

**AUTONOMY 2022**

**MASTER OF PLANNING (URBAN PLANNING)**

**SYLLABUS  
III & IV SEMESTER**

# **THIRD SEMESTER**

COURSE CODE	COURSE NAME	L-T-S-D	CREDITS	YEAR OF INTRODUCTION
22MPC301	SUSTAINABLE URBAN PLANNING	2-1-0-0	3	2022
Course Objectives	<ul style="list-style-type: none"> <li>To understand urbanisation pattern and related resource management</li> <li>To sensitise the significance of sustainability in the field of urban planning and understand its global significance</li> <li>To expose various best practices practiced in the field of sustainable urban planning</li> </ul>			
Syllabus	Overview of Sustainable Development Concept, Environment and Urbanisation, Energy and Urbanisation, Climate change and Urbanisation, Carrying capacity, EIA and SEA, Emerging Concepts			
Expected Outcome	<p>The students will be able to</p> <ol style="list-style-type: none"> <li>1. Appreciate the significance of sustainability in urbanisation and its global impact</li> <li>2. Develop capacity for resource optimisation.</li> <li>3. Approach the environment and natural ecosystems as potentials rather than as constraints for urban development and thus integrate it to the planning process.</li> <li>4. Appreciate and apply the new technologies related to sustainable urban development</li> </ol>			
Reference Books	<ol style="list-style-type: none"> <li>1. AITP Reader on Ecology &amp; Resource Development, AITP</li> <li>2. A K Maitra, AITP Reading Material on Environmental Planning and Design, , SPA Delhi</li> <li>3. Andy Gouldson et al., The Economics of Low Carbon Cities: A Mini-Stern Review for the Leeds City Region, The Centre for Low Carbon Futures Partnership, University of Hull, University Of Leeds</li> <li>4. Best Practices Environment, The Economist, Intelligence University Press</li> <li>5. Brandon P.S, Evaluating Sustainable Development in the Built Environment,, WILEY-BLACKWELL Pub., UK</li> <li>6. Cities and Climate Change, OECD Publishing OECD (2010)</li> <li>7. CPCB Guidelines for Bio-Technologies for Treatment of Wastes and Cleaner Technologies - Issue and Options</li> <li>8. Deakin, Mark; Al Waer, Husam (Eds.) (2012), From Intelligent to Smart Cities, Routledge, Taylor &amp; Francis, USA and Canada.</li> <li>9. Dr. D.A. Nagdeve, Population Growth and Environmental Degradation in India,</li> <li>10. Global Green Standards: ISO 14000 and Sustainable Development, International Institute for Sustainable Development</li> <li>11. Harriet Bulkeley (2013), Cities and Climate Change, (Routledge Critical Introductions to Urbanism and the City), Routledge, New York.</li> <li>12. Kulkarni V. and Ramachandra T. V, Environmental Management,, TERI Press, New Delhi</li> <li>13. Lehmann S (2015), Low Carbon Cities- Transforming Urban Systems, Routledge Publications, New York.</li> </ol>			

	14. Mary K. Theodore and Louis Theodore Introduction to Environmental Management, 15. Ramachandra T.V. and Saira Varghese K., Exploring Possibilities of Achieving Sustainability in Solid Waste Management, , Indian Journal of Environmental Health, 45(4):255-264, 2003 16. Scott Campbell, Green Cities, Growing Cities, Just Cities?, Urban Planning and the Contradictions of Sustainable Development, Journal of The American Planning Association 17. Stephen M Wheeler & Timothy Beatley (Ed.), The Sustainable Urban Development Reader, Second Edition, Routledge 18. Tai-Chee Wong and Belinda Yuen , Eco-City Planning: Policies, Practice and Design, , Springer
--	--

COURSE PLAN		
Module	Contents	Internal/ Sem Exam Marks
I	<b>Overview of Sustainable Development Concept</b> Definitions, concepts and parameters in sustainable development with particular reference to Brundtland Commission and Agenda 21; Eco-City Approach; United Nations Framework Convention on Climate Change; Conference of Parties: Kyoto Protocol, Intergovernmental Panel on Climate Change, Indian Network of Climate Change Assessment etc.	10%
II	<b>Environment and Urbanisation</b> Environment and Development interface; Resource management, exploitation and conservation: Land, water, air and green spaces including forest cover; Impact of urbanisation on environment; Management of sensitive zones in urban areas – hills, coasts, water bodies and water fronts, wetlands etc. (including participatory approaches); Pollution and pollution control.	15%
FIRST INTERNAL TEST		
III	<b>Energy and Urbanisation</b> Sources of energy, Energy supply and demand; Energy consumption in cities, Determinants of energy demand in cities; Energy planning and management; Energy efficient development.	15%
IV	<b>Climate change and Urbanisation</b> Basics of Climate Change: Greenhouse gases, Anthropogenic causes, Carbon cycle, Global warming; Urban Heat Islands; Impacts of Climate Change: Climate as Forcing Variable, Location attributes, sensitivity and vulnerability of different Sectors, extreme events and their effects. Mitigation for climate change in urban areas (Case studies).	25%
SECOND INTERNAL TEST		

<b>V</b>	<b>Carrying capacity, EIA and SEA</b> Carrying capacity based planning: Concept, Parameters and Indicator measures, Models and case studies in Urban development; Role of EIA in the planning and decision making process; Methods of EIA; advantages and limitations; Environmental Impact and Strategic Environmental Assessment for Urban Areas (through Case Studies); Ecological Footprint Analysis of Cities; Sustainable Lifestyle Assessment	<b>20%</b>
<b>VI</b>	<b>Emerging Concepts</b> Green GDP; Environmental accounting; Green Budgeting; Carbon Trading; Carbon sequencing; Compact City Concept - Implications of Urban Form, Density, Land Use Pattern, Transportation System, Waste management and Energy Conservation; New urbanism principles, Smart city concept; Policy, programmes, schemes and strategies adopted by Government (Central & State) to achieve sustainability in urban development.	<b>15%</b>
<b>END SEMESTER EXAM</b>		

