

MADIHA

Official Address: Urban and Infrastructure Engineering Department, NED University of Engineering and Technology, Karachi, Pakistan, postal code. 75270

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1. PERSONAL DATA

Name: Madiha
Father's Name: Muhammad Abid Hussain
Husband's Name: Sultan Ahmed Khan
Date of Birth: Nov 03, 1986
Gender: Female
Marital Status: Married

2. ACADEMIC QUALIFICATIONS

(M.E) Civil Engineering 2011 NED University of Engineering & Technology Karachi, Pakistan.
Department of Civil Engineering
Major area: Civil Engineering
(Specialization in Transportation Engineering)
CGPA: 3.93

(B.E) Urban Engineering 2008 NED University of Engineering & Technology Karachi, Pakistan.
Department of Urban & Infrastructure Engineering
Major area: Urban Engineering
86% aggregate
Gold Medalist (1st Position Holder)

Intermediate 2004 Sir Syed Govt Girls College Karachi, Pakistan
Major area: **Pre-Engineering Group**
76% Grade A

Matriculation 2002 Rose Petal Secondary School Karachi, Pakistan.
Major area: **Science Group**
84% Grade (A-1)

3. JOB EXPERIENCE & CAREER SUMMARY

3.1 APPOINTMENTS

27 th March 2010 –Present	Lecturer BPS-18 (Regular Faculty Member) Department of Urban & Infrastructure Engineering, NED University of Engineering & Technology, Karachi, Pakistan
29 th December 2008 to 26 th March 2010	Lecturer BPS-18 (Adhoc) , Department of Urban & Infrastructure Engineering, NED University of Engineering & Technology

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3.2 TEACHING EFFORTS

- Taught the following theory courses and practical to Undergraduate students (First Year to Final Year) in the Department of Urban & Infrastructure Engineering, Civil Engineering, Petroleum Engineering, and Computer Information & System at NED University of Engineering & Technology.

Undergraduate Theory & Practical Courses Taught By me

- Engineering Materials
- Advanced Technology & Disaster Management
- Soil Mechanics-I & Soil Mechanics-II
- Principle of Engineering construction
- Civil Works & Quantity Cost Estimation

Conducted laboratory sessions of aforementioned courses with:

- Mechanics of Solids-I, Surveying -I, Surveying -II, Statics and Dynamics, Urban Hydrology & Municipal Engineering.

Examiner and Invigilator

- Remain Paper Setter, Internal and External Examiner for various subjects
- Performed Invigilation Duties.

3.3 ACADEMIC SUPERVISIONS

- Remain Co-Supervisor and Supervisor for Final Year Undergraduate projects in the department of Urban and Infrastructure Engineering, NED University.

Final Year Projects Title

Year of Supervision

- | | |
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| 1. GIS based Flood Impact Assessment | 2012 |
| 2. Statistical Analysis of Traffic Stream Headways for Different Arterials of Karachi | 2013 |
| 3. Laboratory Investigation of strength of concrete and soil properties by using Fly Ash | 2015 |

3.4 ADMINISTRATIVE RESPONSIBILITIES & MANAGEMENT SKILLS

Class Advisership

- Appointed as a Class Adviser ship for several times for (First Year to Final Year periodically).

Miscellaneous Tasks:

Student-teacher dealing, preparation of schedule (time table), monitoring of classes held, maintenance of students attendance record, parents-teacher consultation, correspondence with course teachers, smooth conduct of examinations, preparation of condonation cases for short attendance students, providing guidelines to students for registration of courses, arrangement of Internship in coordination with Director Industrial Liaison Office (NEDUET) and Engineering Institutions (Private and Public Sectors) for Third year Undergraduate students, solving academic issues of students, scholarships documentation, assessing students for selection of final year

3.5 TEAM WORK

- Worked as a member of **Board of Studies (BOS) Committee work** from 2014 to 2015.
Role: Revised credit hours and course contents in curriculum of B.E Urban Degree Programmes as per Higher Education Commission (HEC) & Pakistan Engineering Council (PEC) guidelines.
- Worked as a team member for **Outcome Based Education (OBE) Documentation work.**
Role: Developed Course Profiles for various subjects as per Pakistan Engineering Council recommendation.
- Worked as a team member to study the causes of failure of storm water drainage from August –September 2009.
Role: A comprehensive report has been prepared on ‘Facts Finding Study on Karachi Storm Water Drainage Failure’.

3.6 INTERNATIONAL CONFERENCE COORDINATOR & WORKSHOP TRAINER

- Worked as **Conference Coordinator and organized** the conference, “Third International Symposium on Infrastructure Engineering in Developing Countries (IEDC-2010) and 1st International Conference on Sustainable Transportation & Traffic Management Karachi, Pakistan”, 01 to 03 July 2010, Organized by NED University of Engineering & Technology, Karachi, Pakistan.
http://www.neduet.edu.pk/UE/IEDC-2010/Conference_Coordinators.html
- Conduct a workshop as a Trainer on Introduction to GIS Software Applications from 26th May to 28th May 2009.

3.7 RESEARCH DETAILS & SCIENTIFIC ACHIEVEMENT

- Appointed and worked as a Research Assistant on Project Title ,”Development of ITS based Traffic Management Model for Metropolitan Area of Pakistan with Karachi as Pilot case study” from 2011 to 2012, funded by PAK-USAID.
- Appointed and worked as a Research Assistant on Project Title ,” Incorporation of Traffic Heterogeneity in Capacity Analysis of Multi-Lane Urban Arterial of Karachi through development of a Simulation Model” from 2011 to 2012, funded by PAK-USAID.
- Completed Dissertation/Independent study Project (ISP), equivalent to **6** credit hours in Master of Engineering, title, Calibration of car -following models for different traffic stream scenarios of Karachi city, 2011.

