

**NED UNIVERSITY OF ENGINEERING AND TECHNOLOGY, KARACHI**  
**MASTER OF ARCHITECTURE PROGRAMME**

**DEPARTMENT OF ARCHITECTURE AND PLANNING**

On the basis of the prevailing scenario of architectural education in the country in general and Karachi in particular, it can be stated without doubt that there remains an urgent need for an architectural education institution that is capable of imparting quality education, foster research and scholastic pursuits as well as generate useful human resource for the broader socio-economic development of the country.

The working strength of architects is much less than what is practically needed. Given the vast professional sphere in which the architects operate, the numerical strength is simply minimal. A technically sound and socially responsive breed of architects and planners need to be produced to fill this widening gap.

The NED University has remained the foremost institution in professional education in engineering and related disciplines. In its working, the university had developed a regulatory, academic and administrative framework for architectural education which today provides a ready base for appropriate education in these disciplines.

The creation of a department of architecture and planning has been a part and parcel of NED's Master Plan. The present resources, facilities, spaces and technological backup are ample and adequate to support this purpose. Besides, the presence of various disciplines at the university act as a supportive factor for the architecture department. Eversince its creation in 2000, the Department has undertaken numerous research and outreach activities. The Journal of Research in Architecture and Planning, launched in 2001, has been regularly published on an annual basis. The department was a collaborative partner with four international universities from Europe and South Asia in the European Commission funded Asia-Link and Asia-Urbs Programmes between 2004 and 2007. This linkage produced several research outputs in the field of urban design. Besides, the department is the Secretariat of International Council of Monuments and Sites (ICOMOS) and local office of UNESCO University and Heritage Linkage.

The department has been conducting a Master of Urban and Regional Planning Programme since 2002. This programme was setup with the active assistance from University of Western Sydney, Australia. A significant need, however, remained for the initiation of Master of Architecture Programme due to diversifying job market, enhanced demand of specialized capacity in the domains of theoretical and applicational spheres and development of teaching faculty in architectural theory and design pedagogy. It is also worthwhile to note that no postgraduate programme in architecture exists in the entire province of Sindh despite the fact that five architectural institutions are currently functioning. Master of Architecture Programme, initiated in 2009, is therefore aimed to serve a need of the country.

## **Department Facilities**

The Architecture and Planning Department is located at NED City Campus on Maulana Din Muhammad Wafai Road. It possesses adequately equipped computer labs with up-to-date hardware and relevant softwares. The department also possesses an archive which houses the most recent literature, reading material and audio-visual aids related to urban and regional planning studies. A reference library is also available for the access of post graduate students to fulfill the need of text books, reference books, periodicals and journals. Due to links and networking of the department, the post graduate students can also obtain useful information material from private institutions such as the Urban Resource Centre.

## **Number of seats to be offered for admission to the programme**

Total number of seats to the maximum of 25 each shall be offered by the Department for both programmes. The admission for Master of Urban and Regional Planning shall be open to degree holder in the disciplines of Architecture, Urban Planning, Urban or Civil Engineering, however the maximum number of admissions to be offered shall not be exceed a total of 10 per discipline. For Master of Architecture Programme, only candidates possessing a Bachelor of Architecture or equivalent degree shall be offered admission.

## **Principal Faculty for the Programme**

**Prof. Dr. Noman Ahmed**

**Pro Vice Chancellor & Professor**  
PhD Approved Supervisor  
B.Arch (DCET/NED); M.C.P.  
(METU, Turkey);  
Ph.D. (UK); MPCATP

**Prof. Dr. Anila Naeem**

**Chairperson & Professor**  
B.Arch(DCET/NED);  
M.S.in Restoration Historic  
Preservation (METU,Turkey);  
Ph.D. (UK); MPCATP

