



**APPROVED SCHEME OF STUDY FOR M.Sc. IN CITY AND REGIONAL PLANNING**  
**UNIVERSITY OF ENGINEERING & TECHNOLOGY LAHORE**  
 (Effective from 2014 Session and onward)

<b>Approved Scheme of Study</b>					
Ref. No.	Course Title	Contact Hours		(Credit Hours)	
		Theory	Practical	Theory	Practical
<b>Group-A Compulsory Courses (Four to Six Courses to be selected from the following)</b>					
CRP-501	Planning Theory	2	2	2	1
CRP-502	Comparative Urban Planning	2	2	2	1
CRP-503	Regional Development Planning	2	2	2	1
CRP-504	Advance Research Methods	2	2	2	1
CRP-505	Advanced Planning Techniques	2	2	2	1
CRP-506	Housing Policy and Practice	2	2	2	1
CRP-507	Urban Transportation Planning	2	2	2	1
CRP-508	Environmental Planning	2	2	2	1
CRP-517	Urban Land Management	2	2	2	1
CRP-518	Implementation of Policies and Plans	2	2	2	1
CRP-516	Mathematical Models in Planning	2	2	2	1
<b>Group-B Elective Courses (Two to Four Courses to be selected from the following)</b>					
CRP-509	Public Transport Planning	2	2	2	1
CRP-510	Local Planning Practice	2	2	2	1
CRP-511	Environment, Resources and Development	2	2	2	1
CRP-512	Urban Design	2	2	2	1
CRP-513	Rural Planning	2	2	2	1
CRP-514	Geographical Information Systems	2	2	2	1

<b>CRP-515</b>	Community Organization and Development	2	2	2	1
<b>CRP-519</b>	Project Appraisal	2	2	2	1
<b>CRP-520</b>	Transport and the Environment	2	2	2	1
<b>CRP-521</b>	Guided Individual Studies in Urban & Regional Planning	2	2	2	1
<b>CRP-534</b>	Environmental Impact Assessment	2	2	2	1
<b>CRP-535</b>	Climate Change Impacts and Adaptation	2	2	2	1
<b>CRP-525</b>	Participation and social Assessment	2	2	2	1
<b>CRP-528</b>	Negotiation and Conflict Resolution Skills	2	2	2	1
<b>CRP-529</b>	Poverty Alleviation	2	2	2	1
<b>CRP-530</b>	Infrastructure Development	2	2	2	1
<b>CRP-531</b>	Disaster Management	2	2	2	1
<b>CRP-532</b>	Participatory Approaches to Waste Management	2	2	2	1
<b>CRP-522</b>	Research Thesis	0	12	0	6
<b>Total</b>		<b>-</b>		<b>30</b>	

**Approved Scheme of Study**

<b>Ref. No.</b>	<b>Course Details</b>
<b>Group-A Compulsory Courses (Four to Six Courses to be selected from the following)</b>	
<b>CRP-501</b>	<b>Planning Theory</b>  Planning as a mode of public decision making process, Planning theories suggested by Eastern and Western Scholars, Elements of the planning process: Identification of social goals; formulation of objectives, criteria and alternative proposals; Choice of an action plan; Implementation, feedback and evaluation.  Models of the planning process: Instrumentalism, and optimizing strategies and systems approach. Advocacy planning, Planning for efficiency and social justice, Citizen participation in the planning process.  Urban and regional planning as expressions of public planning, Evolution of contemporary urban planning from design disciplines to policy sciences. Introduction to special interests within the field of urban planning, policy planning, regional development, urban design, land planning, social planning and environmental planning.
<b>CRP-502</b>	<b>Comparative Urban Planning</b>  Socio-economic contexts of urban planning in the capitalist, socialist and the developing countries. Introduction to the problems, assumptions, approaches and institutional settings of urban planning in developed countries like the United States, Britain, France, Soviet Union, Poland etc., and in developing countries like India, Pakistan, and China etc. Concepts and approaches emerging from the United Nations and the World Bank's involvement in urban problems of this world. Students will be expected to appreciate varying national styles of urban planning and encouraged to critically understand the context of each approach for assessing its relevance to the Pakistani conditions.
<b>CRP-503</b>	<b>Regional Development Planning</b>  Regional perspectives in national development. Physical and manpower resources, infra-structural setting, locational context and

