

PL501	PLANNING HISTORY AND THEORY					
Pre-requisite	Co-requisite	L	T	P	C	Remark
	NIL	2	1	0	3	
Objective	To study Evolution of Cities and History of Planning. To study Theories of City Development.					
Unit-I	Evolution of City Building					
Relevance of the study of evolution of settlements; Hunter, gatherer, farmer and formation of organized society; Cosmological and other influences, origins and growth of cities, effects of cultural influence on physical form; Human settlements as an expression of civilizations; Basic elements of the city; Concepts of space, time, scale of cities						
Unit-II	Planning History					
Town planning in ancient India; Medieval, renaissance, industrial and postindustrial cities; City as a living spatial entity; Concepts of landmark, axis, orientation; City form as a living space; City as a political statement: New Delhi, Chandigarh, Washington D.C. Brasilia etc; Contribution of individuals to city planning: Lewis Mumford, Patrick Geddes, Peter Hall, etc; Dynamics of the growing city, impact of industrialization and urbanization, metropolis and megalopolis						
Unit-III	Definitions and Objectives of Planning					
Definitions of town and country planning; Orthodoxies of planning; Goal formulation, objective, scope, limitations; Sustainability and rationality in planning; Components of sustainable urban and regional development.						
Unit-IV	Theories of City Development					
Theories of city development including Concentric Zone Theory, Sector Theory, Multiple Nuclei Theory and other latest theories; Land use and land value theory of William Alonso; Ebenezer Howard’s Garden City Concept; and Green Belt Concept; City as an organism: a physical, social, economic and political entity; Emerging Concepts: global city, inclusive city, safe city, etc.; City of the future and future of the city; Shadow cities, divided cities.						
Unit-V	Planning Theories					
Models of planning: Advocacy and Pluralism in Planning; Systems approach to planning: rationalistic and incremental approaches, mixed scanning and middle range planning; Equity planning; Political-Economy Model; Types of development plans, plan making process.						
Text Books and References:						
SL.	Name of Authors	Titles of the Book				Edition
1	Hall, P.	Cities of tomorrow: an intellectual history of urban planning and design in the twentieth century,				2001
2	Birch, E.L. and Silver, C.	One Hundred Years of City Planning's Enduring and Evolving Connections, Journal of the American Planning Association, Vol.75, Issue 2,pp.113-122.				2009
3	Sandercock, L.	Making the Invisible Visible: A Multicultural Planning History				1998
4	Brooks, M.P.	Four critical junctures in the history of the urban planning profession: An exercise in hindsight, Journal of the American Planning Association, Vol. 54, Issue 2, 241-248.				1988
5	McLoughlin, J. B.	Urban and Regional Planning. A systems approach,				1969
6	Faludi, A.	A Reader in Planning Theory,				1973
7	Healey, P.	Collaborative Planning: Shaping Places in Fragmented Societies				1997

Text Books and References:

S. No.	Name of Authors	Titles of the Book	Edition
1	Mohinder Singh and L.R. Kadiyali	Crisis in road transport	1989
2	L. R. Kadiyali	Traffic engineering and transportation planning	2007
3	Mukerjee S. and Chakraborty D. (Eds)	Environmental scenario in India	2012
4	Sameer Kochhar, Deepak B. Phatak, H. Krishnamurthy, Gursharan Dhanjal,	Infrastructure and Governance	2008

Text Books and References:

S. No.	Name of Authors	Titles of the Book	Edition
1	Dwyer, D.J.	<i>People and Housing in Third World Cities</i>	1981
2	Beyer Glen H,	<i>Housing: a factual analysis</i>	1958
3	Abrams, Charles	<i>Man 's Struggle for Shelter in an Urbanizing World</i>	1964
4	Payne, Geoffrey	<i>Urban Housing in the Third World</i>	1977
5	Al Nichols, Jason Laros	<i>Inside the Civano Project (Green Source Books): A Case Study of Large-Scale Sustainable Neighborhood Development (Mcgraw-Hill's Green source Series)</i>	2009
6	Douglas Farr	<i>Sustainable Urbanism: Urban Design With Nature</i>	2007
7	Aromar Revi	<i>Shelter in India – Sustainable Development Series</i>	1990
8	International Institute for Energy Conservation	<i>Eco housing Assessment criteria Version II</i>	2009

