TCPO): https://tcpo.gov.in
3. National Institute of Urban Affairs (NIUA): https://niua.org
4. UN-Habitat: https://unhabitat.org

MURP 133 HOUSING AND ENVIRONMENTAL PLANNING

Course Outcomes

At the end of the course, the students will be able to:

CO1 Explain the principles, concepts and policies of housing and environmental planning.

CO2 Analyze housing needs, typologies, affordability, neighbourhood planning and housing policies in urban and regional contexts.

CO3 Assess social, economic and environmental dimensions influencing housing and settlement development.

CO4 Apply environmental planning techniques, resource assessment methods and environmental management tools in planning practice.

CO5 Evaluate housing and environmental planning proposals using planning standards, sustainability principles and environmental regulations.

CO6 Develop sustainable, climate-responsive and inclusive housing and environmental planning strategies.

Contents

Module 1: Housing Concepts, Policies and Typologies

1. Shelter as a basic human need; determinants of housing form; Census of India definitions; housing need, demand and supply; housing shortage; affordability; poverty; slums and informal settlements; houseless population.
2. Housing typologies including traditional housing, plotted development, group housing, multistoried housing, villas, chawls, rental housing, affordable housing, transit-oriented housing, mixed-use housing and inclusive housing.
3. Various theories of housing; Affordable Housing Policy, Pradhan Mantri Awas Yojana (PMAY), Housing for All, green housing, net-zero housing, energy-efficient housing and green building rating systems (GRIHA, IGBC and LEED).

Module 2: Housing Planning and Neighbourhood Development

1. Housing as an important land-use component of Development Plans and Master Plans; housing surveys; projections; housing demand and supply; land suitability analysis; housing shortage estimation; housing allocation.
2. Planning and design principles of neighbourhoods; neighbourhood structure; planning standards; net and gross residential density; development controls; URDPFI Guidelines (2014), National Building Code (latest edition), and Development Control Regulations.
3. Walkable neighbourhoods, complete neighbourhoods, universal accessibility, child-friendly, age-friendly and transit-oriented neighbourhoods.
4. Case studies of neighbourhood planning.

Module 3: Social, Economic and Spatial Dimensions of Housing

1. Housing as social security; housing and family well-being; safety, crime, deprivation, social vulnerability, gender, elderly, children and persons with disabilities.
2. Housing and social inclusion; informal settlements; ghettoisation; public health and quality of life.
3. Contribution of housing to the micro and macro economy; GDP; employment; housing finance; taxation; fiscal concessions; housing market dynamics; Public–Private Partnerships (PPP) in housing.

Module 4: Environmental Planning and Resource Assessment

1. Global and national environmental concerns; Sustainable Development Goals (SDGs), New Urban Agenda, Paris Agreement, National Action Plan on Climate Change (NAPCC).
2. Components and structure of urban and regional ecosystems.
3. Environmental surveys; methods of data collection; GIS-based environmental databases; land suitability analysis; carrying capacity analysis; vulnerability analysis; ecosystem services assessment and climate risk assessment.
4. Resource assessment of land, water, air and biodiversity.

Module 5: Environmental Quality, Sustainability and Regulations

1. Environmental quality assessment and environmental management.
2. Environmental Impact Assessment (EIA), Strategic Environmental Assessment (SEA), Environmental Management Plan (EMP), Environmental and Social Impact Assessment (ESIA).
3. Environmental legislation, notifications and regulations related to human settlements.
4. Blue-Green Infrastructure, Nature-based Solutions (NbS), Circular Economy, Urban Heat Island mitigation, resource efficiency and climate-resilient settlements.

Module 6: Sustainable Housing and Environmental Planning Applications

1. Integration of housing and environmental planning in urban and regional development.
2. Climate-responsive housing and resilient settlements.
3. Sustainable neighbourhood planning and smart growth principles.
4. Preparation and evaluation of housing and environmental planning proposals through case studies, planning exercises and best practices from India and abroad.

Reference Books:

1. Brian Edwards. Sustainable Housing: Principles and Practice.
2. Geoffrey Payne. Urban Housing in the Global South.
3. A.K. Jain. Sustainable Urban Planning.
4. Government of India. Urban and Regional Development Plans Formulation and Implementation (URDPFI) Guidelines, 2014.
5. Government of India. National Building Code of India (Latest Edition).
6. J.K. Lein. Integrated Environmental Planning.

Online Resources

1. Ministry of Housing and Urban Affairs (MoHUA): https://mohua.gov.in
2. Town and Country Planning Organisation (TCPO): https://tcpo.gov.in
3. National Institute of Urban Affairs (NIUA): https://niua.org

4. Ministry of Environment, Forest and Climate Change (MoEFCC): https://moef.gov.in
5. Central Pollution Control Board (CPCB): https://cpcb.nic.in
6. UN-Habitat: https://unhabitat.org

MURP143 SOCIO ECONOMIC BASE FOR PLANNING

Course Outcomes

At the end of the course, the students will be able to:

CO1	Explain the sociological and economic foundations of urban and regional planning.
CO2	Analyze demographic, socio-cultural and community characteristics influencing settlement planning.
CO3	Assess socio-economic issues, inequality and inclusive development for planning interventions.
CO4	Apply microeconomic and macroeconomic concepts in urban and regional planning.
CO5	Evaluate development policies, economic planning approaches and their spatial implications.
CO6	Develop socio-economic planning strategies for sustainable, equitable and inclusive urban and regional development.

Contents

Module I: Sociological Foundations of Planning

1. Nature, scope and relevance of sociology in planning.
2. Sociological concepts and methods; society, culture, social institutions and social change.
3. Human–environment relationships and behavioural dimensions of planning.
4. Social sustainability, quality of life and Sustainable Development Goals (SDGs).

Module 2: Society, Demography and Settlement Systems

1. Socio-cultural profile of Indian society and urban transformation.
2. Traditions and modernity in urban and rural settlements.
3. Issues related to caste, class, gender, age, health, disability and marginalized communities.
4. Demographic transition, migration, urbanisation, ageing population and changing household structure.

Module 3: Community, Inclusion and Social Planning

1. Social problems of slums and informal settlements; urban and rural transformation and

their effects on social life.

2. Safety, security, crime, social vulnerability and their spatial planning implications.
3. Role of socio-cultural factors in shaping cities, neighbourhoods and communities.
4. Social planning, community participation, stakeholder engagement, inclusive planning, gender-sensitive planning, child-friendly, age-friendly and disability-inclusive planning.
5. Settlement Policy: National Commission on Urbanisation (NCU), Rural Habitat Policy, experiences of developing countries regarding settlement structure, settlement growth and spatial distribution, and their implications for urban and regional planning.

Module 4: Economic Foundations for Planning

1. Concepts of demand, supply, elasticity and consumer behaviour.
2. Production, factor markets, market structures and price determination.
3. Cost-benefit analysis and public sector pricing.
4. National income, inflation, unemployment, investment and capital budgeting.
5. Urban economics, land economics, informal economy and circular economy.

Module 5: Development Economics and Planning Policies

1. Economic growth and development.
2. Human Development Index (HDI), Multidimensional Poverty Index (MPI) and quality of life.
3. Poverty, inequality, livelihoods and employment.
4. Economic principles of land use planning.
5. Balanced and unbalanced growth theories.
6. Public policy, changing economic reforms and their implications for urban and regional planning.

Module 6: Contemporary Socio-Economic Planning Applications

1. Socio-economic surveys and data interpretation for planning.
2. Evidence-based planning and socio-economic indicators.
3. Urban resilience and climate justice.
4. Local economic development and sustainable livelihoods.
5. Case studies on inclusive urban and regional development in India and abroad.

Reference Books:

1. Social areas in cities: Spatial processes and form / HERBART, DT
2. Social Theory for Planning / Naily, Joe
3. Economic Planning / Agarwal, A.N.
4. Economic Planning in Developing Countries / Joseph, Bonger
5. Economic for Urban Social Planning / Hendon, Willium.S
6. Economics of Regional Development & Planning in Third World Countries/ Pattanaik, S.C.

