

NED UNIVERSITY OF ENGINEERING AND TECHNOLOGY, KARACHI
MASTERS OF URBAN AND REGIONAL PLANNING

(a) List of Course for the Master of Urban and Regional Planning Programme

Non-Credit Courses

Course No.	Course Title	Credit Hrs.
AR-511:	Introduction to Urban Design	Non-Credit
AR-512:	Introduction to Urban Sociology	Non-Credit
AR-513:	Methods in Physical Planning	Non-Credit
AR-514:	Introduction to Urban Economics	Non-Credit
AR-515:	Introduction to Transportation and Infrastructure	Non-Credit
AR-516:	Basic Communication Techniques in Planning	Non-Credit

Compulsory Courses

AR-611:	Planning Theory	3
AR-612:	Methods in Urban Planning Research	3
AR-613:	Landuse Planning and Analysis	3
AR-614:	Infrastructure Planning	3
AR-615:	Economic Development and Regional Planning	3

Note: A study may opt for a dissertation of 6 credit hours in accordance with Regulation Clause 6.2.1(vi) and 6.5

Elective Courses

AR-616:	Urbanism: Theory and Practice	3
AR-617:	Advanced Studies in Urban Design	3
AR-618:	Urban Area Conservation	3
AR-619:	Legal and Regulatory Aspects in Planning	3
AR-620:	Planning Implementation Methods	3
AR-621:	Advanced Urban Economics	3
AR-622:	Seminar in Planning, Economics and Development	3
AR-623:	Computer Applications in Planning	3
AR-624:	Real Estate Analysis	3
AR-625:	Statistical Methods in Planning	3
AR-626:	Remote Sensing	3
AR-627:	Advanced Studies in Housing	3
AR-628:	Urban Management and Administration	3
AR-629:	Advanced Urban Sociology	3
AR-630:	Project Planning and Management	3
AR-631:	Development Planning in Pakistan	3

AR-632:	Seminar in Urban Management in Pakistan	3
AR-634:	Planning for Sustainable Development	3
AR-640:	Design Project in Urban Planning	3
AR-641:	Regional Planning Studio	3
AR-642:	City Planning Studio	3
AR-698:	Independent Study Project	6
AR-699:	Dissertation	9
CE-561:	Urban Transportation Planning*	3
EQ-532:	Fire Safety and Management	3

(b) Detailed Contents of Courses for the Masters of Urban and Regional Planning

Non-Credit Courses

AR-511: Introduction to Urban Design

Definition of city and city systems; urban development patterns; introduction to urban functions and corresponding physical forms; introduction to urban design; visual analysis of the city; basic aesthetic considerations.

AR-512: Introduction to Urban Sociology

Introduction to sociological process and theories; socio-economic aspects of the society; sociological variables in urban environment; demographic, ecological and social structure of city; class structure of cities in reference to residential differentiation.

AR-513: Methods in Physical Planning

Concepts and terminologies in physical planning; scales and graphical representations; mapping and drawing techniques in planning; sketching and drafting; analysis and design of different components of urban environment.

AR-514: Introduction to Urban Economics

Concepts and terminology; macro and micro economics and its application to urban problems; demand, supply and need; theory of production and cost; pricing and employment of resources; general equilibrium and welfare economics.

AR-515: Introduction to Transportation and Infrastructure

Evolution and development of urban transport system; types, formats and categories of urban transport systems; basic analysis of urban transport systems; introduction to physical and social infrastructure; basic aspects in planning and development of infrastructure.

* Offered by Civil Engineering Department.

AR-516: Basic Communication Techniques in Planning

Basics in communication; types of communication; characteristics of verbal/oral communication; written and textual communication; graphical and visual communication; introduction to commonly applicable techniques in communication.

Compulsory Courses

AR-611: Planning Theory

The origins of theory – what is theory? The limitations of theory. The theory – reality conflict concepts and functions of planning types; interrelations; public expenditure decisions; planning theories and interpretations; models of rational choice; decision environment; policy design; programming techniques and strategies; issues in goal setting; issues in projections and evaluations.

AR-612: Methods in Urban Planning Research

The process of establishing a context. Information types and its usages in planning process; physical, social and economic context and its interpretation; analytical tools and utilization; trend studies; synthesization of results; correlation of analytical tools and societal understanding; case studies. The conflict between perception, statistics and its resolution. The role and limitation of assumption.