	<p>public policies as determinants of regional development. Sustainable regional development. Theories of Regional Development and explanations of the phenomenon of persistently depressed regions. Balanced versus imbalanced development within a national space. Metropolitan explosion and rural stagnation. Critical evaluation of program of controlling metropolitan growth. Theories of over-urbanization and approaches to regional development. Theories of growth poles and centers. Strategies of industrial deconcentration and decentralization of services. Rural development as an instrument of regional policy. Notions of community development and integrated rural development program. Metropolitan Planning as a form of regional planning. Case studies of regional development in the U.S. Canada, Britain, France, Eastern Europe, African countries, Malaysia, Bangladesh, Iran and Pakistan.</p>
<p><b>CRP-504</b></p>	<p><b>Advance Research Methods</b></p> <p>Why to do research in planning? Expectations from a piece of research. Types of research. Types of research methods; their use and limitations; principles of selecting appropriate research methods for an inquiry. Research design and research process. Critically evaluating published research.</p> <p>Measurement in the social sciences: validity and reliability and how to assess them. The nature of quantitative and qualitative research and their integration.</p> <p>Philosophy of quantitative research. Experiments and experimental design. Survey research: types and aims of surveys. Sampling and generalization. Structured interviews and self-completion questionnaires: differences between them; relationship to measurement issues. Content analysis. Techniques of analyzing quantitative data. Hypothesis testing and identification of relationships among variables through bivariate and multivariate analysis. Tests of significance.</p> <p>Philosophy of qualitative research. Participant observation. Unstructured interviewing. Field observations. Case study strategy. Qualitative data analysis. Conversation analysis. Focus groups.</p> <p>Presentation of findings, writing-up of the thesis, and dissemination of research work.</p> <p>Managing research projects: mobilizing resources, team building, time management, quality control on performance, confidentiality and ethical issues, progressing and expediting, managing costs and estimation, managing conditions of high uncertainty and</p>

	difficulties in successful completion of research projects.
<b>CRP-505</b>	<p><b>Advanced Planning Techniques</b></p> <p>Introduction to decision theory as a basis of public policy planning. Policy analysis as a technique of planning. Program evaluation through cost-effectiveness and cost-benefit analysis. Planning balance sheet and Goal-achievement matrix analysis as tools of planning. Introduction to modeling techniques through the study of population forecasting, gravity and land use models. Social impact analysis as a technique of community planning. Illustration of selected techniques through case studies.</p>
<b>CRP-506</b>	<p><b>Housing Policy and Practice</b></p> <p>Locational determinants of firms and households. Agglomeration of activities and land use patterns. Transport costs, land rent and land values. Institutional context of the land allocation process. Public investment and land values. Property and land taxes as instrument of land regulation. Public land banking &amp; urban land tenure. Policy instrument to regulate land prices and uses. Housing as a system. Community facilities and services, shelter, tenure, physical environment and costs as elements of the housing system. Housing needs and demands. Housing supply and the structure of housing market. Determinants of the supply and demand of housing. Public intervention in housing markets through the regulation of finances, land, community facilities and through direct participation in the form of housing schemes. Low income and squatter housing. Problems,. Issues and approaches. Formal and Informal sectors of urban economy and organization of respective housing markets.</p> <p>Case studies of housing programs initiated by the international agencies and national governments, particularly in the third world countries. Review of housing programs in Pakistan.</p>
<b>CRP-507</b>	<p><b>Urban Transportation Planning</b></p> <p>The Urban Transportation Planning process. Generation of alternatives and their evaluation. Introduction to systems analysis approach to transportation. Introduction to models of travel demand in transportation studies including residential and non-residential trip generation; Gravity and opportunity models of trip distribution; trip end and trip interchange modal split; network</p>

