

Komal Ali

CIVIL ENGINEER

As a Civil Engineer with a Master's degree in Structural Engineering, I have gained experience in academia, research, and the construction industry. Currently serving as a Lecturer in the Department of Civil Engineering at NED University of Engineering and Technology, I have developed a strong understanding of structural analysis, design, and sustainable construction practices. My professional journey began as a BIM Engineer at Osmani & Company (Pvt.) Ltd., where I worked on architectural and structural modeling, project coordination, and documentation. I aim to contribute effectively to teaching and research in the field of civil and structural engineering.

✉ komalalikk2000@gmail.com

📍 Karachi, Pakistan

EDUCATION

M.E in Structural Engineering

NED University of Engineering and Technology

02/2023 - 06/2025

B.E in Civil Engineering

NED University of Engineering and Technology

10/2018 - 10/2022

EXPERIENCE

Lecturer

NED University of Engineering and Technology

09/2025 – Present

Visiting Faculty

NED University of Engineering and Technology

01/2025 – 06/2025

Research Assistant

NED University of Engineering and Technology

01/2024 – 05/2025

- Conducting research focused on developing geopolymers for the restoration and conservation of historical buildings.
- Performed nondestructive in-situ testing (NDT) on various heritage sites across Pakistan to assess structural conditions
- Led field visits to historical structures to collect data, analyze deterioration patterns, and evaluate restoration needs.
- Collaborated with conservation experts to ensure material compatibility and historical authenticity in restoration work.
- Contributed to the development of sustainable materials for heritage preservation through laboratory trials and on-site testing.

BIM Engineer

Osmani & Company (Pvt.) Ltd

01/2023 – 01/2024

- Developed detailed architectural and structural models in Revit in alignment with project deliverables and BIM execution plans
- Created accurate quantity take-offs and area schedules directly from BIM models to support cost estimation and project planning
- Produced high-quality tender and construction documentation, including plans, sections, and isometric drawings, derived from Revit models.

Structural Design Intern

Alliance Consultants

09/2021 – 10/2021

- Assisted senior engineers in the design and analysis of structural components for residential and commercial buildings.

RESEARCH PROJECTS

Development of Sustainable Building Material for Restoration and Conservation for Historical Buildings.

NED University of Engineering and Technology (Master's Thesis)

01/2024 – 06/2025

Mechanical Properties of Ultra-High Strength Concrete

NED University of Engineering and Technology (FYDP)

10/2021 - 10/2022

LICENSES AND CERTICATIONS

Building Information Modelling

NED Academy - NEDUET

Issued Dec 2023

Registered Engineer

Pakistan Engineering Council

Issued Nov 2022

WORKSHOPS AND PARTICIPATIONS

Participated in workshop on Conservation & Restoration Techniques (held at Makli, Thatta – Organized by UNESCO - Ministry of Education, Culture and Science of Netherlands)

Seminar on GHAR- Green Housing, Affordable, Resilient challenges and Opportunities

(Held at NED University of Engineering & Technology)

2-Days Gender-Based Violence GBV Training

(WORLD BANK GROUP - Organized by: KNIP - Karachi Neighborhood Improvement Program)

Managing Construction design & supervision projects using "Microsoft Project"

(Held at Osmani & Company (Pvt) Ltd)

AI & Machine Learning in Construction

(Held at Osmani & Company (Pvt) Ltd)

BIM process according to ISO 19650

(Held at Osmani & Company (Pvt) Ltd)

Designing and Executing a Bamboo Reinforced Concrete Beam

(Organized by ACI NEDUET Student Chapter)

Designing and Executing a Reinforced Concrete Column

(Organized by ACI NEDUET Student Chapter)

SKILLS

- | | |
|--------------|--------------------|
| • Revit | • Tekla Structures |
| • Navisworks | • Primavera P6 |
| • E-tabs | • MATLAB |
| • Grasp | • Mathematica |
| • SAFE | • Match |

LANGUAGES

English

Full Professional Proficiency