COURSE CODE	COURSE NAME	L-T-S	CREDITS	YEAR OF INTRODUCTION
22MPC302	DEVELOPMENT MANAGEMENT AND FINANCE	1-1-0	2	2022
<b>Course Objectives</b>	To familiarise <ul style="list-style-type: none"> <li>• The administration and financing of urban/rural housing and other infrastructure development and management strategies adopted for their implementation and monitoring and to familiarise the concept of Public finance</li> <li>• The aspects of development administration, good governance and their influence in development planning</li> <li>• The powers and responsibilities of ULBs. Revenue and expenditure management, Innovative means of financial resource mobilisation for local bodies, best practices</li> </ul>			
<b>Syllabus</b>	Basic concepts of Development management, Development administration and Development financing. Strategies for managing, financing, implementing and administering urban and rural development. Public / municipal finance, tools for evaluation, innovative methods of resource mobilisation,			
<b>Expected Outcome</b>	The students will <ol style="list-style-type: none"> <li>i. acquire knowledge about the process of management of urban planning and infrastructure projects</li> <li>ii. be able to identify the means of financing, monitoring and implementing them.</li> <li>iii. acquire the knowledge to identify the strategies and methods of resource mobilisation that can be adopted for various development projects.</li> </ol>			
<b>Reference Books</b>	<ol style="list-style-type: none"> <li>1. Ahluwalia, Isher Judge, et.al., Urbanisation in India – Challenges, Opportunities and the Way Forward.</li> <li>2. Aresh Kumar Maitra, „Urban Environment in Crisis“, New Age International (P) Limited, Publishers, New Delhi.</li> <li>3. Avijit Gupta and Mukul G. Asher, „Environment and the Developing World“, John Wiley &amp; Sons, New York, USA.</li> <li>4. Bamberger M &amp; Hewitt E, Monitoring and Evaluation of Urban development Programs.</li> <li>5. Jain D K, Project Planning and Appraisal in Planned Economy in India.</li> <li>6. Maljotra D D Management of Urban Development.</li> <li>7. Mohanty , P.K., Cities and Public Policy – An Urban Agenda for India</li> <li>8. Mundanthura Balakrishnan – Environmental Problems and Prospects in India – Oxford &amp; IBH.</li> <li>9. Oberman J, Planning and Managing the Economy of the City.</li> <li>10. Panandiker, V A P, Development Administration in India.</li> <li>11. Prof. N S Saini, Reading Material on Development Management.</li> <li>12. Rao P.K (2001), „Sustainable Development“, Blackwell Publishers, Massachusetts, USA.</li> <li>13. Rao P.S.N. et.al., Municipal Finance in India – Role of 12th Finance Commission</li> </ol>			

	14. Sharma K S R N, Financing Urban Development in India. 15. TCPO: Perspectives on Management of Urban Development – Financing Urban Services.
--	--

<b>COURSE PLAN</b>		
<b>Module</b>	<b>Contents</b>	<b>Internal/ Sem Exam Marks</b>
<b>I</b>	Development management concepts, definition, characteristics, objectives, scope and its relevance to the planning sector Basic elements of management planning, national goals and management strategies for Urban planning projects. Development goals and processes, effect of political – economic system on development management. Key issues in development management of urban/rural settlements, task force, committees and recommendations on development management.	<b>10%</b>
<b>II</b>	Development administration: Municipal administration system, rural administration system, urban development authorities, urban management agencies etc. Development administration in India, national, state and local level organisations, role of housing boards, development authorities, improvement trusts and boards, cooperatives, agencies, private sector, NGO"s etc in housing / development management.	<b>15%</b>
<b>FIRST INTERNAL TEST</b>		
<b>III</b>	Development strategies: land management techniques for urban planning, housing and infrastructure development. Organizational techniques for development management. Management, monitoring and evaluation techniques for development projects, participatory management processes, managing joint ventures, Practice of PPP in Urban Infrastructure projects, post occupancy management of housing and other development projects. Alternative development management strategies: persuasive strategies, non-persuasive strategies, measures of inducements and promotion of development etc.	<b>15%</b>
<b>IV</b>	Public finance: Government structure under which public financing works - National financial Commission in India. Role of State finance Commissions. Public finance evaluation tools – Fiscal Impact Analysis. Cost-benefit Analysis. Traditional and innovative methods of public finance including property tax, User fee, Impact fee, Tax increment financing, Use of special districts. Estimating infrastructure needs.	<b>20%</b>

<b>SECOND INTERNAL TEST</b>		
<b>V</b>	<p>Development financing: resource mobilisation and intergovernmental fiscal relations, state grants and shared taxes of local bodies, municipal finance, property tax, institutional approaches, capital investments and other new initiatives for financing development.</p> <p>Using land as a resource to finance urban development projects. Development financing tools – development improvement financing, value capture financing etc. Innovative methods and best practices in India and abroad.</p> <p>Role of good governance in development management, Best practices.</p>	<b>25%</b>
<b>VI</b>	<p>Development finance and local bodies: Powers and functional responsibilities of ULBs, Constitutional amendments on local functions and finances.</p> <p>Budgeting process, Link between budgeting and planning. Expenditure and revenue. Existing state of Municipal finance. Municipal financial resource mobilisation – status, issues and concerns. New and innovative fiscal tools, best practices in financial resource mobilisation at local level.</p>	<b>15%</b>
<b>END SEMESTER EXAM</b>		



COURSE CODE	COURSE NAME	L-T-S-D	CREDITS	YEAR OF INTRODUCTION
22MPS301	Planning Studio III	0-0-12	6	2022
Course Objectives	<ul style="list-style-type: none"> <li>To train in the preparation of Development Plan conceived within the framework of the approved perspective plan of a medium/large town</li> </ul>			
Syllabus	Prepare Plan for a medium/large urban settlement such as Development Plan / Master Plan / Structure Plan			
Expected Outcome	<ul style="list-style-type: none"> <li>The students will be able to analyse components such as physical characteristics, natural resources, demographic characteristics, economic base, employment, shelter, transportation, social and infrastructure facilities, finance, institutional set-up, regional interdependencies etc,</li> </ul>			
Reference Books	<ol style="list-style-type: none"> <li>1. Aidan Southall (1998) The City in Time and Space Cambridge University Press</li> <li>2. Anastassios Perdicoulis (2011) Building Competences for Spatial Planners: Methods and Techniques for Performing Tasks with Efficiency, Taylor &amp; Francis</li> <li>3. Ernest R. Alexander (1992), Approaches to Planning: Introducing Current Planning Theories, Concepts and Issues. Philadelphia: Gordon and Breach Science Publishers</li> <li>4. James A. LaGro, Jr. (2013) Site Analysis: Informing Context-Sensitive and Sustainable Site Planning and Design, John Wiley &amp; Sons</li> <li>5. Jane Jacobs (1989) The Death and Life of Great American Cities Knopf Doubleday Publishing Group</li> <li>6. Peter Hall and Mark Tewdwr-Jones (2010) Urban &amp; Regional Planning</li> <li>7. R. Ramachandran (1991), Urbanization and urban systems in India, Oxford University Press</li> <li>8. Urban and Regional Development Plans Formulation &amp; Implementation Guidelines (2014) Ministry of Urban Affairs &amp; Employment, Govt. of India, New Delhi</li> </ol>			

COURSE PLAN		
Module	Contents	Internal/ Sem Exam Marks
I	<b>Major Project I: Development Plan for a medium/large urban settlement</b> Prepare Plan for a medium/large urban settlement such as Development Plan / Master Plan / Structure Plan. The components such as physical characteristics, natural resources, demographic characteristics, economic base, employment, shelter, transportation, social and infrastructure facilities, finance, institutional set-up etc. are to be learned. Depending on the selection criteria an urban settlement would be selected and the information regarding the components stated above would be collected both from the primary and secondary sources and analyzed. A report / maps / charts are the media through which the study is expected to be presented.	