	<p>assignment. Policies for urban mass transit. Planning for pedestrians, cyclists and animal driven vehicles. Transportation problems of rural areas and programs of rural development.</p>
<b>CRP-508</b>	<p><b>Environmental Planning</b></p> <p>Introduction to environmental planning. Environmental planning and sustainability issues. Physical environment as an ecological system. Human impact on nature. Measuring use of nature and monitoring environmental qualities.</p> <p>Review of problems of urban physical environment: Population growth, poverty and environment; disposal of human and animal wastes and sewerage in cities; air and noise pollution; toxic/hazardous wastes; traffic congestion; land and water scarcities; soil erosion and waste of agricultural land.</p> <p>Approaches to environmental planning: Environmental action plans and conservation strategies; Indicators of sustainable urban development; Theory and techniques of Environmental Impact Assessment (EIA), use of EIA in planning; Strategic Environmental Assessment; Valuing the environment, fundamentals of environmental economics; Emergency planning; Environmental law, rights and justice.</p>
<b>CRP-517</b>	<p><b>Urban Land Management</b></p> <p>Urban problems and land management tasks. Understanding the operation of land and real estate markets. The dynamics of land supply and demand. Access to land. Land transaction and land development process in developed and developing countries. The governance of land and the actors involved in land management process. Role of central, provincial and local government, NGOs, Cooperatives, and Property Dealers. The informal sector in land management.</p> <p>Forms of land tenure and their characteristics. Techniques of tenure reforms. Land registration and titling process; constraints and opportunities; private sector involvement in land registration and titling.</p> <p>Land use planning and sub-division regulations as mechanisms to manage land and overcome constraints on the land markets.</p> <p>Strategies and instruments to ensure effective urban land management and their relevance to developing countries; nationalization of land and land-use rights, compulsory land acquisition, land banking, land lease, land readjustment, clearance and</p>

	redevelopment, resettlement. Relationship between land management and the provision of infrastructures. Guided land development. Land Management support system.
<b>CRP-518</b>	<p><b>Implementation of Policies and Plans</b></p> <p>Development policies and plans as instruments of guiding and regulating city growth. Legal and institutional bases of Development Plans. Review of assumptions, approaches and effectiveness of development plans in industrialized and developing countries including Pakistan. Institutional, political and administrative pre-requisites of Development plans in different social contexts. Case studies of development plan efforts in cities like Calcutta, Karachi, Lahore etc. Assessment of the scope of policies, plans and other instruments of urban planning. Planning for urban services and facilities. Capital budgeting and public enterprise as means of urban planning.</p>
<b>CRP-516</b>	<p><b>Mathematical Models in Planning</b></p> <p>Basic concept in matrix algebra, calculus, and probability theory will be covered; attention will be focused upon their use in projecting trends and on applications in planning.</p>
Group-B Elective Courses (Two to Four Courses to be selected from the following)	
<b>CRP-509</b>	<p><b>Public Transport Planning</b></p> <p>Public transport problems in developing countries. Public transport and city structure. Public transport systems and technologies. Passenger transport modes; rail transit, bus transit and para-transit. Comparative Analysis of mass transit options.</p> <p>Transportation system and management, system and service planning, rural public transport. Management of public transport operations, marketing, financing and security and management of terminals.</p> <p>Role of government in regulating public transport. Environmental considerations in public transport planning. Preferential treatment for high occupancy vehicles.</p>

<p><b>CRP-510</b></p>	<p><b>Local Planning Practice</b></p> <p>Government and the planning system. Local planning and public policy. Local planning and the politics at local, provincial and national levels. Local planning agencies and the provincial and central governments. The role of local plans within the statutory land use planning system. The legislative and administrative framework for local plans. The type, form and content of local plans. Local plans for urban development, urban renewal, conservation, environmental improvement, transport management, and regeneration of inner city areas. Local plan preparation, adoption, and review procedures. Bringing local planning issues before the public. Non-statutory approaches to local planning.</p> <p>Local planning and implementation. The development control process. Local plans and the determination of planning applications. Conflict of interests and bargaining in development control. Site development schemes: identifying goals, objectives, policies and standards for site development schemes. Local plans and the role of public and private sectors in the development process. Contingency and the management of change.</p> <p>Case studies of local plan preparation and implementation in developed and developing countries. Institutional, political and administrative pre-requisites of local plans in different social contexts.</p>
<p><b>CRP-511</b></p>	<p><b>Environment, Resources and Development</b></p> <p>Environmental health hazards; effects on human functioning and means of minimizing such effects. Local Agenda 21 as a framework for environmental management. Green ideas for pollution control and waste management.</p> <p>Energy, land, water and air as resources for community life. Techniques of assessing resource potential and optimum use. Energy policies and the environment. Sustainable energy futures. Conservation of natural resources; principles and practices in the use and conservation of natural resources.</p> <p>Perspectives on development. Sustainable development, the city and globalization. City planning and sustainability. Managing environmental issues of the countryside.</p>