Module-IV	Site Planning (Individual Assignment)																	
<p>Site planning is a process whereby the optimum utilization of potential of site is considered recognizing the constraints the site has. It uses three-dimensional space of the site and the associated locational advantages, human activities and the regulations that are assigned to a particular site. The site is developed using a set of standards / norms in a given context which varies from location to location. A student is expected to understand the intricacies and interface between various variables such as soil conditions, topography, environmental dimensions, location, spatial standards applicable to the site, etc.</p>																		
Module -V	City Development Plan (Group Assignment)																	
<p>A City is a multi-dimensional, dynamic and a futuristic space. Understanding city involves appreciating this multi direction, and include them in the city making process. A job of physical planner does not merely understand the current conflict in development but to emerge out of this and to come out with a vision for the city. To arrive at this vision, a planner needs to understand the dynamics of various components of the city and how and what level interventions can be made to achieve that vision. A group of students are expected to study a city in terms its present problems and issues and project a futuristic vision in terms of scenario building.</p>																		
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PL507	SOCIO-ECONOMIC PLANNING					
Pre-requisite	Co-requisite	L	T	P	C	Remark
	NIL	2	1	0	3	
Objective	To study Socio-cultural Profile of Indian Society in the context of Urban and Rural Settlements. To study the Economic Growth and Development of Urban and Rural Settlements.					
Unit-I	Nature and Scope of Sociology					
Sociological concepts and methods, man and environment relationships; Socio- cultural profile of Indian society and urban transformation; Tradition and modernity in the context of urban and rural settlements; Issues related to caste, age, sex, gender, health safety, and marginalized groups; Displacement, resettlement and rehabilitation due to compulsory land acquisition						
Unit-II	Community and Settlements					
Social problems of slums and squatters’ communities, urban and rural social transformation and their impact on social life, safety, security; Crimes in urban areas and their spatial planning implications, social structure and spatial planning; Role of socio-cultural aspects on growth patterns of city and neighborhood communities; Social planning and policy, and community participation; Marginalization and concepts of inclusive planning, and gender concerns in planning.						
Unit-III	Settlement Policy					
Settlement Policy: National Commission on Urbanization, Rural Habitat Policy and experiences from developing countries regarding settlement structure, growth and spatial distribution.						
Unit-IV	Elements of Micro and Macro Economics					
Concepts of demand, supply, elasticity and consumer markets; concept of revenue costs; Economies of scale, economic and social costs, production and factor market; Different market structures and price determination; market failures, cost-benefit analysis, public sector pricing; Determinants of national income, consumption, investment, inflation, unemployment, capital budgeting, risk and uncertainty, and long-term investment planning.						
Unit-V	Development Economics and Lessons from Indian Experiences					
This unit would focus on developing a critical reasoning and communication skills through study planning cases including planning permissions, court cases, and attending public meetings etc., application of concepts of previous unit through study of planning practice, documentation of cases.						
Text Books and References:						
No.	Name of Authors	Titles of the Book				Edition
1	N. Jayapalan	Urban Sociology				2002
2	William G. Flanagan	Urban Sociology-images and Structures				2010
3	Mani Monto, L.S. Ganesh & K. Verghese	Sustainability and Human Settlements: Fundamental Issues, Modeling and Simulation				2005
4	Dr. D N Dwivedi	Principles of Economics				2006
5	Karl E. Case	Principles of Economics				2009
6	Jhingan, M	The Economics of Development and Planning				1998

PL508	CITY AND METROPOLITAN PLANNING					
Pre-requisite	Co-requisite	L	T	P	C	Remark
	NIL	2	1	0	3	
Objective	To study City – Region Linkages and problems of Metro and Mega Cities. To study Urban Development Policies and Problems.					
Unit-I	Urban Growth and System of Cities					
Growth of cities scale, complexity and its impact on national development, cities as engines of growth, cities as ecosystems, resources in cities.						
Unit-II	City – Region Linkages					
City, fringe and the periphery - physical and functional linkages, peri-urban development.						
Unit-III	Metro and Mega Cities: Problems and Issues					
Growth trends and processes, characteristics, problems, concepts and concerns of urban sustainability, issues related to diversity and unintended growth, economic, social and environmental sustainability, quality of life, inclusivity and equity, climate change, transit-oriented development, participatory planning. Inner city – issues and problems, approach to development.						
Unit-IV	Human Settlement Planning, Urban Development Policies and Programmes					
Concepts, approaches, strategies and tools; Policies and programmes at various levels, impact on metro and mega city development.						
Unit-V	Case Study and Documentation					
Visit to a City / Metropolitan Planning and Development Agency and submit report.						
Text Books and References:						
S. No.	Name of Authors	Titles of the Book				Edition
1	ITPI	City and Metropolitan Planning and Design				
2	Ramachandran, R	Urbanization and Urban Systems in India				1998
3	Bawa, V. K.	Indian Metropolis: Urbanization, Planning and Management				1987
4	MMRDA	Madras 2011: A New Perspective for Metropolitan Management				1991
5	NCRPB	Regional Plan 2021				2005
6	DDA	Master Plan for Delhi 2021				2010
7	Misra, R.P. & Misra, K.	Million Cities of India Vol. 1&2				1998