<p><b>II</b></p>	<p><b>Minor Project II: Appraisal of City/Town</b></p> <p>The main purpose is to make the students appreciate the locational attributes of land parcels for future development in a city. Due to the size of the area, this exercise is done in groups of students being assigned to a particular area. The following planning issues at area level should be identified:</p> <ol style="list-style-type: none"> <li>1. Review of the Master Plan / Zonal / Area plan in relation to the selected areas.</li> <li>2. Appreciation / Analysis of ward level data.</li> <li>3. Perception of areas in terms of legal / illegal / authorized / unauthorized, Slums, Urban Aesthetics.</li> <li>4. Social Categorizations of people - Type of population living, people's perception about area and its planning problems.</li> <li>5. General land tenure of the area and land value for different uses.</li> <li>6. Major types of transport, type of roads, hierarchy of roads, type of transport modes used.</li> <li>7. Amenities: Location of Social and Physical infrastructure and their problems as perceived by local population. Look for specific infrastructure such as Water supply, drainage (water logging areas), waste collection and disposal system, sanitation, etc.</li> <li>8. Environmental Issues: Open Spaces – Availability and extent of open space to built-up area, garbage disposal, encroachment (through photographic evidences and sketches).</li> </ol> <p>Locating the study area in the zone, city and regional context with respect to all the above aspects.</p>	<p><b>200</b></p>
<p><b>END SEMESTER JURY EXAM (100 Marks)</b></p>		

COURSE CODE	COURSE NAME	L-T-S-D	CREDITS	YEAR OF INTRODUCTION
22MPS302	DISSERTATION	0-3-0-0	3	2022
<b>Course Objectives</b>	<ul style="list-style-type: none"> <li>To undertake research into any aspect of Planning</li> <li>To widen and enrich the literature pertaining to the topic of research</li> <li>To present the research findings before experts (academicians and/or professionals) in the chosen field.</li> <li>To prepare a technical report on the research undertaken</li> </ul>			
<b>Syllabus</b>	It involves research into any Planning related issues or prospects leading to planning or design proposals/ guidelines/ policies, etc. It is a research study which must be supported by relevant literature at all stages of the study. Primary study may be conducted as required.			
<b>Expected Outcome</b>	<p>The students will be able to</p> <ol style="list-style-type: none"> <li>Identify topics where there is a gap in research in relevant field of study</li> <li>Conduct literature search to further understanding of the topic of study, develop suitable research designs and applying it in the research.</li> <li>Disseminate the findings of the research in professionally acceptable standards</li> </ol>			

COURSE PLAN		
Module	Contents	Internal/ Sem Exam Marks
<b>I</b>	The submission for first internal review should have the following: Synopsis which includes a working title, background to the study, need for the study aim and objectives, methodology, scope and limitations, preliminary literature studies, and brief introduction about the study area. The study is to be presented as sheets with all necessary data including maps, statistics, photos etc. An A4 size draft report should be submitted with minimum 20 pages.	<b>20</b>
<b>FIRST INTERNAL REVIEW (20 marks)</b>		
<b>II</b>	The submission for second internal review should have the following: All previous sheets/slides with improvement, all secondary data about the study area including maps, statistics & photographs, results from primary studies & its analysis. The study is to be presented as sheets with all necessary maps, statistics, photos etc .An A4 size draft report should be submitted with minimum 40 pages.	<b>30</b>
<b>SECOND INTERNAL REVIEW (30 marks)</b>		
	The submission for third internal review should have the following: All previous sheets/slides with improvement, Data Analysis /Findings/Results/,	

<b>III</b>	Inferences, Strategies/guidelines/proposals, Conclusion. The study is to be presented as sheets with all necessary maps, statistics, photos etc .An A4 size draft report should be submitted with minimum 60 pages.	<b>50</b>
<b>THIRD INTERNAL REVIEW (50 marks)</b>		
<b>IV</b>	The final end semester review will be conducted by an Evaluation committee. The students should submit 3 copies of the final dissertation report before the final review. The study is to be presented as A1 sheets (max. 40 no's) with all necessary maps, statistics, photos etc. The students may also present models/ short videos/ power point presentations about the project.	<b>100</b>
<b>END SEMESTER REVIEW (100 marks)</b>		

<b>COURSE CODE</b>	<b>COURSE NAME</b>	<b>L-T-S-D</b>	<b>CREDITS</b>	<b>YEAR OF INTRODUCTION</b>
<b>22MPS303</b>	<b>INTERNSHIP</b>		<b>2</b>	<b>2022</b>
<b>Course Objectives</b>	At the end of the second semester the students are required to undergo an internship for four weeks in an organization (public, private or NGO) that specializes in the concerned stream. The objective is to acquaint the student with real time practices in Urban Design/ Planning /Housing related projects under competent professional guidance.			
<b>Syllabus</b>	<p>The students are encouraged to get hands-on training in Urban Design/ Planning/ Housing techniques employed by Urban Designers/ planning boards/ Housing boards and practicing planners. Students must be engaged in relevant and productive work in the stream of specialization.</p> <p>The work must ideally be part of a live/active-UD/ planning/ housing project, and may involve data collection, data analysis and visualization, field surveys and map preparation exercises, design stage, participation in stakeholder meetings and Focus Group Discussions, as well as report preparation. The students should ensure that the organization in which training is undertaken is capable of providing opportunity to undertake work of such nature. Further, the student must be able to clearly identify his/her contribution towards the planning exercise and be able to present the same in the form of a report/ presentation as deemed fit by the internal committee. Work of clerical nature shall not qualify as fulfilling internship requirements.</p> <p>A training certificate from the concerned organization, listing the nature of work undertaken by the student, is to be produced during the evaluation by internal committee. At the end of the training the students will submit a report, which will be evaluated by an internal committee (for 100 marks).</p>			
<b>Expected Outcome</b>	<p>Students will be able to</p> <ol style="list-style-type: none"> <li>1. Gain an understanding of the institutional mechanism/ organizational setup involved in housing/planning/urban design projects.</li> <li>2. Gain a practical understanding of the procedure involved in the same.</li> <li>3. Apply the skills acquired over the previous semesters.</li> </ol>			