Online Resources

1. Ministry of Housing and Urban Affairs (MoHUA): https://mohua.gov.in
2. National Institute of Urban Affairs (NIUA): https://niua.org
3. NITI Aayog: https://www.niti.gov.in
4. Ministry of Statistics and Programme Implementation (MoSPI): https://mospi.gov.in
5. Census of India: https://censusindia.gov.in
6. UN-Habitat: https://unhabitat.org

MURP 153 TRANSPORT PLANNING

Course Outcomes

At the end of the course, the students will be able to:

CO1	Explain the concepts, principles and significance of transportation planning and its role in urban and regional development.
CO2	Analyse transportation demand, travel characteristics, accessibility, mobility and the relationship between land use and transportation systems.
CO3	Apply transportation planning processes and transport survey techniques for identifying transportation problems and planning requirements.
CO4	Evaluate road systems, public transportation systems, terminals and transportation infrastructure from an urban and regional planning perspective.
CO5	Assess transportation policies, traffic management approaches, environmental impacts and road safety measures for sustainable transportation planning.
CO6	Develop transportation planning strategies for improving accessibility, mobility and sustainable transportation systems in urban and regional areas.

Contents

Module 1: Fundamentals of Transportation Planning

1. Role and importance of transportation in urban and regional development; Meaning, scope, objectives and importance of transportation planning.
2. Relationship of transportation with economic growth and spatial development.
3. Transportation as an essential component of urban infrastructure and Development Plans.
4. Concepts of transportation demand, mobility, accessibility, connectivity and level of service.
5. Urban transportation problems including congestion, travel delays, parking deficiencies and last-mile connectivity.

Module 2: Transportation Systems and Road Network Planning

1. Relationship between land use and transportation; influence of transportation on urban structure and regional development.
2. Travel characteristics, travel behaviour and factors influencing transportation demand.
3. Functional hierarchy of roads in urban and regional areas and planning considerations for road networks.
4. Cross-sectional elements of urban roads including right of way, carriageway, median, service roads, footpaths and cycle tracks.
5. Planning principles of intersections, interchanges and road infrastructure.

Module 3: Transportation Planning Process and Transport Surveys

1. Transportation planning process and stages of transportation studies.
2. Transportation data requirements, Transport Analysis Zones (TAZ) and transport network inventory.
3. Traffic and transportation surveys including traffic volume, origin–destination, parking, speed and delay, pedestrian and accident surveys.
4. Collection, presentation, analysis and interpretation of transportation data.
5. Introduction to trip generation, trip distribution, modal split and travel demand estimation.

Module 4: Public Transportation and Transport Infrastructure Planning

1. Characteristics and planning principles of public transportation systems including city buses, BRTS, LRTS, MRTS and Non-Motorised Transport Systems (NMTS).
2. Planning considerations for bus terminals, truck terminals and passenger interchange facilities.
3. Freight movement and goods transportation in urban and regional areas.
4. Planning of transportation infrastructure and multimodal transportation systems.
5. Role of transportation infrastructure in improving urban mobility and regional connectivity.

Module 5: Traffic Management, Transport Policies and Sustainable Transportation

1. Principles of traffic engineering and traffic management relevant to urban planning.
2. Traffic control devices including traffic signs, signals and road markings.
3. Urban transport policies in India and institutional framework for transportation planning.
4. Transportation safety, road safety measures and accident prevention.
5. Environmental impacts of transportation including vehicular emissions, noise pollution, energy consumption and sustainable transportation approaches.

Module 6: Contemporary Issues in Transportation Planning

1. Transportation planning for metropolitan, medium and small cities.
2. Inclusive transportation planning for children, elderly persons and persons with disabilities.

3. Integration of transportation planning with Master Plans, Development Plans and Regional Plans.
4. Emerging mobility challenges and sustainable urban transportation strategies.
5. Case studies of transportation planning and mobility management in India and abroad.

References

1. Kadiyali, L.R. (Latest Edition). Traffic Engineering and Transport Planning. Khanna Publishers.
2. Khisty, C.J. & Lall, B.K. (Latest Edition). Transportation Engineering: An Introduction. Pearson Education.
3. Hutchinson, B.G. (Latest Edition). Principles of Urban Transport Systems Planning. Taylor
4. Bruton, M.J. (Latest Edition). Introduction to Transportation Planning. Routledge.
5. Vuchic, V.R. (Latest Edition). Urban Transit Systems and Technology. Wiley.
6. O'Flaherty, C.A. (Latest Edition). Transport Planning and Traffic Engineering. Butterworth-Heinemann.
7. Meyer, M.D. & Miller, E.J. (Latest Edition). Urban Transportation Planning. McGraw-Hill.
8. Chakraborty, P. & Das, A. (Latest Edition). Principles of Transportation Engineering. PHI Learning. & Francis.

Codes, Guidelines and Reports

1. Urban and Regional Development Plans Formulation and Implementation (URDPFI) Guidelines, Ministry of Housing and Urban Affairs, Government of India (Latest applicable edition).
2. National Urban Transport Policy (NUTP), Ministry of Housing and Urban Affairs / Institute of Urban Transport (India).
3. Indian Roads Congress (IRC): Relevant Codes, Standards and Guidelines (Latest Editions).
4. Manual for Planning and Development of Urban Roads and Streets, Ministry of Housing and Urban Affairs / IRC (Latest Edition).

MURP166 PLANNING AND DESIGN STUDIO- I

Course Outcomes

At the end of the course, the students will be able to:

CO1 Demonstrate the application of planning theories and principles in the preparation of an integrated urban regional development plan.

CO2 Conduct reconnaissance surveys, field investigations and stakeholder consultations for planning studies.

CO3 Analyse spatial, socio-economic, environmental and infrastructure data using appropriate planning techniques

CO4 Prepare integrated land use, transportation and infrastructure proposals based on planning standards and development needs.

CO5 Formulate implementation strategies including phasing, capital investment, institutional arrangements and urban renewal programmes.

CO6 Present and defend comprehensive planning proposals through professional reports, maps, drawings and presentations.

Contents

Module 1: Project Initiation and Planning Framework

1. Introduction to the planning studio, study area and planning objectives.
2. Review of planning theories, principles and planning standards relevant to the study area.
3. Understanding the regional context, planning issues and development potential.
4. Preparation of work plan, survey methodology and study framework**.**

Module 2: Reconnaissance Survey and Data Collection

1. Reconnaissance survey and delineation of the planning area.
2. Design of field survey methodology and sampling framework.
3. Primary and secondary data collection.
4. Household surveys, land use surveys, infrastructure surveys and stakeholder consultations.
5. Two-week field survey of the study area.

Module 3: Data Analysis and Situation Assessment

1. Compilation, processing and interpretation of field data.
2. Spatial, demographic, socio-economic, environmental and infrastructure analysis.
3. Land use analysis and transportation assessment.
4. Identification of development potentials, constraints and key planning issues.
5. Preparation of base maps, thematic maps and diagnostic reports.

Module 4: Preparation of Integrated Development Plan

1. Formulation of planning vision, goals and development objectives.
2. Preparation of Structure Plan/Development Plan for the urban area and its region.
3. Land use proposals.
4. Transportation network proposals.
5. Infrastructure development proposals.
6. Environmental management and open space proposals.

Module 5: Action Plans and Implementation Strategies

1. Preparation of action area plans/ urban renewal proposals.
2. Development control and implementation strategies.

3. Capital budgeting, project prioritisation and financing options.
4. Institutional framework, governance mechanisms and implementation phasing.
5. Monitoring and evaluation framework.

Module 6: Plan Presentation and Documentation

1. Preparation of planning reports, maps, drawings and planning documents.
2. Preparation of planning regulations and implementation schedules.
3. Studio presentations, jury reviews and stakeholder feedback.

MURP171 GEO INFORMATICS FOR PLANNING

Course Outcomes

At the end of the course, the students will be able to:

CO1	Explain the principles and components of Geographic Information Systems (GIS) and Remote Sensing relevant to urban and regional planning.
CO2	Apply GIS techniques for spatial data management, mapping and planning analysis.
CO3	Interpret aerial photographs and satellite imagery for land use, infrastructure and environmental assessment.
CO4	Demonstrate the application of geospatial technologies in planning, monitoring and decision-making.

