

Md Nazmul Islam

📍 Sirajganj, Bangladesh ✉ nazmul.759293@gmail.com ☎ +880 1516 591993
🌐 nazmuleng.github.io 🌐 [LinkedIn](#)

About Me

Mechanical Engineering graduate with research experience in computational mechanics, composite materials, and advanced manufacturing. My work combines finite element modeling with experimental characterization to understand process–structure–property relationships in engineering materials. I have developed strong skills in simulation, laboratory testing, and scientific analysis. I aim to pursue a fully funded graduate program to contribute to high-performance materials design, multiscale modeling, and data-driven engineering solutions.

Research Interests

Composite and nanocomposite materials, computational mechanics, finite element analysis (FEA), additive and advanced manufacturing, material degradation and failure analysis, multiscale modeling, interface mechanics, and structure–property relationships.

Education

B.Sc. in Mechanical Engineering Dec 2016 – Apr 2022
Khulna University of Engineering & Technology (KUET), Bangladesh
CGPA: 3.45 / 4.00 [Transcript](#)

Undergraduate Thesis: Computational Study of Multi-layer Printed Circuit Boards Under Bending Load

Advisor: Dr. Md. Shariful Islam

Publications

- **Islam, M.N.**, Anwar, M.S., Islam, M.S., Arifuzzaman, M., Al Bari, M.A. (2023). *Bending analysis of glass fiber reinforced epoxy composites/copper-clad laminates for multi-layer printed circuit boards. Hybrid Advances*, 4, 100090. [DOI](#)
First author; conducted finite element simulations, data analysis, and manuscript writing.

Academic Projects

Design and Fabrication of Manual Die-Cutting Machine

Supervisor: Dr. Md. Kutub Uddin

- Designed and fabricated a low-cost, hand-operated die-cutting machine.
- Performed mechanical design, stress analysis, and fabrication planning.
- Enabled precise and repeatable cutting for small-scale industrial applications.

Post-Graduation Activities (2022 – Present)

- Continued research on composite materials and PCB bending, resulting in a peer-reviewed journal publication.
- Strengthened skills in ABAQUS, SolidWorks, MATLAB, Python, and numerical modeling.
- Managed a family-owned twisting mill; supervised 8 workers and improved production efficiency by 10%.
- Solved real-world mechanical issues including shaft fatigue, vibration, and bending failures.

Technical Skills

- **CAD/CAM:** SolidWorks, AutoCAD
- **Simulation:** ABAQUS, ANSYS
- **Programming:** C, MATLAB, Python (basic)
- **Materials:** Glass fiber reinforced epoxy composites
- **Experimental:** UTM, CNC, Lathe, Milling, Welding, Grinding
- **Other:** Academic writing, problem-solving, project management

Training

- AutoCAD & SolidWorks Training — CADers, KUET (2017)
- Programming and Robotics Workshop — LOOP, KUET (2018)
- CNC, CAM, and 3D Printing Training — KUET (2019)

English Language Proficiency

IELTS Academic — British Council (Oct 2025)
Overall Band: 7.0 (L: 8.5, R: 7.0, W: 6.5, S: 5.5)

Honors and Awards

- University Technical Scholarship (2016–2020)
- Inter-departmental Indoor Carom Competition — 2nd Position

Certifications

- Introduction to Programming with MATLAB — Vanderbilt University (Coursera)
- Excel Skills for Business (Essential to Advanced) — Macquarie University (Coursera)

References

1. Dr. Md. Shariful Islam

Professor, Department of Mechanical Engineering,
KUET

Email: msislam@me.kuet.ac.bd

Phone: +88 01779 876378

3. Somnath Somadder

Assistant Professor, Department of Mechanical
Engineering, KUET

Email: somnath@me.kuet.ac.bd

Phone: +88 01752 292813

2. Dr. Md. Arifuzzaman

Professor, Department of Mechanical Engineering,
KUET

Email: arif48@me.kuet.ac.bd

Phone: +88-02477733351-69 (Ext. 431)

4. Md. Harun-Or-Rashid Mollah

Assistant Professor, Department of Mechanical
Engineering, KUET

Email: harunrashid@me.kuet.ac.bd

Declaration

I hereby declare that all the information provided in this curriculum vitae is true, accurate, and complete to the best of my knowledge and belief.

February 2026