PL509	ADVANCE INFRASTRUCTURE PLANNING					
Pre-requisite	Co-requisite	L	T	P	C	Remark
	NIL	2	1	0	3	
Objective	The Role and Significance of Infrastructure in Habitat Planning and in inducing Peoples’ Participation in the Planning Process. To understand the importance of different Sectors and their Mutual Interdependence.					
Unit-I	Water Supply and Sanitation					
Quantity and quality, source of supply, transmission and distribution, treatment methods, design guidelines. Sanitation – concepts, disposal systems, low-cost sanitation options; engineering aspects of sewage disposal; Wastewater – generation, disposal system Storm water drainage – systems						
Unit-II	Solid Waste Disposal and Management					
Basic principles, generation, characteristics, collection, disposal, management						
Unit-III	Fire and Electrification, and Social Infrastructure					
Planning for fire protection, services and space standards, location criteria; Planning for Education, health, civic, cultural infrastructure						
Unit-IV	Traffic and Transportation					
Planning for infrastructure and facilities for transport.						
Unit-V	Case Study and Documentation					
Visit to a Infrastructure Development Agency and submit report.						
Text Books and References:						
S. No.	Name of Authors	Titles of the Book			Edition	
1	Gathe Donald E.; Billings, R. Bruce; Buras, Nathan,	Managing urban water supply			2003	
2	Ghosh, G.K.	Water of India			2000	
3	Yadav, Satish	Water Problems and its Management,			2004	
4	W’Mays Larry	Urban Water Supply Handbook			2002	
5	Butter, David	Urban Drainage			2004	
6	Nathanson, J.A.; John, P.E., Wiley & Sons,N.R. Brisbane	Basic Env. Technology: Water Supply, Waste Disposal & Pollution Control.			1986	
7	Bandela, Tare, D.G.	N.N.; Municipal Management				
8	Holmes, J.R.	Manual on Municipal Solid Waste Management, , The Expert Committee			1984	
		GoI, MoUD, CPNEEO 2000 Managing Solid Waste in Developing Countries				

PL510	REMOTE SENSING & GIS APPLICATION					
Pre-requisite	Co-requisite	L	T	P	C	Remark
	NIL	2	1	0	3	
Objective	To study GIS Applications and principles of remote sensing. To study sources of demographic data and statistical applications					
Unit-I	Remote Sensing					
Why remote sensing, aerial and satellite remote sensing, principles of aerial remote sensing, Aerial photo-interpretation, photogrammetry, stereovision, measurement of heights / depths by relief displacement and parallax displacement. Principles of satellite remote sensing, spatial, spectral, temporal resolutions. Applications in planning, population estimation, identification of squatter / unauthorized areas, sources of pollution, etc., spatial resolution related to level of Planning.						
Unit-II	GIS Mapping					
Coordinate system, Geo-referencing and geo-coding; GIS data processing (Digitization, topology building and metadata creation), Data structures and modeling, GIS analysis (Buffer, proximity and overlay), Decision making through GIS, Information systems (Land Information system, Urban Information system for various activity sectors).						
Unit-III	GIS in Land use Survey					
Digital image classification for land use land cover map preparation. Per pixel classification – statistical, artificial neural network and other machine learning approaches. Object based image classification. Concept of mixed pixel. Sub pixel classification – linear mixture modeling, fuzzy set-based classification, artificial neural network and other machine learning approaches.						
Unit-IV	Issues in urban and regional planning					
Issues in urban and regional planning – objectives and planning processes, data requirements. Physical planning and statistical methods. Mapping of parcels and individual buildings, Utility of land use land cover in urban planning.						
Unit-V	GIS Applications					
Coordinate system and geo-coding, vector data structure and algorithms, raster data structure and algorithms, data bases for GIS – concepts, error modeling and data uncertainty, decision making through GIS, constructing spatial data infrastructure and spatial information system; National Urban Information system.						
Text Books and References:						
S. No.	Name of Authors	Titles of the Book			Edition	
1	Groves R.M., Fowler F.J., Couper M.P., Lepkowski J.M., Singer E., Tourangeau R.,	Survey Methodology			2009	
2	Easa S., Chan Y., (ed)	Urban Planning and Development, Application of GIS			2000	
3	John W. Creswel	Research Design			2003	
4	Glatthorn A.A. and Joyner R. L.	Writing the winning thesis			2005	