<p><b>CRP-512</b></p>	<p><b>Urban Design</b></p> <p>Theories and practices of urban design. Analysis of the visual, natural and cultural aspects of urban design. Social equity and urban design. Studying interacting pattern of land uses and activities in a city and their evolution through time. Design factors influencing the functioning and quality of a city.</p> <p>Urban form and landscape design problems in developing countries. Methods of identification and analysis of urban design problems in the built environment. Developers 'and users' perspective on urban design problems and solutions. Alternative design policies and evaluation of their effects on the built environment.</p> <p>Introduction to sustainable urban design. Principles and approaches to sustainable urban design; livable neighborhoods, place management, reclamation of streets, revitalization of city centers and employment generation through participatory approaches etc.</p>
<p><b>CRP-513</b></p>	<p><b>Rural Planning</b></p> <p>Review of social, economic, physical and environmental bases of rural life in developing countries, particularly Pakistan. Objectives and definitions of rural planning and development. The changing concepts of rural planning and development. A critical review of rural development efforts in Pakistan like Dehat Sudhar, Village Aid, Rural works and Integrated Rural Development Programs, Matching Grant and MNA/MPA Programs etc.</p> <p>Theories of rural urban migration; growth poles, service centers, and rural hinterlands. Central place theories for an efficient system for short and long range rural planning and development.</p> <p>Rural development as a component of Regional Planning. Rural spatial planning and micropolitan planning as strategies for rural development. Spatial and organizational approaches for the delivery of public services and facilities in rural areas. Spatial plans and execution of rural development projects. Village and Neighborhood Councils, Citizen Community Board System etc.</p> <p>Rural economic development through agricultural and industrial growth. Rural environmental and land resources. Preservation of agricultural land and promotion of appropriate technology as objectives of rural planning.</p>

	<p>Policy framework for comprehensive rural development. Top down and bottom up approaches to rural development. Case studies of Pakistan, India, China, Malaysia, Iran, Britain, Germany, Holland etc.</p>
<b>CRP-514</b>	<p><b>Geographical Information Systems</b></p> <p>Introduction to GIS. Principles of Remote Sensing and GIS. Data acquisition techniques, characteristics and nature of spatial data, projections and objects. Spatial analysis. Data model and data structure. Typical GIS operations like linking multiple varied sources of tabular data to spatial datasets, importing spatial data, adding attribute data, labeling features, working with layers, designing GIS questions, integration of GIS with other software applications like AutoCAD etc.</p> <p>Geo-Information Management. Geo-statistics. Global Positioning System and Land Information System and their relevance to City and Regional Planning.</p> <p>Research design and project management in GIS. Using GIS in carrying out urban and regional planning tasks like site selection, land use planning, zoning, land registration and titling, development control, utilities management and community planning.</p>
<b>CRP-515</b>	<p><b>Community Organization and Development</b></p> <p>Models and perspectives of community organization, types of community organizations, and roles of community organizer. The role and work of different sectors like government, non-governmental organizations, volunteers etc., in relating to community organization and liaison.</p> <p>The purpose and vision of community development. The principles and concepts of community-based development. Methods for evaluating and documenting progress and results of community development efforts.</p> <p>Skills and techniques of community organization and development: community study; identification and analysis of community needs, problems, networks and resources; making individual contacts and building relationship; public relations strategies and skills; developing networks; training of community leaders; methods of involving marginalized people; organizing mass meeting and public hearing; designing, managing and implementing community education programs; working with community groups to carry out community problem-solving action; forming and sustaining community groups and organizations; promoting participation;</p>

