HAFIZ ENGINEER MUHAMMAD ZEESHAN
MATH INSTRUCTOR

+92 333 3680140   E-mail: engineermzeeshan@gmail.com   Linkedin: https://tinyurl.com/n5v4ym73
Karachi, Pakistan,

SUMMARY

Dynamic Mathematics Educator and Ph.D. Scholar with over 11 years of diverse teaching experience across local and international platforms. Currently pursuing a Ph.D. in Mathematics at NED University, with research focused on mathematical modeling for engineering applications, particularly in metallurgy—drawing on a unique blend of academic and industry-relevant expertise.

Since beginning my teaching career in 2013, I have developed and delivered advanced mathematics curricula at the university level, fostering critical thinking and analytical skills in students. Presently, I serve as a Lecturer in the Department of Mathematics at NED University and as Visiting Faculty for BBA programs at a University of Karachi-affiliated institution, teaching Mathematics and Statistics.

Beyond classroom teaching, I have a strong global footprint in online education. I have tutored students from leading international universities—including Statistics for a Master's student at the University of Wisconsin, Partial Differential Equations for a student from the University of Geneva, and Calculus for undergraduates at the University of Alberta, among others.

My passion for academic research has led to the publication of my first peer-reviewed paper, with several others in development. Renowned for creating engaging, student-centered learning environments, I am deeply committed to educational excellence and continuous professional development, ensuring I remain at the forefront of both pedagogy and research.

TEACHING EXPERIENCE

Lecturer
NED University of Engineering and Technology
10/2020 – Present   **Karachi, Pakistan**
Mathematics Department

- Deliver engaging and comprehensive lectures on various mathematical topics to undergraduate students.
- Develop and administer assignments, quizzes, and examinations to assess students understanding and progress.
- Ensure fair and timely grading of assignments, quizzes, and exams, adhering to established academic standards.
- Integrate engineering-related examples and applications into lectures to demonstrate the practical relevance of mathematical concepts.
- Provide individualized support and guidance to students, addressing academic concerns and promoting student success.
- Collaborate with colleagues to enhance curriculum design and instructional methodologies, fostering a dynamic learning environment.
- Participate in departmental meeting, workshops, and professional development activity to stay abreast of current trends and best practices in mathematics education.

EDUCATION

PhD Applied Mathematics
NED University of Engineering and Technology
        01/2025– Continue

Masters Applied Mathematics
NED University of Engineering and Technology
        12/2018 – 06/2020

Bachelor of Education
Allama Iqbal Open University (AIOU)
        04/2018 – 11/2019

Bachelor of Engineering in Metallurgy
NED University of Engineering and Technology
        12/2013 – 09/2017

KEY SKILLS

Mathematical & Computational Expertise
Advanced knowledge in mathematical modeling (PDEs, FEM), elastic modulus optimization, and stress-strain analysis for high-entropy alloys and biomedical applications.

Global Teaching & Curriculum Design
Experienced in designing and delivering engaging, customized courses in applied mathematics, statistics, and engineering, across both physical and online platforms.

Research & Data Analysis
Skilled in using FEniCS (Python), COMSOL, ANSYS, and MATLAB for computational simulations, data handling, and research validation.

Cross-Cultural Communication & Collaboration
Extensive experience working with students and researchers from diverse academic and cultural backgrounds, fostering inclusivity and effective communication in both virtual and classroom settings.

Academic Writing & Publication
Proficient in preparing scientific papers, technical reports, and research documentation, with ongoing contributions to peer-reviewed journals.

Professional Strengths: Critical Thinking, Decision Making, Planning & Coordination, Cross-Cultural Communication, Self-Motivated

Freelance Online Mathematics Instructor
Remote|Self-Employed
03/2022 – Present   U.S., Canada & Europe
- Delivered personalized online instruction in Mathematics and Statistics to international students across the globe.
- Designed custom learning plans and assessments aligned with each university's academic standards.
- Utilized online platforms (Zoom, MS Teams, Google Meet) to facilitate interactive and effective learning environments.
- Known for simplifying complex concepts and achieving measurable improvement in student performance.