Contents

Module 1: GIS Applications

1. Introduction to GIS and its applications in urban and regional planning.
2. Coordinate systems, georeferencing and geo-coding.
3. Vector and raster data models; spatial databases and data management.
4. Spatial analysis, decision support systems, Spatial Data Infrastructure (SDI) and National Urban Information System (NUIS).

Module 2: Remote Sensing Applications

1. Fundamentals and principles of aerial and satellite remote sensing.
2. Aerial photograph interpretation, photogrammetry and stereoscopic image interpretation.
3. Satellite image characteristics: spatial, spectral and temporal resolutions.
4. Applications of remote sensing in land use mapping, urban growth analysis, infrastructure planning, environmental monitoring, population estimation and identification of informal settlements.

References

1. Burrough, P.A. & McDonnell, R.A. *Principles of Geographical Information Systems.*
2. Lillesand, T.M., Kiefer, R.W. & Chipman, J.W. *Remote Sensing and Image Interpretation.*
3. Longley, P.A. et al. *Geographical Information Systems and Science.*
4. NRSC (ISRO). Manuals and Applications of Remote Sensing.
5. National Remote Sensing Centre (NRSC) and Bhuvan Geoportal Documentation.

MURP172 DEMOGRAPHY & STATISTICAL APPLICATIONS

Course Outcomes

At the end of the course, the students will be able to:

CO1 Compile, organize and interpret demographic data from national databases for urban and regional planning applications.

CO2 Analyze population characteristics, demographic indicators and settlement patterns to support planning and policy decisions.

CO3 Apply basic statistical techniques, including sampling, measures of central tendency and dispersion, for planning data analysis.

CO4 Use correlation, regression and other statistical methods to interpret planning data and support evidence-based planning.

Contents

Module 1: Demography

1. Sources of demographic data in India; Census, Sample Registration System (SRS), National Family Health Survey (NFHS) and other official databases.
2. Settlement characteristics including urban and rural settlements, growth patterns, settlement hierarchy, peri-urban expansion and economic base.
3. Population structure and composition: age, sex, gender, literacy, occupation, religion and social groups.
4. Demographic indicators including fertility, mortality, migration, dependency ratio, population pyramid and their applications in spatial planning.

Module 2: Statistical Applications

1. Introduction to statistical methods in planning.
2. Population, sample, variables and sampling techniques.
3. Measures of central tendency and dispersion.
4. Correlation, regression and interpretation of statistical results for planning applications.

References

1. Bhende, A.A. & Kanitkar, T. *Principles of Population Studies*.
2. Kothari, C.R. *Research Methodology: Methods and Techniques*.
3. Gupta, S.C. *Fundamentals of Statistics*.

Government Publications and Data Sources

1. Census of India, Office of the Registrar General & Census Commissioner.
2. Sample Registration System (SRS) Reports.
3. National Family Health Survey (NFHS) Reports.
4. Periodic Labour Force Survey (PLFS), Ministry of Statistics and Programme Implementation (MoSPI).
5. URDPFI Guidelines, Ministry of Housing and Urban Affairs.

SEMESTER II

MURP 212 PLANNING FOR REGIONS

Course Outcomes

At the end of the course, the students will be able to:

CO1 Explain the concepts, typologies, delineation and characteristics of regions and their relevance to urban and regional planning.

CO2 Analyze regional growth, economic structure, disparities, interdependencies and rural–regional relationships influencing regional development.

CO3 Evaluate regional planning approaches, governance frameworks and planning tools through the study of different types of regions and regional development initiatives in India.

CO4 Assess emerging trends and challenges in regional development, including demographic change, technological transformation, globalization, sustainability and climate change.

Contents

Module 1: Concepts, Typology and Delineation of Regions

1. Basic concepts of regions; defining a region: fluidity, purposiveness and spatial relationships.
2. Typology of regions: resource regions, mega, macro, meso and micro regions.
3. Principles and approaches to delineation of regions (regionalisation).
4. Rural settlement analysis: settlement types and patterns; activity, environmental and economic interfaces in rural habitats; role of technology in transformation of rural settlements.

Module 2: Regional Dynamics and Development

1. Growth of mega and metropolitan regions: scale, complexity and implications at national and international levels; concepts of convergence and divergence.
2. Regional economy and competitiveness; leading, lagging and backward regions and factors influencing regional development.
3. Special regions: Special Economic Zones (SEZs), agro-regions, ecological regions and other functional regions.
4. Regional disparities: concepts, indicators and introductory application of analytical techniques.
5. Regional interdependence and linkages; introduction to Input–Output analysis and its relevance to regional planning.

Module 3: Regional Planning in India

1. Resource regions; corridor regions; national, sub-national and state-level regions; macro, meso and micro regions in India.
2. Planning of metropolitan and mega regions: case studies of National Capital Region (NCR), Mumbai Metropolitan Region, Kolkata Metropolitan Region, Chennai Metropolitan Region and other relevant examples.
3. Planning of special geographic regions: Western and Eastern Ghats, North-Eastern Region, coastal regions and river-valley regions.
4. Development corridors: Golden Quadrilateral, Delhi–Mumbai Industrial Corridor, Chennai–Bengaluru Industrial Corridor, North–South and East–West Corridors, and other contemporary regional development corridors.
5. Concepts of core, fringe and periphery and their implications for regional planning.
6. Tools and techniques for regional plan preparation and implementation in India.
7. Institutional and governance framework for regional planning; role of the 73rd and 74th Constitutional Amendment Acts, District Planning Committees and Metropolitan Planning Committees**.**

Module 4: Emerging Trends and Future Regions

Seminar on following themes.

1. Futures perspectives and approaches in regional planning.
2. Technological advancement, changing economic structures and emerging regional growth centres.
3. Regional demographic transitions, migration patterns and changing settlement systems.
4. Sustainability, ecological footprint, ecological economy and climate change in the context of regional development.
5. Globalisation, connectivity and emergence of networked and functionally integrated regions.
6. Policy and governance changes influencing future regional development.

7. Seminar discussions on emerging regional development scenarios and planning responses.

Reference Books:

1. Introduction to Regional planning / GlassonJ
2. An Approach to Planning / Burrough, T HB
3. Development Planning, Models and Methods / Todaro, Michael P
4. Disaster Planning: Preservation of Life and Property / Foster, Harold D.
5. Economic Planning; Principles, Techniques and Practice / Agarwal, A N.
6. Regional Development Planning in India / Misra, RP
7. Regional Disparities in India / Nair K RG.
8. Regional Geography Theory and Practice / Minshull, Roger.

Guidelines and Online Resources

1. Ministry of Housing and Urban Affairs (MoHUA)- URDPFI Guidelines and relevant regional planning publications.
2. National Capital Region Planning Board (NCRPB)- Regional Plans and planning documents.
3. NITI Aayog- regional development, SDGs and development indicator reports.
4. Census of India- demographic and settlement data.
5. Ministry of Statistics and Programme Implementation (MoSPI)- regional and state-level socio-economic statistics.

MURP 222 REGIONAL INFRASTRUCTURE

Course Outcomes

At the end of the course, the students will be able to:

CO1 Explain the role, planning principles and governance of regional infrastructure systems.

CO2 Analyze regional resources, infrastructure availability, service gaps and spatial disparities using appropriate indicators, benchmarks and planning tools.

CO3 Evaluate physical, connectivity, energy, social and economic infrastructure systems, relevant policies and institutional frameworks for balanced regional development.

CO4 Formulate integrated and sustainable regional infrastructure strategies considering financing, governance, resilience and technological advancements.

Contents

Module 1: Regional Infrastructure Planning and Governance

1. Concepts, classification and significance of infrastructure in regional development.
2. Infrastructure planning principles: equity, accessibility, affordability, efficiency, quality of service, levels of service and service standards.