	<p>mobilizing and developing resources; developing community based information for use in community decision formation; budgeting and financial management; intervening into crisis and managing conflict; negotiating and lobbying; preparing for specific change actions; planning of action strategies and tactics.</p> <p>Identification and analysis of the major issues and problems in community organization and liaison in developing countries: social responsibility, political involvement, social control, accountability, and citizen participation, etc. Role of IT in community organization and development.</p>
<b>CRP-519</b>	<p><b>Project Appraisal</b></p> <p>Introduction to the concepts underling the appraisal of investment projects. Project appraisal as a tool of policy analysis. The framework and elements of project appraisal. Objectives and criteria. Commercial and social appraisal. Social cost-benefit analysis. Valuing benefits time, life environment. Capital budgeting discounting for time, risk and uncertainty. Applications of commercial appraisal, cost-benefit and cost effectiveness analysis, multi criteria analysis and other appraisal frameworks. Case studies demonstrating the use of project appraisal techniques in practice.</p>
<b>CRP-520</b>	<p><b>Transport and the Environment</b></p> <p>Environmental impacts of transport. Transport and sustainability. Transport policy and environmental quality issues. Environmentally sustainable transport system. Sustainable transport and economic development. Transport, energy and urban form. Cities and transport energy. Land use and transport planning issues. Environmental assessment for transport policies plans and programs. Transport emission control measures. Case studies from cities in developed and developing countries.</p>
<b>CRP-521</b>	<p><b>Guided Individual Studies in Urban &amp; Regional Planning</b></p> <p>A student may read on topics of his interest individually. Topics and reading lists must be approved by the faculty supervisor prior to registration for this course.</p>

<p><b>CRP-534</b></p>	<p><b>Environmental Impact Assessment</b></p> <p><b>Theory:</b>  Definition; aim; objectives and role of Environmental Impact Assessment (EIA) in development related decision making. Principles; Trans-boundary issues; Process/stages and techniques of EIA including: screening, scoping, impact identification, assessment, public participation, consideration of alternatives, impact mitigation and management and follow-up monitoring. Requirements and guidelines of international development banks.  Legal provisions, guidelines and review/approval process and institutional set-up for EIA in Pakistan. Critical literature on EIA-international and Pakistani cases.  Introduction to Strategic Environmental Assessment (SEA); How it differs from EIA; legal requirements of SEA; SEA of policies, plans and programs; International and national practices.</p> <p><b>Practical:</b>  Students to determine need and scope of EIA of hypothetical projects; visit public hearing or conduct public participation mock exercise; conduct a quality review of an EIA statement (from Pakistan); write a short essay for how weaknesses and problems of EIA/SEA may be overcome. Field visit of a project developed after approval of EIA to observe impacts arising during operation of the project and mitigation measures/environmental management plan being implemented.</p>
<p><b>CRP-535</b></p>	<p><b>Climate Change Impacts and Adaptation</b></p> <p>Climate change; its impacts, adaptation and vulnerability. Natural and anthropogenic drivers of climate change. Scientific evidence of climate change and peoples' belief. Climate change and water resources. Global climate change impacts; National and international examples of climate change. Regional impacts of global climate change. Climate change impacts: Asia and Pakistan. Climate change related government policies; National Climate Change Policy, Final report of the task force on climate change (TFCC), Urban flood management Tools, techniques and strategies, Solar energy for safe environment, National disaster risk</p>