Mathematics Teacher
The Quest Academy of Science
03/2014 – Present   Karachi, Pakistan
Coaching Center in Malir Cantt
- Led mathematics instruction for intermediate-level students at a coaching center, fostering a conductive learning environment. Developed and implemented comprehensive lesson plans tailored to student's needs, ensuring effective coverage of curriculum topics.

Visiting Lecturer
College of Business and Finance
02/2024 – 01-2025   Karachi, Pakistan
University of Karachi Affiliated College
- As a Visiting Lecturer at the College of Banking and Finance, I deliver engaging lectures on Basic Mathematics and Statistics to BBA students. I develop assignments, administer tests and exams, and provide constructive feedback to promote academic growth and success.

Lecturer
Fazaia Inter College Malir
01/2018 – 10/2020   Karachi, Pakistan Malir Cantt Karachi
- Created and carried out lesson plans covering important topics in the subject.
- Worked collaboratively with fellow educators to identify and resolve systematic issues within the mathematics curriculum.

RESEARCH WORK AND PUBLICATIONS

Machine Learning Prediction of Mechanical Properties in Reinforcement Bars.
IJIST
Taimoor Hussain-Muhammad Ali Siddiqui-Syed Dabeer Mehdi-Muhammad Zeeshan-Minhal Waseem-Zain Noreen
03/2024
This Study addresses the pressing need for precise prediction of mechanical properties in steel reinforcement bars (rebars) through a data-driven approach utilizing machine learning techniques.

Efficient Re-initialization of the level-set field using Geometrical approach
Mathematics Department, NED University of Engineering and Technology
Muhammad Zeeshan
11/2020
MS Applied Mathematics Thesis

ACHIEVEMENT

Outstanding Student Satisfaction
Consistently received high ratings from both local and international students for delivering clear, engaging, and results-driven mathematics instruction.

International Impact in Education
Successfully taught a wide range of mathematics topics to students from top global institutions, including the University of Wisconsin, University of Geneva, and University of Alberta, contributing to improved academic performance.

Research Innovation
Ongoing Ph.D. research focused on modeling the elastic modulus of high-entropy alloy implants, integrating advanced PDE and FEM techniques—early findings are in preparation for publication.

Curriculum Innovation & Delivery
Created and implemented tailored course materials in Engineering Mathematics and Business Statistics, effectively utilizing online platforms to enhance student learning and interaction.

Technology Integration in Teaching
Leveraged advanced computational tools (FEniCS, MATLAB, LaTeX) and virtual teaching platforms (Zoom, MS Teams) to foster interactive and hands-on learning experiences.

PASSIONS

Mathematics Education Advocacy:
Actively engaged in initiatives to enhance mathematics education and promote numeracy skills among students. Volunteer efforts including tutoring sessions and participation in educational outreach programs aimed at fostering a love for mathematics.

Mathematical Research and Exploration:
Passionate about delving into mathematical theories and problem-solving. Actively involved in conducting research projects, attending conferences, and contributing to academic publications in the field of mathematics.

Mentorship and Academic Support:
Dedicated to supporting students' academic and personal growth. Serve as a mentor to students, providing guidance and encouragement to help them excel in their mathematical studies.

Study of math teaching difficulties (geometric issues) and its solution for high school learners.
Allama Iqbal Open University
Muhammad Zeeshan
10/2019
Bachelor of Education Thesis

Analysis of corrosion behavior of S.S. 316 L in Alkaline solution (acidic at different PH) with or without inhibitors, to overcome the problems facing in oil and gas sectors petrochemical and chemical industries due to corrosion.
Metallurgical Engineering Department, NED University of Engineering and Technology
Muhammad Zeeshan
07/2017
BE Thesis

Continuous learning and professional Development:
Committed to staying updated on the latest advancements in mathematics and pediagogy. Actively participate in workshops, seminars, and online courses to enhance teaching methodologies and integrate innovative approaches into the classroom.

Promoting Diversity and Inclusion in Mathematics:
Advocate for diversity and inclusion within the field of mathematics. Support initiatives that aim to increase representation of underrepresented groups in STEM fields and create inclusive learning environments for all students.