3. Infrastructure indicators, infrastructure index, benchmarks and assessment of regional infrastructure gaps.
4. Ownership and governance models: Public, Private, Community-based, Special Purpose Vehicles (SPVs) and Public–Private Partnerships (PPP).
5. Infrastructure financing, investment prioritization and regulatory frameworks.
6. Regional resource assessment and mapping of land, water, forest, mineral and agricultural resources.
7. Role of GIS, Remote Sensing and Spatial Information Systems in regional infrastructure planning, monitoring and decision-making.

Module 2: Water, Environmental and Utility Infrastructure

1. Water resources planning: availability, demand, supply, regional distribution, conservation and integrated water resource management.
2. National Water Policy, inter-state and transboundary water issues, water rights and institutional arrangements.
3. Drinking water and irrigation infrastructure: regional disparities, service standards, pricing, efficiency and community participation.
4. Sanitation infrastructure, wastewater management and regional sewerage systems.
5. Solid waste management in urban and rural regions; hazardous, biomedical and electronic waste management; circular economy approaches.
6. Environmental infrastructure, pollution control and climate-resilient infrastructure.
7. National policies and programmes related to water, sanitation and waste management (Jal Jeevan Mission, Swachh Bharat Mission, AMRUT and relevant state initiatives).

Module 3: Regional Connectivity, Energy and Network Infrastructure

1. Regional transport infrastructure: hierarchy of roads, railways, ports, airports, inland waterways and logistics infrastructure.
2. National Highway Development Programme, Bharatmala Pariyojana, PMGSY, Dedicated Freight Corridors and industrial/economic corridors.
3. Role of transport infrastructure in regional accessibility, economic integration and spatial development.
4. Conventional and renewable energy infrastructure; regional energy planning, transmission networks and energy security.
5. Digital infrastructure: Information and Communication Technology (ICT), broadband connectivity, gas pipelines and utility corridors.
6. National Infrastructure Pipeline (NIP), PM Gati Shakti National Master Plan and infrastructure planning frameworks.

Module 4: Social and Economic Infrastructure and Integrated Regional Development

1. Planning of health, education, socio-cultural and recreational infrastructure.

2. Economic infrastructure: agricultural markets, warehousing, logistics, banking, tourism infrastructure, industrial estates and Special Economic Zones (SEZs).
3. Spatial disparities in infrastructure provision and strategies for balanced regional development.
4. Integrated infrastructure planning, infrastructure resilience and sustainable regional development.
5. Institutional coordination, stakeholder participation, monitoring and performance evaluation of infrastructure projects.
6. Case studies of regional infrastructure planning and development in India.

Suggested References

1. Goodman, A.S. and Hastak, M. *Infrastructure Planning Handbook: Planning, Engineering and Economics*.
2. Parkin, J. and Sharma, D. *Infrastructure Planning*.
3. Rondinelli, D.A. *Applied Methods of Regional Analysis: The Spatial Dimensions of Development Policy*.
4. Misra, R.P. *Regional Planning: Concepts, Techniques, Policies and Case Studies*.
5. Clayton, C.K. *Solid Waste Management: The Regional Approach*.
6. Chatterjee, A.K. *Water Supply, Waste Disposal and Environmental Engineering*—selected planning-related chapters.

Guidelines and Government Publications

1. Urban and Regional Development Plans Formulation and Implementation (URDPFI) Guidelines, Ministry of Housing and Urban Affairs.
2. National Infrastructure Pipeline (NIP), Government of India.
3. PM Gati Shakti National Master Plan, Government of India.
4. National Water Policy, Government of India.
5. Jal Jeevan Mission, Swachh Bharat Mission, AMRUT and other relevant MoHUA and Ministry of Jal Shakti publications.
6. NITI Aayog reports on infrastructure and regional development.

MURP 232 DISTRICT PLANNING AND RURAL DEVELOPMENT

Course Outcomes

At the end of the course, the students will be able to:

CO1 Explain the principles, institutional framework and governance mechanisms of decentralized district planning and rural development in India.

CO2 Analyze district planning processes, resource assessment, spatial integration and participatory approaches for integrated regional development.

CO3 Evaluate rural development programmes, infrastructure initiatives and inclusive development strategies in the context of district planning.

CO4 Assess emerging challenges, policy initiatives and technological interventions for sustainable and resilient district and rural development.

Contents

Module 1: Decentralized District Planning and Governance

1. Concepts, objectives and evolution of decentralized planning in India.
2. Constitutional framework for decentralized planning: 73rd and 74th Constitutional Amendment Acts.
3. Institutional framework for district planning: District Planning Committees (DPCs), Panchayati Raj Institutions (PRIs), Urban Local Bodies (ULBs) and State Planning Departments.
4. Participatory planning, local governance and stakeholder engagement.
5. Role of NITI Aayog, Central and State Finance Commissions, digital governance and ICT in district planning.

Module II: District Planning Process and Spatial Integration

1. District planning process: visioning, situation analysis and resource assessment.
2. Spatial database development, GIS-based resource mapping and district information systems.
3. Preparation of District Development Plans and Village Development Plans.
4. Integration of rural and urban development plans; vertical and horizontal planning integration.
5. Infrastructure planning, funding mechanisms, capacity building and monitoring for decentralized planning.
6. Rural–urban linkages and regional development approaches.

Module 3: Rural Development Planning and Inclusive Growth

1. Concepts, objectives and approaches to rural development.
2. Evolution of rural development policies and programmes in India.
3. Rural infrastructure planning: water supply, sanitation, housing, connectivity, livelihoods and social infrastructure.
4. Major rural development programmes and initiatives including MGNREGS, PMGSY, PMAY-G, National Rural Livelihood Mission (NRLM), Jal Jeevan Mission and Digital India initiatives.
5. Inclusive development: Tribal Sub-Plan, Scheduled Caste Sub-Plan, gender-responsive planning, Direct Benefit Transfer (DBT), Aspirational Districts Programme and Sustainable Development Goals (SDGs).

Module IV: Emerging Issues and Sustainable District Development

1. Changing characteristics of rural India: demographic transition, land-use change, agricultural transformation, migration, changing livelihoods and rural consumption patterns.
2. Rural resilience, climate change adaptation and disaster risk reduction in district planning.
3. Role of technology, innovation, e-governance and spatial decision-support systems in district planning.
4. Monitoring, evaluation and performance indicators for district development.
5. Case studies of successful district planning and rural development initiatives in India.

References

1. Misra, R.P. & Sundaram, K.V. *Rural Development: Perspectives and Approaches.*
2. Singh, K. *Rural Development: Principles, Policies and Management.*
3. Chambers, R. *Rural Development: Putting the Last First.*
5. Jain, L.C. *Decentralisation and Local Governance in India.*
6. Venkata Reddy, K. & Reddy, G.P. *Rural Development in India: Poverty and Development Policy.*
7. Desai, V. & Potter, R.B. *The Companion to Development Studies* (selected chapters).
8. Mathur, O.P. *District Planning in India*.

Government Publications and Guidelines

1. NITI Aayog – *Aspirational Districts Programme* and district planning publications.
2. Ministry of Panchayati Raj – *District Planning Committee Guidelines*.
3. Ministry of Rural Development – Guidelines for MGNREGS, PMGSY, PMAY-G and NRLM.
4. Ministry of Housing and Urban Affairs (MoHUA) – *Urban and Regional Development Plans Formulation and Implementation (URDPFI) Guidelines* (Latest Edition).
5. National Institute of Rural Development and Panchayati Raj (NIRDPR) – Manuals and publications on decentralized planning.

MURP 242 LAND MARKETS AND MANAGEMENT

Course Outcomes

At the end of the course, the students will be able to:

CO1 Explain the economic principles, policies and institutional framework governing land markets and land management in urban and regional planning.

CO2 Analyze land supply, demand, utilization and market dynamics influencing land development and regional growth.

CO3 Evaluate land management techniques, regulatory instruments and land value management strategies for sustainable development.

CO4 Assess land valuation methods, land information systems and emerging approaches to transparent and efficient land governance.

Contents

Module 1: Land Economics, Land Policy and Management

1. Introduction to land economics and its relevance to urban and regional planning.
2. Economic principles of land use; land rent theories and demand forecasting.
3. Factors influencing land supply and demand; formal and informal land markets.
4. Interpretation of cadastral maps and land records.
5. Land policies and planning instruments influencing land markets.
6. Public, private and Public–Private Partnership (PPP) approaches to land development.
7. Land governance, land administration and institutional framework for land management.