AR-613: Landuse Planning and Analysis

Land and landuse; types of landuse; relationship of land use with physical and social infrastructure, landuse changes-causes, effects and outcomes; methods of landuse analysis, case studies. Segregated and integrated landuse.

AR-614: Infrastructure Planning

Types of infrastructure; physical, social and institutional infrastructure; assessment of infrastructural requirements in various territorial and socio-economic contexts; need analysis for infrastructural planning; pre-requisites to infrastructural planning; spatial considerations in infrastructural planning; collaborations; partnerships and input of formal and informal sector in infrastructure planning; case studies. Integrating informally planned infrastructure within a larger plan.

AR-615: Economic Development and Regional Planning

Meaning of development in different economic theories; focal issues in development economics; unbalanced and balanced growth; planned and unplanned development; income distribution; labour market; development planning and national plans; regional growth theories. Regional planning and ecological issues.

Elective Courses

AR-616: Urbanism: Theory and Practice

Concepts and definitions; frameworks for understanding theories and interpretations; ingredients and characteristics of urbanism; experience and communications; comparative studies; practice and applications. Integrating unplanned development.

AR-617: Advanced Studies in Urban Design

Theoretical contributions to urban design; initiatives for conscious efforts to organise urban system and its limitations; relationship between physical form and social structure; emerging concepts in urban space design; approaches to urban design projects; case studies. Technology its potentials and limitations.

AR-618: Urban Area Conservation

Introduction to concepts and philosophies of area conservation; terminologies in conservation (conservation, restoration, historic preservation, historic urban landscapes, regeneration/redevelopment); aesthetic, cultural, economic and technical issues in conservation; legal, administrative and management aspects of historic areas; area designation policies and framework. Case studies on world heritage cities/towns; conservation and its relationship to the process of urban change and evolution.

CE-561: Urban Transportation Planning

Coordination of City Planning and Transportation Planning. Trip generation, trip distribution, modal split, trip assignment models. Preparing landuse cum transport plans. Economic evaluation. Urban travel characteristics and trends in travel demand. Basic urban transportation studies i.e. origin destination surveys. Inventory use studies, parking studies and transit surveys. Pedestrian facilities. Light Rail and Mass Rapid Transit

AR-619: Legal and Regulatory Aspects in Planning

Legal and regulatory concepts; legislative, judicial and administrative structure in relation to planning; urban planning process in relation to local, provincial and federal governments; planning and development laws, regulations and byelaws; issues in implementation and enforcement; critical analysis of planning and development laws and regulations and their application.

AR-620: Planning Implementation Methods

Types of planning; planning outputs; development proposals; programmes and projects; institutional methods, processes and procedures related to programme and

project implementation; analysis of implementation modes; alternatives, case examples and best practices. BoT, international tendering.

AR-621: Advanced Urban Economics

Economic theory and purposes of economic planning; the evaluation and functions of urban planning in market economics; formation and distribution of value in the physical environment; approaches to rent theory and measurement of value in urban land and property; approaches in the explanation of basic urban processes; the nature and functioning of the construction industry; behavioural patterns in property markets; development of urban land; re-development and rehabilitation; urban growth and structural change. The politics of urban economics (how also geo-politics and global politics) and its physical, cultural and some repercussions.

AR-622: Seminar in Planning, Economics and Development

This course shall focus on the contemporary planning process in relation to economics and developmental issues. Students shall be encouraged to select topics related to planning, economics and development and study the said topic thoroughly. Thereafter they shall prepare a presentation as part of their sessional work under the supervision of the course teacher.

AR-623: Computer Applications in Planning

Data base management in planning process; data requirements generation and assessment; computer applications related to operational issues in planning; spread sheets; charts; diagrammatics in planning representations; assessment and application of software and hardware requirements in planning process. Geographic variables in planning; attributes and parameters; plotting of information on maps, plans and details; softwares and packages of geographic information systems; data storage and retrieval modes; concept and logic of map interfaces and overlays; planning analysis and representations using GIS modes.

AR-624: Real Estate Analysis

Concepts and terminology in urban property systems; property valuation criteria; land value analysis; threshold analysis for land and real estate projects/programme; modalities in real estate development; contractual options in real estate including BOO, BOT, BOOT; financing mechanisms; mitigating techniques in real estate; data base creation and management.