# **ELECTIVES II**

COURSE CODE	COURSE NAME	L-T-S	CREDITS	YEAR OF INTRODUCTION
22MPPE301.1	Village Planning and Rural Development	2-0-0	2	2022
Course Objectives	<ul style="list-style-type: none"> <li>To understand rural society within the context of rural development and change In the post-independence period</li> <li>To enable planning for overall development of the social institutions, human behaviour and economy of the rural population</li> </ul>			
Syllabus	Introduction to rural development and planning,, national planning and rural development, rural settlements, planning for rural development, land reforms, poverty and anti-poverty measures			
Expected Outcome	The Students will be able to <ul style="list-style-type: none"> <li>i. Understand the relevance of village planning and rural development</li> <li>ii. Understand the context of village planning and rural development</li> <li>iii. Understand the importance of land reforms and different anti-poverty measures.</li> </ul>			
Reference Books	<b>References:</b> <ol style="list-style-type: none"> <li>1. B.S.Khanna, „Rural Development in South Asia“, Allied Publishers, New Delhi, 1991.</li> <li>2. H.A.Hye. „Integrated Approach to Rural Development“, Sterling Publishers, New Delhi, 1986.</li> <li>3. Keith Hoggard and Henry Builer, „Rural Development – A Geographical Perspective“. Croome Helm, London, 1987.</li> <li>4. Misra. R.P.(ed.), „Rural Development, National Policies and Experiences“, UNCRD, Nagoya,Japan, 1981.</li> </ol>			

COURSE PLAN			
Module	Contents	Hours	Internal/ Sem Exam Marks
I	<b>Introduction</b> Relevance of rural area for urban development, mutual dependence between urban and rural areas, between industry and agriculture. Characteristics of symbiotic development and the pattern of urban development in India in this context. Levels of living of rural people-trends of development differentials in level of development between various regions within India and different socio economic groups.	6	20%

<b>II</b>	<b>National Planning and rural development</b> National planning and rural development. Concepts of planning for rural settlement. Regional development and urban rural partnership, related inputs and infrastructure development. Agricultural development, allied activities and patterns of rural linkages, communication and marketing facilities, community development, institutions and delivery of social services.	<b>6</b>	<b>20%</b>
<b>FIRST INTERNAL TEST</b>			
<b>III</b>	<b>Rural settlements</b> Rural settlements, typology, structure, spatial significance in metro-regions and interior areas. Planning principles of villages and community norms. Rural reconstruction. Basic needs and rural sanitation, water supply, hygiene and drainage. Technology transfer and options	<b>3</b>	<b>15%</b>
<b>IV</b>	<b>Planning for Rural development</b> Area, district and block level development planning and implementation, public participation in rural development process, role of voluntary Organisation. Rural energy issues, renewable and alternative sources of energy. Ecological and environmental considerations in rural development and village planning	<b>6</b>	<b>15%</b>
<b>SECOND INTERNAL TEST</b>			
<b>V</b>	<b>Land Reforms in India</b> Land Reforms in India: Need and Scope of Reforms, Tenancy Reforms., Rural Credit. Community Development and Panchayati Raj, Area Development and Target Group Based Development.	<b>3</b>	<b>10%</b>
<b>VI</b>	<b>Poverty and anti-poverty measures</b> Green Revolution, Rural Poverty and Poverty Studies., Anti Poverty Programmes and Their Performances. Non-government Experimentation of Rural Development, Milk Co-operative in India	<b>4</b>	<b>20%</b>
<b>END SEMESTER EXAM</b>			



COURSE CODE	COURSE NAME	L-T-S-D	CREDITS	YEAR OF INTRODUCTION
22MPPE301.2	Environmental Planning and Development	2-0-0-0	2	2022
Course Objectives	<ul style="list-style-type: none"> <li>To introduce the discipline of planning and planning history</li> <li>To expose planning theory and practice</li> <li>To make aware of the institutional mechanism involved in planning and implementation process</li> </ul>			
Syllabus	Introduction to environmental planning, Environmental zones and its development, Environmental resource management, Role of organisations in environmental protection, Environmental Impact Assessment, Emerging new environmental concepts			
Expected Outcome	<p>The Students will be able to</p> <ol style="list-style-type: none"> <li>Understand the various factors of development and its effect on the environment.</li> <li>The students are exposed to different facets of environmental planning, development control, impact assessment methods, eco cities development, environmental improvement etc</li> <li>The students are enabled to incorporate environmental consideration in spatial planning backed by theoretical understanding.</li> </ol>			
Reference Books	<ol style="list-style-type: none"> <li>Asesh Kumar Maitra, „Urban Environment in Crisis“, New Age International (P) Limited, Publishers, New Delhi</li> <li>Avijit Gupta and Mukul G. Asher, „Environment and the Developing World“, John Wiley &amp; Sons, New York, USA</li> <li>Larry W. Canter, „Environmental Impact Assessment“, McGrawHill, Inc., New York, 1996</li> <li>Randolph J „Environmmetal Landuse Planning and Management“ Covelo CA, Island Press, 2012</li> <li>Rao P.K (2001), „Sustainable Development“, Blackwell Publishers, Massachusetts, USA.</li> </ol>			

COURSE PLAN		
Module	Contents	Internal/ Sem Exam Marks
I	<b>Introduction to Environmental planning</b> Concept of environmental planning, Settlement structure and form in response to environmental challenges, Urban ecosystem	10%
II	<b>Environmental zones and their development</b> Environmental zones, (Hill, Coastal, Arid) Characteristics, resources, settlement pattern, problems and potentials, regulating mechanisms for development	15%

<b>FIRST INTERNAL TEST</b>		
<b>III</b>	<b>Environmental resource management</b> Management of land, water bodies and water channels, forests and wildlife, minerals, Management of urban areas, Management of sensitive areas, Management of sensitive areas – hills, coast, arid wetlands etc; Management of watersheds	<b>25%</b>
<b>IV</b>	<b>Role of organisations in environmental protection</b> Role of government and non government organisations in environmental protection, Environmental management of Indian metropolis	<b>15%</b>
<b>SECOND INTERNAL TEST</b>		
<b>V</b>	<b>Environmental Impact Assessment</b> Role of EIA in the planning and decision making process, Methods of EIA; advantages and limitations, Assessment of impacts on resources – air, water, flora and fauna, Assessment of impacts on land use, Assessment of social and health impacts, Public participation in EIA	<b>20%</b>
<b>VI</b>	<b>Emerging environmental concepts</b> Ecological footprints, Ecotourism, Environmental disaster, Environmental information systems and models, Environmental security, urban ecology, energy planning in urban settlements etc	<b>15%</b>
<b>END SEMESTER EXAM</b>		