PL511	PLANNING STUDIO - II					
Pre-requisite	Co-requisite	L	T	P	C	Remark
	NIL	0	0	12	6	
Objective	To Assess, Collect and Analyze the Information Requirements for the Study. To understand the Characteristics of the City for Preparation of Sustainable Development Plan.					
Module-I	Geo-Informatics Laboratory Training					
The laboratory training will be conducted in accordance with the studio exercise. Introduction to Geo-informatics, introduction to Remote Sensing – Aerial and Satellite; introduction to GIS, Spatial data and Attribute data; Satellite images as input to GIS; Collection and presentation of baseline information.						
Module-II	Development Plan					
<p>The studio exercise focuses on the planning, development and design aspect (in line with the other core and elective courses offered in the semester). The exercise pertains to large cities and emerging metropolitan cities and ranges from preparation of sustainable development plans to sector specific themes pertaining to tourism, SEZs, etc. The studio exercise enables students to develop an approach/ framework for the task; it is field based as a database is generated that is analyzed and the plan and strategies are formulated.</p> <p>Initial study involves understanding of the exercise through theories, study of similar case studies, awareness of relevant norms and standards through extensive literature search. Students are required to prepare a comprehensive list of required data and identify probable sources before making a field visit to the case study town/city. Students are encouraged to translate learning from the core and elective subjects to the studio exercise. The introduction of GIS in the studio enables them to apply it in the studio exercise. Students are expected to analyze the data collected and come out with proposals and recommendations for planned development of the city. The entire exercise is also documented in the form of a technical report.</p> <p>The second exercise is a short and intensive exercise of one-month duration. It pertains to topical issues i.e. property tax reforms, informal sector, development of railway land, etc. The study is based on primary surveys and students are expected to analyze the information and arrive at recommendations.</p>						
Text Books and References:						
S. No.	Name of Authors	Titles of the Book				Edition
1	Dellinger, A.	Validity and the Review of Literature, Reviewing the Schools				2005
2	Hart, C.	Doing a Literature Review, Releasing the Social Science Research Imagination				198
3	Taylor, G.	A Student's Writing Guide: How to Plan and Write Successful Essays				2009
4	Colin Neville, C.Neville,	The Complete Guide to Referencing and Avoiding Plagiarism				2007
5	Punch, Keith	An Introduction to Social Research: Quantitative and Qualitative Approaches				2005
6	Neuman, William	Basics of Social Research: Qualitative and Quantitative Approaches				2007
7	Bryman, Alan	Social Research Methods				2008
8	Finlay, B.	Statistical Methods for the Social Sciences				2009

PL519	DISSERTATION & PROFESSIONAL TRAINING					
Pre-requisite	Co-requisite	L	T	P	C	Remark
	NIL	2	2	4	6	
Objective	The purpose of dissertation is to introduce to students, the research methods and to develop competencies for critically examining topics of their interest and present them. This will be a preparatory stage for the terminal or thesis project.					
Unit-I	Conducting Literature Review					
Preliminary literature review for identification of research gaps; Selection of topic, thesis statement, developing the thesis; developing research questions; detail literature reviews to understand the current state of knowledge around a particular topic.						
Unit-II	Developing an Argument					
What is an argument, argument structure and identification, validity and strength of arguments, common fallacies of reasoning, use and abuse of language in reasoning, principles of fair play in argumentation, respecting opposing positions, understanding different modes of persuasion; emotional, moral and rational.						
Unit-III	Report Writing-I					
Report writing, Type; characteristics of writing technical reports. Format of Reports: Preface, acknowledgements, contents, indexing, key word indexing, introduction, body terminal section, appendices, references;						
Unit-IV	Report Writing-II					
Writing style - introductory, developmental, transitional and concluding paragraphs, linguistic unity, coherence and cohesion, descriptive, narrative, expository and argumentative writing. Proofreading and editing.						
Unit-V	Developing a Research Design					
Formulation of objectives, research methods relevant for individual topic, development of research methodology elaborating methods of primary data collection.						
Text Books and References: 1. Machi, L.A. and McEvoy, B.T. (2012) The Literature Review, Six Steps to Success, Sage, New Delhi.						

	PROFESSIONAL TRAINING
Objective	To gain hands on experience in a planning organization so that students become future ready after they obtained the postgraduate degree. The main objective of professional training is to expose the students to live planning and development project and working environment in a planning agency.