**Ms. Fariha Amjad Ubaid**

**Associate Professors**  
B.Arch (NCA); MCPUD (METU,  
Turkey); MPCATP

**Dr. Saeed Ud Din Ahmed**

**Associate Professors & Co-Chairperson**  
PhD Approved Supervisor  
B.Arch (NED); MPCATP; M.URP  
(NED) Ph.D. (UK)

### **Assistant Professors**

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|-----------------------------|--|
| 1. Dr. Fahmida Bano Sheikh  | B.Arch (MUET); MURP; MPCATP<br>Ph.D., NEDUET, Karachi  |
| 2. Dr. Ravindar Kumar Ravi  | B.Arch (NED); MUD; MPCATP<br>Ph.D.(NED), NEDUET, Karachi   |
| 3. Mr. Salman Manzoor Hasan | B.Arch (NCA); M.Arch(NED)<br>MPCATP  |
| 4. Dr. Masooma Mohib Shakir | B.Arch (IVSAA); M.Arch;<br>(KU-Leuven, Belgium); MPCATP<br>Ph.D.(Bauhaus, Germany)   |
| 5. Ms. Saadia Bano          | M.Engg (Civil), NED;<br>B.Arch (NED); MPCATP   |
| 6. Dr. Rabela Junejo        | B.Arch (MUET); MPCATP<br>PhD. METU, Turkey   |
| 7. Ms. Farida Abdul Ghaffar | B.Arch (DCET/NED); MPCATP<br>MURP (NED)  |
| 8. Ms. Sarah Ather Khan     | B.Arch (NED); MPCATP;MURP<br>(NED); PhD Scholar (NED)  |
| 9. Dr. Tania Ali Soomro     | B.Arch (MUET); MSc in Conservation<br>of Monuments and Sites, RLICC<br>KULeuven Belgium;<br>PhD in Preservation of Architectural<br>Heritage, Politecnico Di Milano, Italy |

In addition to regular faculty members, qualified personnel in the city are engaged for postgraduate teaching.

Applications in response to advertisement for Master of Urban and Regional Planning shall be duly completed and submitted, personally or by registered post to:

**The Chairperson**  
**Department of Architecture and Planning**  
**NED City Campus**  
**Maulana Din Mohammad Wafai Road**  
**Karachi-74200. Pakistan.**  
**Phone: 92-021-99332078; 32620793; 32210225**  
**Fax: 92-021-99213058**  
**Email: crd@neduet.edu.pk**

## PROGRAMME DETAILS

### (a) List of Courses

COMPULSORY COURSES		Credit Hours
AR-601:	Advanced Architectural Design-I	03
AR-602:	Advanced Architectural Design-II	03
AR-603:	Studies in Architectural Research	03
AR-604:	Architectural Theory	03
ELECTIVE COURSES		
AR-605:	Architectural Design Project	06
AR-606:	Aesthetics in Architecture	03
AR-607:	Theory and Applications of Arts in Architecture	03
AR-608:	Green Architecture: Concepts and Applications	03
AR-609:	Regulatory Considerations in Architectural Applications	03
AR-610:	Interdisciplinary Issues in Architectural Applications	03
AR-635:	Case Studies in Architectural Conservation and Restoration in Developing Countries	03
AR-636:	Advanced Computer Applications in Architecture	03
AR-637:	Architecture of Housing	03
AR-638:	Advanced Landscape Architecture	03
AR-639:	Psychological Applications in Architectural Design	03
AR-643:	Entrepreneurship in Architecture	03
AR-644:	Stylistic Studies in architecture	03
AR-646:	Community Architecture	03
AR-647:	Advanced Writing Skills in Architecture	03
AR-648:	Architecture and the City	03
AR-649:	Advanced Themes in Analysing Architecture	03
AR-698:	Independent Study Project	06
AR-699:	Dissertation	09
EQ-532:	Fire Safety and Management	03

### (b) Detailed Contents of Courses for Master of Architecture Programme

#### COMPULSORY COURSES

##### AR-601: Advanced Architectural Design-I

This is a studio course. In a directed environment, the students are given an exposure to advanced design methodology. The studio shall encourage the students to gradually evolve individual expression around the stated design brief. A capacity of critically examining the existing design approaches in the various contexts shall be developed. Ability to build up appropriate knowledge base for application into architectural design shall be an integral dimension of the studio process. The students will be encouraged to question the validity of existing trends in design and development with an objective to develop alternatives for the same. An enhanced understanding about the pragmatic factors – such as regulatory, financial

and decision making parameters of design – shall also be created. Range of assignments may cover – but not limited to – intervention strategies in natural and eco-sensitive environments, corporate architecture, facilities architecture, psychological and comfort dimensions in architecture.