COURSE CODE	COURSE NAME	L-T-S-D	CREDITS	YEAR OF INTRODUCTION
22MPPE301.3	Geo-informatics	2-0-0	2	2022
<b>Course Objectives</b>	<ul style="list-style-type: none"> <li>To introduce the discipline of geo-informatics</li> <li>To expose theory and practice of geo-informatics</li> <li>To make aware of the steps involved in spatial analysis and implementation process</li> </ul>			
<b>Syllabus</b>	Introduction to geo-informatics, Overview of photogrammetry, GPS, GIS and RS, Urban planning and mapping, Basics of spatial analysis			
<b>Expected Outcome</b>	<p>The Students will be able to</p> <ol style="list-style-type: none"> <li>Understand about geo-informatics and its applications in planning of cities</li> <li>Appreciate of the role of historical developments in the field of geo-informatics</li> <li>Develop capacity to understand how studies can be done using GIS</li> </ol>			
<b>Reference Books</b>	<ol style="list-style-type: none"> <li>G.S Srivastava – „An Introduction to Geo-informatics“, McGraw Hill Education (India) Pvt. Ltd, 2014.</li> <li>Goodchild M.F. and Kemp K – „Developing a curriculum in GIS: The NCGIA Core Curriculum Project“, University of California, Santa, Barbara 1990.</li> <li>Heywood I, et al, An Introduction to Geographical Information System, Longman, New Delhi, 1998.</li> <li>Ian Haywood Cornelius and Steve Carver – An introduction to GIS, Longman, New York, 2000.</li> <li>Lo CP &amp; Young AKW, Concepts &amp; Techniques of Geographical Information System, Prentice Hall of India, New Delhi – 2003.</li> <li>Misra HC – A Handbook on GIS, GIS India, Hyderabad, 1995.</li> <li>Smith T.R. and Piquet, GIS, London Press, London, 1985.</li> <li>Taylor DRF – GIS: The Micro computer and Modern Cartography, Pergamon Press, Oxford, 1991.</li> </ol>			

COURSE PLAN			
Module	Contents	Hours	Internal / Sem Exam Marks
I	<b>Introduction to Geo-informatics</b> Scope and Importance of Geo-informatics; Geo-informatics technologies and the technologies used in Geographical Studies; Photogrammetry, Remote sensing, Global Positioning System, Geographic Information System; Applications in urban planning	5	15%

<b>II</b>	<b>Geo-informatics- Photogrammetry and GPS</b> Photogrammetry- History, definition, classification and basic principles Global Positioning System- Differential GPS, Concepts of GPS- History, types, navigation systems and applications	4	<b>15%</b>
<b>FIRST INTERNAL TEST</b>			
<b>III</b>	<b>Approaches to the study of G.I.S.</b> History of GIS; G.I.S. Terminology; Coordinate systems; G.I.S. as a Special Field of Academic study- G.I.S. as a Spatial Data Institution and its Social Implications; Applications in transportation planning and environmental management	3	<b>15%</b>
<b>IV</b>	<b>Urban Planning and Mapping</b> Importance and types of plan, urban and regional planning, LU/LC mapping, GIS data modeling for urban infrastructure, urban site selection for urban development; Urban mapping physical structure and composition of urban areas, urbanization process, growth trend, problems of urbanization, urban sprawl and associated problems	6	<b>20%</b>
<b>SECOND INTERNAL TEST</b>			
<b>V</b>	<b>Applications of RS and GIS in Urban Planning</b> RS- Concepts and principles, LU/LC analysis- Change detection in LU/LC, Site suitability analysis for residential, commercial, recreational, religious, waste material disposal sites for urban and regional planning. Creation of databases of cities for municipal corporations, Urban population identification, Urban slums- Trend, pattern and management	6	<b>20%</b>
<b>VI</b>	<b>Basics of Spatial Analysis</b> Significance of spatial analysis; Overview tools for analysis Spatial analysis- Vector based: Overlay operations, multilayer operations Spatial analysis- Raster based: Map algebra, grid based operations, optimal path and proximity search Network analysis- Concepts, types of analysis	6	<b>15%</b>
<b>END SEMESTER EXAM</b>			

<b>COURSE CODE</b>	<b>COURSE NAME</b>	<b>L-T-P</b>	<b>CREDITS</b>	<b>YEAR OF INTRODUCTION</b>
<b>22MPPE301.4</b>	<b>Urban Conservation</b>	<b>2-0-0</b>	<b>2</b>	<b>2022</b>
<b>Course Objectives</b>	<ul style="list-style-type: none"> <li>● To introduce the idea of Urban Conservation as an effective planning strategy and as means of addressing issues of cultural identity</li> <li>● To introduce the issues and practices of urban conservation at various levels and scales.</li> <li>● To give an overview of the Urban Conservation scenario in India, the legislations and policies involved.</li> </ul>			
<b>Syllabus</b>	Introduction to the topic - The principles and ethics involved in Urban Conservation - History and evolution of conservation philosophies - Conservation in Indian context - Historic urban planning in India, the issues faced by historic settlements in modern context - Conservation Practice, Assessment, Management - Conservation as an urban planning tool - National and International agencies involved, Charters, Central and State legislations and policies.			
<b>Expected Outcome</b>	The students will be able to i. Develop an understanding of the Urban Conservation techniques as an effective planning strategy. ii. Develop skill to undertake and participate in studies on Urban Conservation.			
<b>Reference Books</b>	1. A.G. K. Menon ed. Conservation of Immovable Sites, INTACH Publication, New Delhi. 2. Glendinning, Miles. (2013), The Conservation Movement: a History of Architectural Preservation, ROUTLEDGE. 3. Feilden, Bernard M. (1982). Conservation of Historic buildings. Butterworth Co. London. 4. Hollis, Malcolm. (2000). Surveying Buildings. RICS Business Services Limite, UK. 5. Oxley, R. (2003). Survey and Repair of Traditional Buildings. Donhead Publishers, Dorset. UK.			