3.8 MISCELLANEOUS TASKS

- Remain Master of ceremony for different events.
- Remain Department Representative, Green Society at NED University, March 2012.
- Prepared presentations for Open Day and Orientation Day.
- Arranged and assist Field Visits for the students to enhance their practical knowledge.
- Organized and supervised “Urban Day” i.e. Student Project Competition.
- Designed the content of Engineering Material workbook.
- Arranged sponsors and prepared tariff plan for International Workshops on Road Safety & Traffic Simulation in December 2015.

4. PUBLICATIONS

International Conference Papers:

- Madiha, Adnan,M., Ali.M.S.,(2012) “**Calibration of car-following model for different traffic stream scenarios of Karachi City**”,*Awam International Conference on Civil Engineering (AICCE'12) Geohazard Information Zonation (GIZ'12) Park Royal Penang Resort*, Organized by: School of Civil Engineering University Sains Malaysia, 28th-30th August 2012.
- Jooma.R.,Razzak.J.,Ahmed.M.,Madiha.,” **GIS based Placement and route planning of Emergency Response Vehicle (ERVs) for efficient incident management**”, *Third International Symposium on Infrastructure Engineering in Developing Countries (IEDC2010) and1st International Conference on Sustainable Transportation & Traffic Management* Organized by NED University of Engineering &Technology, Karachi, Pakistan, 13th July, 2010.

5. PROFESSIONAL TRAINING & SKILLS

- Received ISO Training on “**Time Management**” on 19th August 2016 at CIS Lecture Hall, NED University of Engineering &Technology.
- Received (MR ISO 9000) Training on “**IT Tools for Academic Profession**” from 12th & 13th Sept, 2013, NED University of Engineering &Technology.
- Received Training on “**Surveying Instruments**” on 1st Oct, 2011 & 10th Oct, 2011 at NED University of Engineering &Technology.
- Received Training on “**Ingredients of Successful Academic Career**” from 27th March, 2013, CCEE-NED University of Engineering & Technology.
- Received MR ISO 9000 Training on “**Duties & Responsibilities of Class advisers**” on 14th Jan, 2102, NED University of Engineering & Technology.
- Received training on two-day course on “**Traffic Accidents & Road Safety Engineering**” from 30th to 31st October 2010 at CCEE-NED University of Engineering & Technology.
- Received Training on “**Presentation and Communication Skills**” from 5th to 7th May 2010, CIS Department NED University of Engineering & Technology.
- Received on job training on “**Database Programming for GIS applications**”, 06th to10th April, 2009 from SUPARCO.
- Received training on “**Traffic Visio way Open counter**,” 4th Feb, 2009 to 11th Feb, 2009, Exponent Engineering firm.
- Certified Course of **Auto Cad** from AutoDesk Authorized Training Center, 2006, NED University of Engineering &Technology.
- Certificate Course of **Eagle Point** (Road Calc) Organized by Geo-consult Pakistan, 2008, NED University of Engineering & Technology.
- **Geomedia** Pro. (For GIS) used in Final year project, 2008, NED University of Engineering & Technology.

6. SEMINARS & WORKSHOPS

- Attended Road Safety Seminar organized by National Highway & Motorway Police on 1st March 2012, NEDUET.
- Attended seminar on Traffic Congestion, organized by Toyota Research, 2nd April 2012, NEDUET
- Attended Orientation Program Organized by PAKSTRAN, 25th August 2015, Auditorium, NEDUET.
- Attended workshop on Sustainable Transportation System and Role of Pakistan in capacity Building organized by PAKSTARN, 3rd December 2014, NEDUET.
- Attended a Road Safety seminar on (Safety of road user, challenges and solutions) organized by Motorway Police , 16th Nov, 2009 at Pearl Continental.
- Attended Executive Workshop on GIS Based Decision Support Systems for Infrastructure Decision Support Systems for Infrastructure Management, Disaster Response and Community Preparedness, 18th June, 2008, CIS Lecture Hall, NEDUET.

- Attended a seminar on Environmental Impact Assessment on proposed Desalination plant of Karachi city at Hawks bay area, April 2008, at Federation House.
- Attended a workshop on “National Road Safety” organized by Indus Motors Limited April 2007 in Marriot hotel.

7. SCHOLASTIC HONOURS

GOLD MEDAL 2008

- Certificate of Academic Merit and Gold Medal awarded to me for securing First Class First position Aggregate **86 %** at the Bachelor of Engineering (URBAN) Examination 2008 from NED University of Engineering & Technology Karachi.

XIXTH STAR AWARDS 2008

- Certificate of Excellence awarded to me in which I have selected as Star Laureate 2008 for my outstanding achievements in the field of Engineering by South Asia Publications.

BEST TEACHER AWARD 2012

- Received best teacher Awards by students of B.E Urban Engineering Batch (2008-2009).
- Ranked as Excellent Teacher (Bachelors Level) by ISO Certified Student’s Survey.

8. INTERNSHIP

Company Name:	National Engineering Services Pakistan Limited, Karachi
Formal Title:	Trainee Engineer (Roads & Bridges)
Duration:	From 4th June 2007 to 13th July 2007

9. PROFESSIONAL MEMBERSHIP

- Affiliated as a Registered Engineer (R.E.) with Pakistan Engineering Council. (Reg. No. URBAN/34).
- Member the Institution of Engineers Pakistan (MIEP) (Reg. No. LM-16532).

10. COMPUTER SKILLS

Softwares	S-PARAMICS, AutoCAD, Road Calc, Prezi, Zotero
Statistical Package	SPSS
Languages	FORTTRAN, MATLAB
Office Work Packages	MS office, MS project ,Microsoft Visio