### **AR-602: Advanced Architectural Design-II**

A pre-requisite for this studio course is AR-601: Advanced Architectural Design-I. This course shall extend the capacity building process that has been initiated in AR-601. The abilities of the students shall be built with respect to objective assessment of design process and outputs. Appraisal of designs, briefs with an ability to visualize the anticipated outputs shall be an important ingredient in this respect. Interpretation of styles on the basis of available examples, basic competence to evolve theoretical connotations, participation in philosophical discourses and creative descriptions in the form of architectural texts and conceptual briefs shall constitute the usual premise of studio work. Important design case examples from local and global perspective shall also be deliberated in the studio environment under guidance of faculty.

### **AR-603: Studies in Architectural Research**

Purpose of this course is to build up the capacity of students in the field of research and its applications. Research methodology in social and applied sciences; ingredients of architectural research; framework of research in emerging fields in architecture; research in architectural communication; scientific writing; bibliographical studies; stylistic studies in architecture; creativity in architectural research process and evaluation research in architectural studies are the topics that will be covered in the course.

### **AR-604: Architectural Theory**

This course will investigate the role that ideas play in the conception, making and interpretation of various elements in the built environment. As a basis for this inquiry, the course will explore significant architectural and urban theories, design strategies, and architectural projects developed primarily from the beginning of the 20<sup>th</sup> century to the present. Lectures will cover a broad range of theoretical positions that have influenced the shaping of built environment. The course specifically aims to present the material in a manner that aids students in clarifying their own values and intentions as emerging designers. The course is based on the premise that theory and design practice inform one another in a mutually reinforcing way.

## **ELECTIVE COURSES**

### **AR-605: Architectural Design Project**

An architectural 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-606: Aesthetics in Architecture**

Studies in aesthetical attributes are a significant domain in architecture. The course aims to develop abilities in the students to review, understand and comment upon the various theories in aesthetics. Arts and science of architectural composition under the broad realm of aesthetics shall be studied with historic and contemporary perspectives. Instruction strategies shall comprise comparative studies, case examples and critical appraisal methods.

### **AR-607: Theory and Applications of Arts in Architecture**

Review of ideas and applications in arts; survey of artistic work, debates and discourses; themes; professional interface; scale and profiles; case studies in art applications; dominant issues in the application of arts in architecture.

### **AR-608: Green Architecture: Concepts and Applications**

This course will cover the impacts of building and traditional construction on environment; general principles of green architecture and sustainability; energy efficiency and conservation; day lighting and natural ventilation; environmentally smart materials; occupant health and productivity; deconstruction: life cycle costing and recycling; economics of sustainability; LEED rating system and accreditation; LEED Pakistan; understanding what is important (traditions/culture/attitude) and that the design process is extremely complex and sophisticated.

### **AR-609: Regulatory Considerations in Architectural Applications**

Concepts, theory and practice of regulatory framework; prescriptive regulations; performance based regulations; relationship of regulatory framework with resulting built environment; contemporary issues in regulatory aspects of architectural practice.

### **AR-610: Interdisciplinary Issues in Architectural Applications**

Contemporary architectural applications are impacted by several interdisciplinary issues pertaining to many other disciplines in social and applied sciences. Interface of architectural applications with engineering, management, business studies, media and communications. The course will be a combination of lectures and seminar based inputs.

### **AR-635: Case Studies in Architectural Conservation and Restoration in Developing Countries**

Concepts and methodologies in architectural conservation and restoration; international practices; restoration of historic architecture in Sanaa and Shibam in Yemen; restoration and re-development work in Mostar, Tuzla, Sarajevo and Bana Luca in Bosnia Hercegovina; restoration of historic architecture in Istanbul, Cappadocia, Edirne, Konya, Efes, Antalya and other locations in Turkey; restoration practices in Bam and other locations in Iran; restoration and conservation applications in Nepal and Sri Lanka.