AR-625: Statistical Methods in Planning

Data and its types (physical, social and economic attributes); data review and quality evaluation; sampling distribution; sample drawing techniques; estimation of

means, variances, differences and proportions in demographic data; design of experiments/data collection, processing and interpretation exercises.

AR-626: Remote Sensing

Concepts and terminology; tools employed in remote sensing; layers of information; parameters in remote sensing; applicational aspects of remote sensing in the domains of ecological zones, specialized terrains and territories; interface with satellite imagery.

AR-627: Advanced Studies in Housing

Concepts and terminology; housing need, demand and supply; formal and informal housing; provision and management of housing by the public, formal private, informal private and cooperative sector; physical planning principles of housing; housing finance and credit mechanisms; housing in relation to community development; evictions, its causes and effects. The land issue (tenure, transparency, land use applications, the conflict between standards, byelaws and social and economic reality.

AR-628: Urban Management and Administration

Macro administrative structure related to urban and regional planning; institutions and organizations; institutional process; distribution of legal, administrative and managerial responsibilities; institution of planning; skills and techniques in urban administration; comparative studies leading to focused analysis.

AR-629: Advanced Urban Sociology

Evolution and development of urban societies; urban institutions; relationship between trade/industrialization and urbanization; urbanization in the developing world; employment, opportunities and social relations; rural-urban and urban-urban migrations; emerging social structure in cities; sociological issues in contemporary urban settlements; globalization and its impacts on urban societies.

AR-630: Project Planning and Management

Principles of project planning; models in project management; cost analysis; cost and resource allocation/disbursement; use of simulation techniques in project scheduling; project control; revision and verification techniques; computer applications in project management. Project planning and management and un-relationship to interest groups, communities and donors.

AR-631: Development Planning in Pakistan

Background of development planning in Pakistan; review of five year plans; sectoral planning; planning institutions institutional process in development planning and its dynamics; analysis of development planning process in Pakistan.

AR-632: Seminar in Urban Management in Pakistan

The course is designed as a seminar focused on the selected contemporary topics in urban management. The objective of this course is to concentrate the student's understanding on different urban management issues in Pakistan. Current urban management problems of Pakistani cities shall be examined and evaluated by employing the framework developed by various theories. Relevance and validity of different paradigms shall be tested in this context. Politics of urban spatial structures, service provision, land ownership, social movements and planning shall be dealt in the proceedings of the course.

AR-634: Planning for Sustainable Development

Terminologies related to sustainability; sustainability in relation to social, economic and geo-physical perspectives; growth in correspondence to sustainability; poverty and environmental degradation; resource management and conservation; technology and financial transactions; international and inter-generational equity.

AR-640: Design Project in Urban Planning

A planning dissertation on a specified topic shall be undertaken by each student under the guidance of the faculty. The objectives of this course are to enhance the exploratory capacity of student and provide an opportunity to structure arguments around the chosen topic. The course shall be conducted in a studio format with periodic set of visual and graphical presentations.

AR-641: Regional Planning Studio

Concepts, methodologies and applications in regional planning practice are to be taught. Origin, evolution and characteristics of regional development projects in different contexts are to be investigated in studio; examining the nature and practical applications of techniques used by regional planners for both policy formulation and assessing social and resource problems. Articulation of problems at the regional level, evolving corresponding regional planning tools and applications is to be the core of the studio exercises. A range of case studies are to be outlined from the national context for detailed exploration, analysis and planning proposal development. Examples could include coastline of Pakistan, arid zones, disaster affected areas and economically depressed regions. Both individual and group work is to be conducted.

AR-642: City Planning Studio

Formats of city planning outputs and relevance to corresponding nature of assignments are to be covered. This studio covers cases in the formation, use and control of urban environment. Subjects are to be chosen preferably, with an aim to seize opportunities in the advancement of forms of Pakistani urban life. Current real world issues should be scientifically examined and introduced as major problematic areas becoming the basis for all group and individual work. Planning tasks are to be defined so as to find relevant solutions to typical problems, rather than unique solutions to 'location specific' cases. Methods of study in studio work should cover the theoretical and empirical field surveys design and prescription, design and evaluation of planning proposals through projects. Spatial, organizational and design solutions will be encouraged with special emphasis of presentations in the visual media.