<b>COURSE PLAN</b>			
<b>Module</b>	<b>Contents</b>	<b>Hours</b>	<b>Internal/ Sem Exam Marks</b>
<b>I</b>	Understanding Heritage – Built and Cultural Heritage – Heritage conservation – need, debate and purpose – Conservation and Preservation, ethics and principles involved – Distinction between Architectural and Urban Conservation – History of Architectural Conservation in International and Indian context.	4	<b>15%</b>

<b>II</b>	History of emergence, formulation and development of Preservation and Conservation philosophies – Contributions of John Ruskin, William Morris, Violet-le-Duc, formation of SPAB – attitudes and debates in the field – Conservation in India – Museum conservation – Monument conservation and the role of Archaeological Survey of India – NGOs involved.	6	<b>15%</b>
<b>FIRST INTERNAL TEST</b>			
<b>III</b>	Overview of urban history in Indian context – Understanding the character and issues of historic cities – Selected case studies of various urban historic settlements like temple towns, administrative capitals, etc. – Historic districts and heritage precincts in modern urban context.	4	<b>15%</b>
<b>IV</b>	Conservation practice – Listing of monuments, documentation of historic structures – Assessing architectural character – Historic report – Guidelines for preservation, rehabilitation and adaptive reuse of historic structures – Heritage site management.	6	<b>15%</b>
<b>SECOND INTERNAL TEST</b>			
<b>V</b>	Norms for conservation of heritage buildings and sites as part of Development Regulations - Conservation as an urban planning tool – financial incentives and planning tools such as TDR (Transferable Development Right) – Urban conservation and heritage tourism, case studies such as Pondicherry French town and Mattancherry.	4	<b>20%</b>
<b>VI</b>	International (ICCROM, UNESCO etc.) and National agencies (INTACH, ASI, Urban Arts Commission etc.) involved in Urban Conservation – Critical analysis of International Charters pertaining to urban heritage and its conservation – Central and State government policies and legislations and its impact.	6	<b>20%</b>
<b>END SEMESTER EXAM</b>			

# **ELECTIVES III**

COURSE CODE	COURSE NAME	L-T-S	CREDITS	YEAR OF INTRODUCTION
22MPPE302.1	Urban Design	2-0-0	2	2022
<b>Course Objectives</b>	<ul style="list-style-type: none"> <li>● To introduce the application of basic urban design</li> <li>● To give practice in the basic skills of urban design analysis</li> <li>● To give appreciation of both the process and product of the design of the built environment</li> <li>● To emphasize the need for planners to learn design, and designers to learn planning</li> <li>● To provide practice in visual, graphic and spatial literacy</li> </ul>			
<b>Syllabus</b>	Architecture – Urban planning and urban design relationships – Urban land use – Population density and transportation and their relationship to urban built form and environment – Urban Image and Spaces –Elements of townscape – Urban design techniques – techniques of urban design – Inventories – visual survey Site analysis			
<b>Expected Outcome</b>	This course will explore the fundamentals of urban design as they relate to all scales of the built environment - including regions, cities, districts, neighborhoods, blocks and parcels - and will reinforce the basics of sound community planning. The Students will learn how to analyze and measure design, how to apply its principles, how to understand the design process of creating new areas and the fundamentals of retrofitting existing ones. Students will answer the question of how a planner can impact the design of a city positively without designing buildings, and what tools are available to implement urban design plans and policies.			
<b>Reference Books</b>	<ol style="list-style-type: none"> <li>1. Christopher Alexander et.al., A Pattern Language : Towns, Buildings, Construction, Oxford University Press, USA, 1977</li> <li>2. Geoffrey Braodbent, Emerging Concepts in Urban Space Design, Taylor &amp; Francis, 1995.</li> <li>3. Gordon Cullen, The Concise Townscape, Architectural Press, 1971</li> <li>4. Krier Rob, “Urban Space” academy Edition, London, 1967.</li> <li>5. Larice, M, and Macdonald, E. (Ed.), The Urban Design Reader, Routledge, 2012.</li> <li>6. Lynch Kevin, “The Image of the City”, MIT Press, Cambridge Man 1960.</li> <li>7. Moltoch J.L., “Introduction to Landscape Design”, VNR Publishing C.,New York, 1991.</li> <li>8. Paul D. Spereigen, Urban Design the Architecture of Towns and Cities, McGraw Hill Inc., 1965</li> <li>9. Simon Eisner, Arthur Gallion, Stanley Eisner, The Urban Pattern, 6e, Wiley, 1993</li> <li>10. Simonds J.O., Landscape Architecture – The Shaping of Man’s Natural Environment”, McGraw Hill Books Co., New York, 1916.</li> </ol>			



<b>COURSE PLAN</b>		
<b>Module</b>	<b>Contents</b>	<b>Internal/ Sem Exam Marks</b>
<b>I</b>	Architecture – Urban planning and urban design relationships – Urban land use – Population density	<b>15%</b>
<b>II</b>	Transportation and their relationship to urban built form and environment – Consequences of chaotic and disordered development in urban areas and its impact on urban functions and aesthetics.	<b>15%</b>
<b>FIRST INTERNAL TEST</b>		
<b>III</b>	Urban Image and Spaces – Image of the city and its elements by Kevin Lynch - Perception of urban environment – Understanding the organisation and articulation of spaces – The intended, informal and incidental activities taking place in the urban spaces	<b>15%</b>
<b>IV</b>	Elements of townscape – Urban design techniques – Hierarchy of spaces – Sequence and stimulus space – Scale time formation and dynamics – Order, forms, mass and space – Symbiotic relationships function and activity	<b>15%</b>
<b>SECOND INTERNAL TEST</b>		
<b>V</b>	Identity, techniques of urban design – Inventories – visual survey – techniques of visual recording - Site analysis – space and regulation of urban activities	<b>20%</b>
<b>VI</b>	Urban renewal – The scope, need and the procedure- tools are available to implement urban design plans and policies.	<b>20%</b>
<b>END SEMESTER EXAM</b>		