Module 2: Land Supply, Utilization and Regulatory Framework

1. Property rights, land ownership, tenure systems and land transactions.
2. Land development process, land conversion and peri-urban land management.
3. Land utilization patterns, land capability and land suitability analysis.
4. Master Plans, zoning regulations, Development Control Regulations (DCR) and other planning regulations influencing land markets.
5. Land supply management, access to land, social equity and affordable land development.
6. Issues of informal land development, speculation, corruption and transparency in land markets.

Module 3: Land Management Techniques and Land Value Management

1. Land assembly and land readjustment.
2. Land pooling and plot reconstitution.
3. Transfer of Development Rights (TDR), land sharing and land leasing.
4. Land acquisition and introduction to Resettlement and Rehabilitation (R&R).
5. Land Value Capture (LVC) mechanisms: betterment levy, impact fees, development charges and value capture financing.
6. Transit-Oriented Development (TOD), urban redevelopment and public-private participation in land development.

Module 4: Land Valuation, Land Information Systems and Emerging Trends

1. Principles and methods of land valuation.
2. Land pricing, land price indices, subsidies, auctions and market behaviour.
3. Introduction to hedonic pricing and factors affecting land values.
4. Land Information Systems (LIS), digital land records, GIS-enabled land information management and cadastral information systems.

5. Digital land governance, transparency in land transactions and emerging technologies in land administration.
6. Case studies of land management and land market interventions in India.

References

1. Ratcliffe, R.U. *Urban Land Economics*. McGraw-Hill.
2. Evans, A.W. *Economics, Real Estate and the Supply of Land*. Wiley-Blackwell.
3. Harvey, J. *Urban Land Economics*. Macmillan.
4. Alterman, R. *National-Level Planning in Democratic Countries: Land Use, Property Rights and Spatial Development.*
5. Archer, R.W. *Land Readjustment*. World Bank (selected papers).
6. Bertaud, A. *Order without Design: How Markets Shape Cities.*

Government Guidelines and Publications

1. Urban and Regional Development Plans Formulation and Implementation (URDPFI) Guidelines, Ministry of Housing and Urban Affairs (Latest Edition).
2. Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013.
3. Real Estate (Regulation and Development) Act (RERA), 2016.
4. Department of Land Resources, Government of India – Digital India Land Records Modernization Programme (DILRMP).
5. Ministry of Housing and Urban Affairs – Transit-Oriented Development Policy and relevant publications on Land Value Capture Financing.

MURP 252 URBAN & RURAL SOCIOLOGY (ELECTIVE1)

Course Outcomes

At the end of the course, the students will be able to:

CO1	Explain the concepts, theories and social structures of rural and urban societies and their relevance to urban and regional planning.
CO2	Analyze the processes of social change, urbanization, migration and rural–urban linkages influencing settlement development.
CO3	Evaluate the role of community institutions, governance, public participation and social inclusion in planning and development.
CO4	Assess contemporary social challenges, including poverty, inequality, exclusion and demographic change, in the context of sustainable urban and rural development.

Contents

Module 1: Society, Culture and Social Structure

1. Basic concepts of sociology: society, culture, community, social groups, institutions, social

organization and environment.
2. Rural–urban continuum, rural–urban dichotomy and settlement systems.
3. Social and physical characteristics of rural and urban communities.
4. Concepts of little community, peasant society, social organization, production systems and production relations.
5. Rural–urban linkages and changing relationships between villages and towns.

Module 2: Social Change, Urbanization and Settlement Transformation

1. Social change and modernisation in rural and urban societies.
2. Urbanisation, industrialisation and globalisation: trends and implications.
3. Migration, demographic transition and changing settlement patterns.
4. Changing land use, livelihoods, family structure and occupational patterns.
5. Social impacts of urban growth and regional development.
6. Urban development policies and their social implications.

Module 3: Community Participation, Governance and Inclusive Planning

1. Social dimensions of spatial planning and sustainable development.
2. Public participation and stakeholder engagement in planning.
3. Community institutions, leadership and changing power structures.
4. Panchayati Raj Institutions (PRIs), Urban Local Bodies (ULBs) and decentralized governance.
5. Participatory planning, social capital, community mobilization and conflict resolution.
6. Gender, equity and social inclusion in planning processes.

Module 4: Social Issues and Contemporary Challenges in Planning

1. Rural and urban poverty: causes, characteristics and planning interventions.
2. Social exclusion, inequality and vulnerability in urban and rural areas.
3. Housing, informal settlements and access to basic services.
4. Livelihoods, quality of life and human development indicators.
5. Demographic ageing, youth, migration and emerging social challenges.
6. Case studies on community-based planning and inclusive development in India.

References

1. Bhusan, V. & Sachdeva, D.R. *An Introduction to Sociology.*
2. Rao, M.S.A. *Urban Sociology in India.*
3. Dube, S.C. *Indian Society.*
4. Desai, A.R. *Rural Sociology in India.*
5. Saunders, P. *Social Theory and the Urban Question.*
6. King, A.D. *Buildings and Society.*
7. Friedmann, J. *Planning in the Public Domain.*
8. Sandercock, L. *Towards Cosmopolis: Planning for Multicultural Cities.*

Government Reports and Guidelines

1. Ministry of Housing and Urban Affairs (MoHUA). *Urban and Regional Development Plans Formulation and Implementation (URDPFI) Guidelines* (Latest Edition).
2. Ministry of Panchayati Raj – Publications on Decentralized Planning and Governance.
3. NITI Aayog – SDG India Index and Human Development Reports.
4. Census of India – Rural–Urban Distribution, Migration and Population Reports.
5. National Institute of Rural Development and Panchayati Raj (NIRDPR) – Publications on Rural Development and Community Participation.

MURP 252 POVERTY AND DEVELOPMENT (ELECTIVE II)

Course Outcomes

At the end of the course, the students will be able to:

CO1	Explain the concepts, dimensions and measurement of poverty and their relevance to urban and regional development.
CO2	Analyze the spatial, socio-economic and demographic determinants of rural and urban poverty using appropriate indicators and datasets.
CO3	Evaluate poverty alleviation policies, programmes and inclusive development strategies in the context of sustainable planning.
CO4	Assess emerging challenges such as climate change, vulnerability and inequality, and propose planning interventions for resilient and inclusive development.

Contents

Module 1: Concepts and Measurement of Poverty

1. Concepts and definitions of poverty: absolute, relative, multidimensional, income poverty, capability deprivation and social exclusion.
2. Evolution of poverty measurement in India and internationally.
3. Poverty estimation methodologies, poverty lines and poverty indices.
4. Data sources for poverty assessment: Census of India, National Sample Survey (NSS), Periodic Labour Force Survey (PLFS), National Family Health Survey (NFHS), Socio-Economic and Caste Census (SECC) and other official datasets.
5. Indicators of poverty: Head Count Ratio (HCR), Poverty Gap Index (PGI), Multidimensional Poverty Index (MPI), Human Development Index (HDI), Gender Development Index (GDI) and Sustainable Development Goal (SDG) indicators.

Module 2: Rural and Urban Poverty

1. Nature, causes and dimensions of rural and urban poverty.
2. Rural livelihoods, land ownership, employment, agricultural transformation and regional disparities.

3. Urban poverty: informal settlements, informal economy, migration, housing deprivation, vulnerability and access to basic services.
4. Poverty, inequality, livelihoods and social exclusion.
5. Spatial dimensions of poverty and methods for poverty mapping and spatial targeting.

Module 3: Poverty Alleviation Policies and Inclusive Development

1. Evolution of poverty alleviation strategies in India.
2. Major programmes for rural and urban poverty reduction, employment generation and livelihood enhancement.
3. Inclusive development approaches: social protection, financial inclusion, affordable housing, skill development, gender equity and community participation.
4. National and international best practices in poverty reduction.
5. Monitoring and evaluation of poverty alleviation programmes and their role in achieving the Sustainable Development Goals (SDGs).