Contents	Each student shall undertake training in a planning or related office for two months. Students will undergo professional training in a department approved organization on a project for 2 months. This will be supervised training by a senior professional from the organization. Satisfactory completion of training will be mandatory for the award of a degree. Out of six credits, two credits will be awarded for successful completion of training as reflected in PL519.
Text Books and References: <ol style="list-style-type: none"> 1. <i>Locke, E.A. (2003) The Blackwell Handbook of Principles of Organizational Behavior, Wiley-Blackwell, London.</i> 2. <i>Saccoccia, S. (2016) Planning Practice, MIT Press, Massachusetts.</i> 	
Outcomes	After undertaking professional training, the students would be able: <ul style="list-style-type: none"> • To show capabilities of working on live planning and development projects. • To demonstrate knowledge of work environments in different planning organizations.

PL520	PLANNING STUDIO - III					
Pre-requisite	Co-requisite	L	T	P	C	Remark
	NIL	0	0	12	6	
Objective	To Assess, Collect and Analyze the Information Requirements for the Study. To understand management and infrastructural/ facility aspects for preparation of Sustainable Development Plan.					
Module-I	Geo-Informatics Laboratory Training					
The laboratory training will be conducted in accordance with the studio exercise. Introduction to Geo-informatics, introduction to Remote Sensing – Aerial and Satellite; introduction to GIS, Spatial data and Attribute data; Satellite images as input to GIS; Collection and presentation of baseline information.						
Module-II	Management and Governance Plans					
The focus of the studio is on management and governance aspects (in line with the other core and elective courses offered in the semester).						
The exercise pertains to metropolitan cities and mega cities and ranges from preparing management plans and projects related to various sectors pertaining to infrastructure, disaster risk, riverfront development etc.						
Students are also required to identify and formulate projects, work out the appraisals and do the feasibility, viability and implementation mechanisms of the projects.						
Students work on a case study town/city and have to visit the field for collection of data and interaction with city officials and stakeholders. Although planning continues to be an important aspect of the exercise, students are also exposed to project identification, formulation, and appraisal, financing mechanisms and institutional framework.						
Students draw from the theoretical knowledge provided in the core and elective subjects related to management, finance and governance offered in the semester and translate them in their studio exercise.						
The culmination of the exercise is in the form of group presentations and studio report.						
Text Books and References:						
S. No.	Name of Authors	Titles of the Book				Edition
1	Dellinger, A.	Validity and the Review of Literature, Reviewing the Schools				2005
2	Hart, C.	Doing a Literature Review, Releasing the Social Science Research Imagination				198
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5	Punch, Keith	An Introduction to Social Research: Quantitative and Qualitative Approaches				2005
6	Neuman, William	Basics of Social Research: Qualitative and Quantitative Approaches				2007
7	Bryman, Alan	Social Research Methods				2008

PL528	THESIS					
Pre-requisite	Co-requisite	L	T	P	C	Remark
	NIL	0	0	12	6	
Objective	The primary purpose of a thesis is to independently undertake a piece of research involving a deeper study of theories and frameworks, develop elegant research questions and connect with empirical evidences for creating new knowledge					
	Course Content					
<p>The purpose of a post-graduate thesis is to take forward the literature review involving a deep study of theories and frameworks and develop elegant research questions. It is expected that a post-graduate student is clearly able to explain how a piece of research adds new knowledge to the existing body of knowledge in a field and show its practical significance to the profession of planning. Without a clearly defined purpose and strong theoretical grounding, the thesis is fundamentally flawed.</p>						
<p>Text Books and References:</p> <ol style="list-style-type: none"> 1. Booth, W.C., Colomb, G., Williams, J.M., Fitzgerald, W. (2016) <i>The Craft of Research</i>, University of Chicago Press, Chicago. 2. Eco, U. (2015) <i>How to Write a Thesis</i>, MIT Press, Massachusetts. 3. Oliver, P. (2008) <i>Writing your Thesis</i>, Sage, New Delhi. 						

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6. Choudry, Paul. *Social Welfare Administration*, Atma Ram & Sons, Delhi, 1979.
7. Dubey, S.N. *Administration of Social Welfare Programs in India*, Somaiya Publication, Bombay.
Bose, A.B. *Social Welfare Planning in India*, U.N. Publication, Bangkok.
8. Gangrade, K.D. *Social Legislation in India, Vol. I & II*. Ministry of Urban Development (2006)
National Urban Information System, Ministry of Urban Development, New Delhi.
9. Weng, Q. (2010) *Remote Sensing and GIS Integration: Theories, Methods, and Applications*, McGraw Hill, New York.