COURSE CODE	COURSE NAME	L-T-S-D	CREDITS	YEAR OF INTRODUCTION
22MPPE302.2	LANDSCAPE PLANNING	2-0-0-0	2	2022
<b>Course Objectives</b>	<ul style="list-style-type: none"> <li>To understand the role of biodiversity and biodiversity values in planning of landscape.</li> <li>To evolve an understanding of landscape planning in addressing the urban and rural context.</li> <li>To expose various best practices practiced in the field of landscape planning.</li> </ul>			
<b>Syllabus</b>	An overview of natural processes and landscape ecology, Management concepts related to urban ecology, Biodiversity Planning, Elements of Landscape Planning, landscape planning in Urban and Rural context, landscape planning as a component of regional development proposals			
<b>Expected Outcome</b>	<p>The students will be able to</p> <ol style="list-style-type: none"> <li>Appreciate the significance of landscape ecology in management of urban open spaces</li> <li>Understand the significance of biodiversity values and develops a holistic approach in the planning of towns and cities.</li> <li>Application of the landscape planning will enable to address the environmental issues.</li> </ol>			
<b>Reference Books</b>	<ol style="list-style-type: none"> <li>Jack Ahern, Biodiversity Planning and Design: Sustainable Practices.2006 Jellicoe, G. &amp; Jellicoe, S. The Landscape of Man, London: Thames and Hudson. 1991.</li> <li>Lyall S. Designing the New Landscape. UK: Thames &amp; Hudson. 1998.</li> <li>Lyle Tillman John, Design for Human Ecosystems: Landscape, Land Use, and Natural Resources: Island Press.1985</li> <li>Lynch , K. Image of the city: The MIT Press. 1962</li> <li>Lynch, K. Site Planning, Cambridge: The MIT Press. 1962</li> <li>McHarg I. Design with Nature. NY: John Wiley &amp; Co. 1978.</li> <li>Motloch, J. L. Introduction to Landscape Design, US: John Wiley and sons., 2001</li> <li>Simonds, J.O. Landscape Architecture: The Shaping of Man’s Natural Environment, NY: McGraw Hill Book Co. Inc. 1961.</li> </ol>			

COURSE PLAN			
Module	Contents	Hours	Internal / Sem Exam Marks
I	Landscape as an outcome of natural processes; principles and techniques of design with landform, water and vegetation; the role of surface materials, outdoor fittings and structures.	4	10%

<b>II</b>	Biodiversity- species, concepts and inventory, use of bio resources, valuing biodiversity, national and International policies and instruments, biodiversity planning.	3	<b>10%</b>
<b>FIRST INTERNAL TEST</b>			
<b>III</b>	Introduction to landscape ecology, Management Concepts related to urban ecology and urban habitats such as urban forests, river banks, regional parks and agricultural green belts. The management of open space in urban areas: ecological, economic and administrative issues.	6	<b>20%</b>
<b>IV</b>	Urban Landscape - Characteristics and components of open space patterns in towns and cities (traditional and contemporary) basic types: streets, squares, plazas, gardens, Ghats and maidans, public parks at district, local and neighborhood levels; park systems	4	<b>20%</b>
<b>SECOND INTERNAL TEST</b>			
<b>V</b>	Elements of Landscape Planning The rural landscape; characteristics, components and change related to agriculture, forestry and development. Landscape Assessment techniques; Basic quantitative methods of collecting, analyzing, projecting and presenting data for Landscape Planning.	6	<b>20%</b>
<b>VI</b>	Landscape planning as a component of regional development proposals for industrial location (manufacturing and extractive); environmental conservation, tourism, etc.; landscape planning in the context of urban extensions and new towns	6	<b>20%</b>
<b>END SEMESTER EXAM</b>			

COURSE CODE	COURSE NAME	L-T-S-D	CREDITS	YEAR OF INTRODUCTION
22MPPE302.3	ENERGY, CLIMATE CHANGE AND URBAN DEVELOPMENT	1-1-0-0	2	2022
Course Objectives	<ul style="list-style-type: none"> <li>To study the determinants of Energy supply and demand</li> <li>To study relationship of plans, Policies and Strategies with reference to energy planning</li> <li>To study various best practices for urban development with consideration for climate change</li> </ul>			
Syllabus	Overview of Climate change and urban development, Energy and Urbanisation, Climate change and Urbanisation, Emerging Concepts			
Expected Outcome	<p>The students will be able to</p> <ol style="list-style-type: none"> <li>Appreciate the determinants of energy supply and demand</li> <li>Develop capacity for energy optimisation.</li> <li>Approach energy planning as a potential for urban development and thus integrate it to the planning process.</li> <li>Appreciate and apply the new technologies related to urban development mitigating and adapting to the climate change</li> </ol>			
Reference Books	<ol style="list-style-type: none"> <li>Andres, D., Speck, J., &amp; Mike, L. (2009). The Smart Growth Manual. McGraw Hill.</li> <li>Bicknell, J. (2009). Adapting cities to climate change: Understanding and addressing the development change. London : Earthscan.</li> <li>Cities and Climate Change, OECD Publishing OECD (2010)</li> <li>Global Green Standards: ISO 14000 and Sustainable Development, International Institute for Sustainable Development</li> <li>Harriet Bulkeley (2013), Cities and Climate Change, (Routledge Critical Introductions to Urbanism and the City), Routledge, New York.</li> <li>Jenks, M., &amp; Burgess, R. (2000). Compact cities: Sustainable urban forms for developing countries. London: Spon Press.</li> <li>Lehmann S (2015), Low Carbon Cities- Transforming Urban Systems, Routledge Publications, New York.</li> <li>Owen, D. (2009). Green Metropolis: Why living smaller, living closer, and driving less are the keys to sustainability.</li> <li>S.K.Dash. (2007). Climate Chnge: An Indian perspective . New Delhi: Cambridge University Press.</li> <li>The Economics of Low Carbon Cities: A Mini-Stern Review for the Leeds City Region, Andy Gouldson et al., The Centre for Low Carbon Futures Partnership, University of Hull, University Of Leeds</li> </ol>			

COURSE PLAN			
Module	Contents	Hours	Internal/ Sem Exam Marks
I	<b>Introduction</b> Energy, Climate change and urban development	4	10%
II	<b>Climate change and Urbanisation</b> Basics of Climate Change: Greenhouse gases, Anthropogenic causes, Carbon cycle, Global warming; Urban Heat Islands; Impacts of Climate Change: Climate as Forcing Variable, Location attributes, sensitivity and vulnerability of different Sectors, extreme events and their effects. Mitigation for climate change in urban areas (Case studies).	7	20%
FIRST INTERNAL TEST			
III	<b>Energy and Urbanisation</b> Sources of energy; Energy planning and management; Energy efficient development.	4	15%
IV	<b>Energy Generation and Consumption</b> Energy supply and demand, Energy consumption in cities, determinants of energy demand,	7	20%
SECOND INTERNAL TEST			
V	<b>Plans, Policies and Strategies</b> Related to energy planning, conservation, climate change mitigation and adaptation	4	20%
VI	<b>Emerging Concepts</b> Green GDP; Environmental accounting; Green Budgeting; Carbon Trading; Carbon sequencing; Compact City Concept - Implications of Urban Form, Density, Land Use Pattern, Transportation System, Waste management and Energy Conservation; New urbanism principles, Smart city concept; Policy, programmes, schemes and strategies adopted by Government (Central & State) to achieve sustainability in urban development.	4	15%
END SEMESTER EXAM			