Module 4: Poverty, Climate Change and Sustainable Development

1. Poverty, vulnerability and climate change.
2. Climate risks and their impacts on livelihoods, migration and human settlements.
3. Disaster risk reduction, climate adaptation and resilience planning for vulnerable communities.
4. Spatial targeting of poverty and climate-vulnerable regions.
5. Planning strategies for sustainable, resilient and inclusive urban and regional development.
6. Case studies on poverty reduction, community resilience and climate-responsive development.

References

1. Sen, A. *Development as Freedom.*
2. Chambers, R. *Rural Development: Putting the Last First.*
3. Dreze, J. & Sen, A. *An Uncertain Glory: India and its Contradictions.*
4. Sachs, J.D. *The End of Poverty.*
5. Ravallion, M. *The Economics of Poverty: History, Measurement and Policy.*
6. Todaro, M.P. & Smith, S.C. *Economic Development.*
7. World Bank. *World Development Report* (Latest Edition).

Government Reports and Guidelines

1. NITI Aayog – *National Multidimensional Poverty Index Reports*.
2. UNDP – *Human Development Report* (Latest Edition).
3. Ministry of Rural Development – Publications on rural livelihoods and poverty alleviation.
4. Ministry of Housing and Urban Affairs (MoHUA) – Publications on urban poverty, affordable housing and inclusive development.
5. Census of India, NSS, PLFS, NFHS and SECC reports.

MURP 2610 PLANNING STUDIO- II (With Field study)

Course Outcomes

At the end of the course, the students will be able to:

CO1 Conduct field investigations, spatial analysis and stakeholder consultations for planning at village, block, peri-urban and urban scales.

CO2 Analyze regional resources, socio-economic characteristics, infrastructure systems and development issues using appropriate planning tools and GIS techniques.

CO3 Prepare integrated development plans incorporating land use, infrastructure, transportation, environmental management and implementation strategies.

CO4 Present professional planning proposals supported by maps, reports, GIS analysis and stakeholder consultations for sustainable regional development.

Contents

Module 1: Planning Framework and Field Investigations

1. Introduction to integrated regional planning and planning studio methodology.
2. Understanding village, block, tehsil, peri-urban and urban planning systems.
3. Selection and delineation of the planning area.
4. Review of planning theories, planning standards and relevant policies.
5. Design of survey methodology, sampling framework and stakeholder consultation.
6. Collection of primary and secondary data.
7. Two-week field survey and reconnaissance study.

Module 2: Situation Analysis and Spatial Assessment

1. Preparation of base maps using GIS and remote sensing.
2. Analysis of land use, natural resources, settlement systems and environmental characteristics.
3. Assessment of demographic, socio-economic and infrastructure conditions.
4. Analysis of transportation networks, public facilities and regional connectivity.
5. SWOT analysis and identification of development potentials, constraints and planning issues.

Module 3: Preparation of Integrated Development

1. Formulation of planning vision, goals and development objectives.
2. Preparation of integrated development proposals for village, block, peri-urban and urban areas.
3. Land use planning and zoning proposals, transportation and mobility planning.

4. Infrastructure planning (water supply, sanitation, drainage, solid waste management, energy and social infrastructure).
5. Environmental management, resource conservation and climate resilience.
6. Action area plans, investment priorities, implementation phasing and institutional framework.

Module 4: Plan Presentation and Professional Documentation

1. Preparation of development plans, thematic maps, planning reports and policy recommendations.
2. GIS-based visualization and spatial decision-support.
3. Preparation of implementation strategies, capital investment proposals and monitoring framework.
4. Presentation before departmental jury, professionals and stakeholders.
5. Incorporation of feedback and submission of the final planning report.

Studio Components

Village Planning Study

1. Duration: 6 Weeks
2. Village profile, socio-economic survey, resource mapping, infrastructure assessment and preparation of a Village Development Plan.

Block / Tehsil Planning Study

1. Duration: 10 Weeks (including presentation of Village Study)
2. Preparation of an integrated Block/Tehsil Development Plan with emphasis on:
    - Regional land use
    - Transportation and connectivity
    - Physical and social infrastructure
    - Environmental management
    - Rural–urban linkages
    - Implementation strategy and investment framework

Suggested Deliverables

1. Reconnaissance Report
2. Base Maps and GIS Database
3. Socio-economic and Infrastructure Analysis
4. SWOT Analysis
5. Village Development Plan
6. Block/Tehsil Development Plan
7. Final Planning Report

8. Planning Drawings and Maps
9. Seminar Presentation and Viva Voce

SEMESTER III

MURP 312 PLANNING LEGISLATION AND PROFESSIONAL PRACTICE

Course Outcomes

At the end of the course, the students will be able to:

CO1 Explain the constitutional, legal and institutional framework governing urban and regional planning in India.

CO2 Interpret planning legislations, development regulations and environmental laws applicable to planning practice.

CO3 Evaluate planning instruments, development control mechanisms and statutory procedures for plan preparation and implementation.

CO4 Demonstrate professional ethics, consultancy practices and legal responsibilities in public and private planning practice.

Contents

Module 1: Constitutional and Legal Framework for Planning

1. Concept, significance and sources of law: custom, legislation and precedent.
2. Legal terminology: legislation, ordinance, bill, act, rules, regulations and bye-laws.
3. Relationship between law and urban and regional planning; statutory basis of planning; police powers and eminent domain.
4. Constitutional provisions related to planning, property rights, environment and urban governance.
5. Legislative powers of the Union, State and Local Governments; 73rd and 74th Constitutional Amendments; Metropolitan Planning Committees (MPCs) and District Planning Committees (DPCs).

Module 2: Planning Legislations and Development Regulations

1. Evolution of planning legislation in India.
2. Town and Country Planning Acts, Development Authority Acts and Model Regional and Town Planning and Development Law.
3. Preparation and implementation of Regional Plans, Development Plans, Master Plans, Local Area Plans and Town Planning Schemes.
4. Development Control Regulations (DCR), zoning regulations, subdivision regulations, building bye-laws and development permissions.

5. Betterment levy, development charges, Transfer of Development Rights (TDR), Air Rights and land development control in peri-urban areas.

Module 3: Planning Policies, Environmental Legislations and Development Management

1. National and State planning policies relevant to urban and regional development.
2. Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013.
3. Environment (Protection) Act, Disaster Management Act, SEZ Act, Real Estate (Regulation and Development) Act (RERA), and other legislations relevant to planning.
4. Laws related to slum redevelopment, housing, heritage conservation, environmental protection and infrastructure development.
5. Statutory procedures for land acquisition, environmental clearance, public participation and plan implementation.

Module 4: Professional Practice and Consultancy in Planning

1. Professional role and responsibilities of planners; professional ethics and code of conduct.
2. Role of professional institutes and interdisciplinary collaboration in planning practice.
3. Consultancy practice including preparation of consultancy proposals, Expression of Interest (EOI), Request for Proposal (RFP), contract management and project execution.
4. Office management, professional charges, public-private partnerships, collaborative projects and contemporary planning practice in public, private and joint sectors.

References

1. Rangwala, S.C. *Town Planning.*
2. Ballaney, Shirley. *Urban and Regional Planning in India.*
3. Jain, A.K. *Urban Planning and Governance.*
4. Singh, V.B. *Urban Planning and Development.*
5. Chakrabarty, B.K. Urban Management: Concepts and Strategies.
6. Ratcliffe, J., Stubbs, M. & Shepherd, M. Urban Planning and Real Estate Development.

Codes, Guidelines and Government Publications

1. Urban and Regional Development Plans Formulation and Implementation (URDPFI) Guidelines, Ministry of Housing and Urban Affairs (Latest Edition).
2. Model Regional and Town Planning and Development Law, Ministry of Housing and Urban Affairs (Latest Edition).
3. Relevant State Town and Country Planning Acts.
4. National Urban Policy Framework and relevant MoHUA publications.
5. National Building Code of India (Latest Edition).