	<p>management framework for Pakistan 2007, Monsoon contingency plan (CP) 2011- Khyber Pakhtunkhwa, National environmental policy (NEP) 2005, Local agenda 21. Skeptics of climate change.</p> <p>Climate change adaptation – What is it?, Need for climate change adaptation, Types of adaptation, Guiding principles for adaptation, Adaptation policies. Climate change adaptation measures; Climate change adaptation measures on water resources, Regional cases of climate change adaptation measures on water resources. International council for local environmental initiatives (ICLEI) and climate change. Climate change awareness and adaptation practices at local level in developing countries.</p> <p><b>Practical:</b></p>
<b>CRP-525</b>	<p><b>Participation and social Assessment</b></p> <p><b>Theory:</b></p> <p>Definitions of Participation, Participatory and Institutional Mapping, Participatory Appraisal, Participatory Development Approaches, Problems and Preference Ranking, Gender Analysis and Beneficiary Assessment, Social Assessment and Stakeholder Analysis, Methods for Stakeholder Analysis,</p> <p><b>Practical:</b></p> <p>Organization of seminars/workshops and preparation of reports, social assessment of selected projects.</p>
<b>CRP-528</b>	<p><b>Negotiation and Conflict Resolution Skills</b></p> <p><b>Theory:</b></p> <p>Introduction: Negotiation theory, practice and behavior. Elements of negotiation. Principled, interest based negotiation. Communication preference, adjusting to others, multiple processing style, effective learning. Strategies and techniques for effective negotiation. Gaining control, closing the deal, everyday negotiations.</p> <p>Conflict theory and management. Sources, elements, stages and levels of conflict, conflict styles, power, rights, interests and conflict. Conflict resolution theory, the basics of communication. The dispute resolution process. Moving past conflict, working with</p>

	<p>difficult people, selecting your strategy. Techniques for getting past 'no'.</p> <p><b>Practical:</b> Studies to verify above concepts</p>
CRP-529	<p><b>Poverty Alleviation</b></p> <p><b>Theory:</b> Introduction to the Concept of Poverty, Poverty measurement and assessment, Poverty and Technology, Poverty, economy and development, Poverty Alleviation and Reduction Strategies, Poverty alleviation through private-public partnership, Poverty alleviation programmes and their impact assessment, Poverty and Environmental Degradation, Spatial Dimension of Poverty, Gender aspects of Poverty. Urban governance as a tool for eradicating poverty.</p> <p><b>Practical:</b> Studies on urban and rural poverty, impact assessment of poverty alleviation projects</p>
CRP-530	<p><b>Infrastructure Development</b></p> <p><b>Theory:</b> Concept of Infrastructure Development, Types of Social and Physical Infrastructure, Community Integrated Infrastructure Development, Infrastructure Development Issues, Public Private Partnerships (PPPs) for Infrastructure Development, Role of Local Authorities in Infrastructure Development, Population Growth and Infrastructural Facilities, Quality Control of Infrastructure Projects</p> <p><b>Practical:</b> Study of infrastructural development issues in urban and rural areas. Evaluation of community based infrastructural projects etc.</p>

<p><b>CRP-531</b></p>	<p><b>Disaster Management</b></p> <p><b>Theory:</b>  Concept and Types of Disaster, Introduction to Disaster Management, Risk and Vulnerability, Disaster Impacts and Issues, legislative Challenges in Disaster Management, Coordination and Community Participation in Disaster Management, Country Profiles on Disaster, Disaster Pron Areas, and Disaster mitigation plans.</p> <p><b>Practical:</b>  Analysis of case studies involving community capacity building for disaster mitigation, study of community based disaster preparedness approaches etc.</p>
<p><b>CRP-532</b></p>	<p><b>Participatory Approaches to Waste Management</b></p> <p><b>Theory:</b>  Introduction: waste, sources, types, generation and composition. Waste plans and surveys. Waste policy and legislation. Regulatory, siting and societal issues. Waste collection and disposal options.  Waste management hierarchy: source reduction, reuse and recycling, composting, incineration. Role of informal sector, NGOs, private sector, and communities in waste management.</p> <p><b>Practical:</b>  Studies on participatory waste management projects, practical verification of other concepts specified in the course outline.</p>
<p>Group-C Compulsory for All</p>	
<p><b>CRP-522</b></p>	<p><b>Research Thesis</b></p>

The thesis proposal shall be prepared by the students during the First Term as a part of Sessional work in the compulsory subject of Planning Research Methods. These proposals shall be considered by the Post Graduate Board of Studies and got approved from the Vice-Chancellor through the Directorate of Advanced Studies and Research during the first month of the Second Term. The students are expected to work on data collection and literature review during the second term in their spare time. However, in the thesis term of 3 months, the students are required to concentrate wholly on their research thesis. A time table (weekly schedule) for the thesis term shall be prepared which will show two meeting days per week with the concerned supervisor. Other meetings may be arranged according to mutually agreed time between the supervisor and the supervisee. Full time students are strongly advised to submit their thesis at the end of the thesis term.