COURSE CODE	COURSE NAME	L-T-S-D	CREDITS	YEAR OF INTRODUCTION
22MPPE302.4	Politics and Planning	1-1-0-0	2	2022
<b>Course Objectives</b>	<ul style="list-style-type: none"> <li>To understand the relation between Politics and Planning</li> <li>To develop a comprehension of the interplay of politics in the planning process</li> <li>To understand the social, economic, and cultural contexts of Politics and Planning and its influence on development/ provision/ financial/ management of resources and other basic infrastructure</li> </ul>			
<b>Syllabus</b>	Interface of politics and planning, Politics related to planning and development			
<b>Expected Outcome</b>	The students will be able to i. Appreciate the relation between politics and planning ii. Develop capacity for resource optimisation. iii. Comprehend the influence of politics in the planning process.			
<b>Reference Books</b>	1. Ghose, Rina (2005). The complexities of Citizen Participation through Collaborative Governance, Space and Polity, 9(1): 61-75 2. Maarten, A.H. (1989). City Politics, Aldershot, Avebury 3. Sarma, KSRN (1979). Financing Urban Development in India, Indian Institute of Public Administration, New Delhi 4. Sharan P. (1984). Government and Politics of India, Metropolitan Book, New Delhi 5. Thompson L. And Tapscott C (Ed) (2010). Citizen and Social movements – Perspectives from the Global South; Zen Books, London 6. Vettivel, Surendra, K. (1993). Participation of Sustainable development: Theory and Practice in Government and NGOs, Vetri Publishers, New Delhi.			

COURSE PLAN			
Module	Contents	Hours	Internal/ Sem Exam Marks
<b>I</b>	<b>Interface between Politics and Planning</b> Social and economic context; State in India – political culture of the Indian state – centre- State- local political economy: 74th Constitution Amendment Act, State Finance Commissions; Emergence of the state in the federal set up	4	10%
<b>II</b>	<b>City and the State</b> State as a manager of resources – property rights, norms and standards – Government market; Government – Regulatory state, Reforming	5	20%

	state and rent seeking state – their spatial implications; Development Planning and the Indian state – Centralisation, powerlessness and decentralisation; Politics of the state and bureaucracy;		
<b>FIRST INTERNAL TEST</b>			
<b>III</b>	<b>Politics related to Planning and development</b> Politics related to land, shelter, urban infrastructure, resources; Regeneration and redevelopment politics; politics of provision, financing and pricing; decision making.	5	<b>20%</b>
<b>IV</b>	<b>Politics and Civil society</b> Politics and political society, emergence of civil society – NGO, CBO and their role in planning, postmodern urbanism, critical urban theory, collective bargaining and collective action, governance and citizen participation	6	<b>20%</b>
<b>SECOND INTERNAL TEST</b>			
<b>V</b>	<b>Spatial politics and policy</b> Spatial politics: spatial politics and competition; Politics of public space; Politics of environment, capacity and social capital; urban policy	4	<b>20%</b>
<b>VI</b>	<b>Political movements</b> Terrorism and surveillance, Politics of radical movements, social movements	6	<b>10%</b>
<b>END SEMESTER EXAM</b>			

# **FOURTH SEMESTER**



<b>COURSE CODE</b>	<b>COURSE NAME</b>	<b>L-T-S-D</b>	<b>CREDITS</b>	<b>YEAR OF INTRODUCTION</b>
<b>22MPS401</b>	<b>PLANNING THESIS</b>	<b>0-0-26</b>	<b>12</b>	<b>2022</b>
<b>Course Objectives</b>	<ul style="list-style-type: none"> <li>● To provide an opportunity for each student to do original and independent study and research on a subject concerning planning.</li> <li>● To explore in depth and develop a subject of his/her own choice, which adds significantly to the body of knowledge existing in the field of planning and which uses the knowledge he/she has acquired from theory and design courses previously taken</li> </ul>			
<b>Syllabus</b>	<p>The topic of the thesis may be comparative, or evaluative and should offer scope to adopt a fresh approach in formulating a concept to developing a methodology effective and useful in the field.</p> <p>Students shall be required to undertake thesis studies in the areas of relevance and concern in the urban and regional development process. The broad areas of study would include any one from the following;</p> <ol style="list-style-type: none"> <li>1. Planning for region, urban renewal and development</li> <li>2. Planning for infrastructural development</li> <li>3. Environment and sustainable development</li> <li>4. Housing &amp; Human settlements</li> <li>5. Tourism planning &amp; development</li> <li>6. Any other emerging areas in the field of urban planning.</li> </ol>			
<b>Expected Outcome</b>	<p>The students will</p> <ol style="list-style-type: none"> <li>i. develop suitable skills to critically analyze existing situations and to propose suitable planning approaches for planned growth and development.</li> <li>ii. be capable of independently undertaking or supervising planning projects.</li> </ol>			

<b>COURSE PLAN</b>		
<b>Module</b>	<b>Contents</b>	<b>Internal/ Sem Exam Marks</b>
<b>I</b>	The submission for first internal review should have the following: Synopsis which includes a working title, background to the study, need for the study aim and objectives, methodology, scope and limitations, preliminary literature studies, and brief introduction about the study area. The study is to be presented as sheets with all necessary data including maps, statistics, photos etc. An A4 size draft report should be submitted with a minimum of 20 pages.	<b>100</b>
<b>FIRST INTERNAL REVIEW (100 marks)</b>		
<b>II</b>	The submission for second internal review should have the following: All previous sheets/slides with improvement, all secondary data about the study area including maps, statistics & photographs, results from primary studies & its analysis. The study is to be presented as sheets with all necessary maps, statistics, photos etc .An A4 size draft report should be submitted with minimum 40 pages.	<b>100</b>
<b>SECOND INTERNAL REVIEW (100 marks)</b>		
<b>III</b>	The submission for third internal review should have the following: All previous sheets/slides with improvement, Data Analysis /Findings/Results/, Inferences, Strategies/guidelines/proposals, Conclusion. The study is to be presented as sheets with all necessary maps, statistics, photos etc .An A4 size draft report should be submitted with a minimum 60 pages.	<b>150</b>
<b>THIRD INTERNAL REVIEW (150 marks)</b>		
<b>IV</b>	The final end semester Viva Voce will be conducted by a Evaluation committee appointed by the University. The students should submit 3 copies of the final thesis report before the final examination. The study is to be presented as A1 sheets (max. 40 no's) with all necessary maps, statistics, photos etc. The students may also present models/ short videos/ powerpoint presentations about the project.	<b>150</b>
<b>END SEMESTER VIVA VOCE (150 marks)</b>		