MURP 322 RESEARCH METHODOLOGY

Course Outcomes

At the end of the course, the students will be able to:

- **CO1** Explain the principles, approaches and ethical considerations of research in urban and regional planning.
- **CO2** Formulate research problems, objectives, hypotheses and appropriate research designs for planning studies.
- **CO3** Apply suitable methods of sampling, data collection and analytical techniques for planning research.
- **CO4** Prepare research proposals and technical reports using appropriate referencing, data presentation and interpretation techniques.

Contents

Module I: Foundations of Research Methodology

1. Meaning, objectives and significance of research in urban and regional planning.
2. Types of research: basic, applied, exploratory, descriptive, analytical, experimental, qualitative, quantitative and mixed-method research.
3. Research process and characteristics of scientific research.
4. Research ethics, plagiarism, academic integrity and responsible conduct of research.
5. Identification of planning problems and formulation of research questions.

Module II: Research Design and Data Collection

1. Formulation of research objectives, hypotheses and conceptual framework.
2. Research design: exploratory, descriptive, analytical, experimental and case study research.
3. Sampling design: census and sample surveys; probability and non-probability sampling techniques.
4. Primary and secondary data sources; questionnaire design, interview schedules, observation methods, focus group discussions and stakeholder consultation.
5. Use of Census, NSS, NFHS, government databases, GIS and remote sensing data in planning research.

Module III: Data Processing, Analysis and Interpretation

1. Data editing, coding, classification and tabulation.
2. Descriptive statistical techniques and introduction to inferential statistics.
3. Correlation and regression; interpretation of planning data.
4. Introduction to multivariate analysis and spatial analysis in planning research.

5. Introduction to statistical software (SPSS/ Excel) and GIS applications for data analysis.

Module IV: Research Reporting and Scientific Communication

1. Literature review and identification of research gaps.
2. Referencing styles (APA, IEEE and other commonly used formats), citations, footnotes, endnotes and bibliography.
3. Structure of research proposals, dissertations, technical reports and journal articles.
4. Presentation and visualization of research findings using tables, charts, maps and diagrams.
5. Writing abstracts, conclusions, recommendations and policy briefs.

References

1. Wilkinson & Bhandarkar: Methodology and Techniques of Social Research.
2. Pauline Vyoung: Scientific Social Surveys and Research.
3. Panneerselvam, R., Research Methodology, Prentice Hall of India, New Delhi,2004.
4. D.K.Bhattachary, Research Methodology; Excel Books
5. Kothari, C.R. & Garg, G. (Latest Edition). *Research Methodology: Methods and Techniques*. New Age International.
6. Creswell, J.W. & Creswell, J.D. (Latest Edition). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches*. Sage Publications.
7. Kumar, R. (Latest Edition). *Research Methodology: A Step-by-Step Guide for Beginners*. Sage Publications.

Planning References

1. UN-Habitat. *The Planner's Guide to Spatial Planning* (Latest Edition).
2. MoHUA. *URDPFI Guidelines* (Latest Edition).

MURP 332 PROJECT PLANNING

Course Outcomes

At the end of the course, the students will be able to:

CO1	Explain the principles, processes and life cycle of development projects in urban and regional planning.
CO2	Apply technical, financial, economic, social and environmental appraisal methods for evaluating planning projects.
CO3	Evaluate project financing mechanisms, implementation strategies, and institutional arrangements.
CO4	Apply monitoring, evaluation and project management tools for effective project execution and decision-making.

Contents

Module 1: Project Planning and Formulation

1. Introduction to development projects and project planning.
2. Nature and types of planning projects.
3. Project life cycle: project identification, formulation, appraisal, implementation, monitoring and evaluation.
4. Identification and prioritization of projects; linkage with national, state, regional and local development plans and sectoral policies.
5. Pre-feasibility and feasibility studies.
6. Logical Framework Approach (LFA), Goal-Oriented Project Planning (GOPP) and stakeholder participation in project planning.

Module 2: Project Appraisal

1. Concept, objectives and need for project appraisal.
2. Technical appraisal: project location, technology, infrastructure, implementation schedule and resource requirements.
3. Financial appraisal: project costs and benefits, cash flow, Net Present Value (NPV), Benefit-Cost Ratio (BCR), Internal Rate of Return (IRR) and sensitivity analysis (concepts and applications).
4. Economic appraisal: economic costs and benefits, shadow pricing and Economic Rate of Return (ERR).
5. Social and environmental appraisal: stakeholder analysis, Social Impact Assessment (SIA), Environmental Impact Assessment (EIA), sustainability and climate resilience considerations.

Module 3: Project Financing and Implementation

1. Sources of project finance: government funding, fiscal transfers, municipal finance, multilateral and bilateral funding agencies, Public-Private Partnerships (PPP), municipal bonds and Special Purpose Vehicles (SPVs).
2. Procurement procedures, e-tendering and contract management.
3. Institutional arrangements, stakeholder participation and governance in project implementation.
4. Project risks and uncertainty; risk identification, sensitivity analysis and mitigation measures.

Module 4: Project Monitoring, Evaluation and Management

1. Concepts and objectives of project monitoring and evaluation.
2. Performance indicators and evaluation techniques: ex-ante, concurrent, mid-term and ex-post evaluation.
3. Project scheduling and management tools: Gantt Chart, PERT and CPM.

4. Cost, quality and time management.
5. Preparation of project reports and case studies of urban and regional development projects.

References

1. Chandra, P. Projects: Planning, Analysis, Financing, Implementation and Review. McGraw Hill.
2. Kerzner, H. Project Management: A Systems Approach to Planning, Scheduling and Controlling. Wiley.
3. Meredith, J.R. & Mantel, S.J. Project Management: A Managerial Approach. Wiley.
4. Gittinger, J.P. Economic Analysis of Agricultural Projects. Johns Hopkins University Press.
5. Goodman, A.S. & Hastak, M. Infrastructure Planning Handbook. McGraw Hill.

Guidelines and Government Publications

1. Ministry of Housing and Urban Affairs (MoHUA). Urban and Regional Development Plans Formulation and Implementation (URDPFI) Guidelines (Latest Edition).
2. NITI Aayog. Public-Private Partnership (PPP) Guidelines.
3. Ministry of Environment, Forest and Climate Change (MoEFCC). Environmental Impact Assessment Notification (Latest Edition).
4. Department of Economic Affairs. PPP Toolkits and Project Appraisal Guidelines.

MURP 342 URBAN REGENERATION & CONSERVATION TECHNIQUES (Elective I)

Course Outcomes

At the end of the course, the students will be able to:

CO1	Explain the concepts, principles and approaches of urban regeneration, renewal and heritage conservation.
CO2	Assess historic urban areas and identify conservation and regeneration needs using appropriate planning techniques.
CO3	Formulate conservation and urban regeneration strategies integrating physical, social, economic and environmental considerations.
CO4	Evaluate implementation mechanisms, governance frameworks and community participation for urban regeneration and heritage management.

Contents

Module 1: Concepts of Urban Regeneration and Heritage Conservation

1. Evolution and concepts of urban regeneration, urban renewal, redevelopment, rehabilitation, reconstruction and rejuvenation.
2. Characteristics of historic cities and heritage precincts; significance of tangible and intangible cultural heritage.

3. Causes of urban decline and need for regeneration.
4. Principles of integrated urban conservation and sustainable regeneration.
5. International charters and guidelines: Venice Charter, Burra Charter, UNESCO Historic Urban Landscape (HUL) Approach and relevant national conservation policies.

Module 2: Heritage Assessment and Conservation Planning

1. Identification, classification and documentation of heritage resources.
2. Heritage inventories, surveys, mapping and condition assessment.
3. Planning techniques for conservation of historic monuments, heritage buildings, precincts and cultural landscapes.
4. Adaptive reuse, restoration, rehabilitation, reconstruction, revitalization and compatible infill development.
5. Legal and institutional framework for heritage conservation in India.

Module 3: Urban Regeneration Strategies

1. Physical, economic, social and environmental dimensions of urban regeneration.
2. Regeneration of inner-city areas, waterfronts, brownfield sites, traditional markets and declining neighbourhoods.
3. Urban renewal programmes, infrastructure upgrading, public realm improvement and place-making.
4. Heritage-led regeneration, tourism, local economic development and climate-resilient regeneration.
5. National initiatives such as Smart Cities Mission, AMRUT, HRIDAY and relevant state programmes.