### **AR-636: Advanced Computer Applications in Architecture**

The course introduces and discusses current developments in architectural discourse, design theory, digital design models and technique and their relations to design (the search for new forms and presentation techniques). The theoretical influence of architectural concepts is presented through historical references in digital designs, such as Frank Gehry, Peter Cook and Colin Fournier. Furthermore knowledge and understanding of the way that digital technologies support business and awareness of the new business models that are developing in response to these technologies.

### **AR-637: Architecture of Housing**

Advanced applications of architectural input in housing; emerging typologies of housing; socio-economic, physical, financial, managerial and cultural issues in housing; housing choices and availability relationships; evolving appropriate standards in housing; design, delivery and management of housing for large scale of populations; housing for emergency conditions; case studies.

### **AR-638: Advanced Landscape Architecture**

Principles and ingredients; typologies in landscapes; advanced approaches in landscape design; contextual factors in landscape design; interface with horticulture and agronomy; environmental considerations; landscape design considerations in water scarce conditions; landscape management; case studying examples from developing countries.

### **AR-639: Psychological Applications in Architectural Design**

Concepts and terminologies; psychological parameters in architectural design; implications of colours, dimensions, volumes and masses in architectural design; techniques in psycho-spatial analysis; case examples from existing buildings/elements of built environment; design approaches for remedy of existing buildings and new projects.

### **AR-643: Entrepreneurship in Architecture**

Concepts and terminologies in entrepreneurship; Studies in approaches to evolve and develop enterprises in architectural applications; forms and formats of service delivery; Overlapping with other professional domains; Contextual determinants in architectural entrepreneurship; Business planning for architectural firms; communication strategies in architectural entrepreneurship; Selected case studies; Studio exercise in developing model enterprise in architecture

### **AR-644: Stylistic Studies in Architecture**

The course shall build the intellectual capacity of students to comprehend, probe and analyse the stylistic attributes in architecture. Building upon the attainment of history, theory and criticism stream of learning, the course shall introduce contemporary dimensions of aesthetical and functional understanding about architectural styles. Ingredients of architectural styles; influences; derivatives; compositional spreads; design logics; languages and interface with the society shall be the main features that shall be studied. Case examples shall comprise western styles; oriental approaches to design; contemporary hybrids and evolving milieu in design applications.

### **AR-646: Community Architecture**

Context of development and role of architects; Alternative approaches to professional practice to reach out to urban and regional poor communities; Understanding and appraisal of important initiatives in community development where architects have played a leading role, study of concepts, approaches and strategies formulated and applied by Architect Perveen Rahman in Orangi Pilot Project and other extension attempts; Institutional arrangements for extending catalytical support to disadvantaged communities, Exposure and studio exercises shall be included to build the comprehension of students in the domain of community architecture in Pakistan and abroad.

### **AR-647: Advanced Writing Skills in Architecture**

Writing is an important medium of communication in architectural application. The course shall focus to enhance the writing abilities of students through instruction, experiential assignments and designed workshops. With appropriate choices of topics in architectural studies, the students shall be instructed in advanced skills in writing professional texts. Some important topics include appraisals of existing built environment, man-environment studies, cognitive studies in architecture, urbanism and urban design and vernacular – indigenous paradigms.

### **AR-648: Architecture and the City**

This course attempts to explore impact of urban phenomenon and context on architectural design. Discussions on advanced parameters and theories of cities provide the background for developing understanding. These discussions shall include patterns in landuse, density, infrastructure, ecology, housing, etc. Theories range from eastern and western writers such as Aldo Rossi, Kevin Lynch, Christopher Alexander, Balkrishna Doshi, Charles Correa, Geoffrey Broadbent, and other well-known contributors. Cases of both developing and developed world illustrate the relationship of architecture to the city in terms of its form, aesthetics, solid void diagram, urban inclusivity, entrances and other elements and principles.

### **AR-649: Advanced Themes in Analysing Architecture**

Advanced techniques in Analyzing Architecture are explored by undertaking analytical exercises for vicinity buildings as well as iconic architecture from history. Philosophical understanding of beauty, questions of interpretation and representation and manners in architecture are developed so as to enhance skills of in value judgment of design solutions. A multi-disciplinary survey is carried out for existing building analysis techniques from building science, conservation, fine arts, engineering, management, history and design approaches. Studio based exercises for analyzing architecture is undertaken with emphasis on professional presentation techniques.