Module 4: Implementation and Urban Management

1. Preparation and implementation of regeneration and conservation plans.
2. Institutional arrangements, stakeholder participation and community engagement.
3. Financial incentives, public-private partnerships (PPP), heritage financing and resource mobilization.
4. Monitoring, management and governance of regeneration projects.
5. Case studies of successful urban regeneration and heritage conservation in India and abroad.

Recommended References

1. Dobby, A. *Conservation and Planning.*
2. Rodwell, D. *Conservation and Sustainability in Historic Cities.*
3. Roberts, P., Sykes, H. & Granger, R. *Urban Regeneration.*
4. Feilden, B.M. *Conservation of Historic Buildings.*
5. Jokilehto, J. *A History of Architectural Conservation.*
6. Ashworth, G.J. *Conservation of the Built Environment.*

Guidelines and Publications

1. UNESCO. *Recommendation on the Historic Urban Landscape (HUL), 2011.*
2. ICOMOS. *The Venice Charter* (1964) and *The Burra Charter* (Latest Edition).
3. Ministry of Housing and Urban Affairs (MoHUA). *Urban and Regional Development Plans Formulation and Implementation (URDPFI) Guidelines* (Latest Edition).
4. Archaeological Survey of India (ASI). Conservation Manuals and Guidelines.
5. Ministry of Culture, Government of India. Heritage Conservation Policies and Guidelines.

MURP 342 RESETTLEMENT AND REHABILITATION (Elective II)

Course Outcomes

At the end of the course, the students will be able to:

CO1 Explain the concepts, legal framework and policies governing land acquisition, resettlement and rehabilitation in development planning.

CO2 Assess the social, economic and environmental impacts of development-induced displacement using appropriate planning tools.

CO3 Formulate resettlement and rehabilitation plans incorporating livelihood restoration, stakeholder participation and inclusive development strategies.

CO4 Evaluate institutional mechanisms, implementation strategies and monitoring approaches for effective resettlement and rehabilitation.

Course Contents

Module 1: Concepts, Policies and Legal Framework

1. Concepts and principles of land acquisition, displacement, resettlement and rehabilitation.
2. Development-induced displacement: voluntary and involuntary resettlement.
3. Land acquisition approaches: compulsory acquisition, negotiated settlement, land pooling, land readjustment and land sharing.
4. Legal and policy framework: Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement (RFCTLARR) Act, 2013; relevant State policies.
5. International safeguard frameworks: World Bank Environmental and Social Framework (ESS5), Asian Development Bank Safeguard Policy Statement and other international practices.

Module 2: Social Impact Assessment and Resettlement Planning

1. Social Impact Assessment (SIA): objectives, methodology and applications.
2. Identification of Project Affected Persons (PAPs) and Project Affected Assets (PAAs).
3. Assessment of social, economic and environmental impacts of linear and non-linear infrastructure projects.

4. Impacts on vulnerable groups, indigenous communities, women and children.
5. Preparation of Resettlement Action Plans (RAPs): principles, structure, compensation, relocation options and livelihood restoration planning.

Module 3: Rehabilitation and Livelihood Restoration

1. Rehabilitation planning and implementation.
2. Livelihood impact assessment and socio-economic baseline surveys.
3. Income restoration, skill development, employment generation and economic rehabilitation.
4. Housing, community infrastructure and social services in resettlement areas.
5. Participatory planning, stakeholder consultation and grievance redressal mechanisms.

Module 4: Institutional Framework, Monitoring and Case Studies

1. Institutional arrangements for resettlement and rehabilitation at national, state and local levels.
2. Role of government agencies, NGOs, CBOs, community organizations and international development agencies.
3. Monitoring, evaluation and post-resettlement assessment.
4. Case studies of resettlement and rehabilitation in infrastructure, mining, industrial development, highways, urban redevelopment, dams and disaster-affected areas.

References

1. Cernea, M.M. *The Economics of Involuntary Resettlement: Questions and Challenges.*
2. Mathur, H.M. *India: Social Development Report* (selected chapters on displacement and rehabilitation).
3. Fernandes, W. *Development-Induced Displacement and Rehabilitation.*
4. Downing, T.E. *Avoiding New Poverty: Mining-Induced Displacement and Resettlement.*
5. Cernea, M.M. & McDowell, C. *Risks and Reconstruction: Experiences of Resettlers and Refugees.*

Acts, Policies and Guidelines

1. Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 (RFCTLARR Act).
2. World Bank Environmental and Social Framework (ESS5): Land Acquisition, Restrictions on Land Use and Involuntary Resettlement.
3. Asian Development Bank Safeguard Policy Statement (2009).
4. URDPFI Guidelines, Ministry of Housing and Urban Affairs (Latest Edition).

MURP 3510 THESIS / DISSERTATION &PLANNING SEMINAR

Course Outcomes

At the end of the course, the students will be able to:

- **CO1** Formulate a research problem and develop an appropriate research framework for an urban, regional or rural planning study.
- **CO2** Conduct literature review, case studies and field investigations using suitable planning tools and research techniques.
- **CO3** Prepare a research methodology, delineate the study area and compile primary and secondary datasets.
- **CO4** Present and defend the dissertation proposal and work plan through a planning seminar.

Contents

Module 1: Research Proposal Development

1. Selection and finalization of dissertation topic.
2. Identification of research problems, objectives, scope and research questions.
3. Preparation of research proposal.
4. Approval by the Departmental Research Committee/Jury.

Module 2: Literature Review and Preliminary Studies

1. Literature review and identification of research gaps.
2. Review of relevant planning policies and planning practices.
3. National and international case studies.
4. Delineation of study area.
5. Preparation of conceptual framework.

Module 3: Research Methodology and Data Collection

1. Preparation of research methodology.
2. Survey design, sampling framework and stakeholder identification.
3. Primary and secondary data collection.
4. Compilation and preliminary organization of data.

Module IV: Planning Seminar

1. Presentation of dissertation proposal.
2. Presentation of research methodology, analytical tools and work plan.

3. Review by internal jury and experts.
4. Incorporation of comments for further research.

SEMESTER IV

MURP 4120 THESIS / DISSERTATION

Note: This course is a continuation of MURP 3510: Thesis / Dissertation & Planning Seminar undertaken in Semester III. Students shall build upon the approved dissertation proposal, research methodology, literature review and data collected during the previous semester to undertake detailed analysis, formulate planning strategies and proposals, prepare the final dissertation, and defend their work before the departmental and external jury.

Course Outcomes

At the end of the course, the students will be able to:

CO1 Analyze spatial, socio-economic, environmental and planning data using appropriate qualitative and quantitative techniques.

CO2 Develop planning strategies, policies and proposals to address the identified planning issues based on research findings.

CO3 Validate planning proposals through appropriate analytical methods, stakeholder consultations and action-area demonstrations.

CO4 Prepare and defend a professional dissertation demonstrating independent research, planning competence and effective communication.

Contents

Module I: Data Analysis and Problem Assessment

1. Processing, analysis and interpretation of primary and secondary data.
2. Spatial, socio-economic, environmental and institutional analysis.
3. Identification of planning issues, development potentials and constraints.
4. Validation of research findings.

Module II: Development of Planning Proposals

1. Formulation of planning vision, goals and objectives.
2. Development of planning strategies and policy recommendations.
3. Preparation of alternative planning scenarios and evaluation.
4. Preparation of integrated planning proposals.

Module III: Action Area Planning and Validation

1. Selection of representative action area(s).
2. Preparation of detailed planning proposals.
3. Testing and validation of planning proposals through planning standards, stakeholder consultation and feasibility assessment.
4. Preparation of implementation framework, institutional arrangements and investment priorities.

Module IV: Dissertation Documentation and Viva Voce

1. Preparation of dissertation report, maps, drawings and technical documentation.
2. Preparation of planning illustrations, GIS outputs and analytical diagrams.
3. Presentation before external jury.
4. Final viva voce and submission of dissertation.