Raheel Nazir





Start Date: May 2025

Personal Statement: Mechanical Engineering student with a strong foundation in calculus, physics, and engineering design. Seeking hands-on experience in mechanical design, prototyping, and product development to apply theoretical knowledge in real-world applications. Passionate about improving lives and pushing the limits of technology.

Education

University of Maryland Transfer Program

Expected May 2027

Community College of Baltimore County

January 2023 - Present

Associates of Engineering - Mechanical Engineering

Technical Skills: SolidWorks, AutoCAD, CATIA, Revit, MATLAB

Extracurricular Activities: LSU Tiger Racing Formula SAE, Progressive Student Alliance, Fencing, Guitar

Work Experience

Al Kareem School

Assistant Teacher

May 2022 - Present

- Assisted in developing and delivering lesson plans, helping students understand key concepts in subjects such as mathematics and science.
- Provided individual support to 50+ students, adapting teaching techniques to meet various learning styles.
- Supported classroom management and activities, ensuring a positive and productive learning environment.

Projects

Intro to Engineering Design – Team Lead

January - May 2024

- Designed a spaceship the size of a U.S. aircraft carrier using AI-driven tools, focusing on modularity and efficiency for space assembly.
- Used AutoCAD to create detailed blueprints of modular components, ensuring precision and compatibility for orbital assembly.

Calculus III August - December 2024

- Worked on a project applying multivariable calculus to model the motion of a pendulum under varying forces.
- Utilized advanced calculus techniques to solve complex integrals and differential equations.
- Presented results, demonstrating the real-world application of calculus principles.

Mechanics I (Statics)

August - December 2024

- Completed a project analyzing static equilibrium of a structure, calculating forces and moments to ensure stability and safety.
- Used engineering software to simulate and visualize forces acting on the structure.
- Presented findings in a report, showcasing problem-solving and technical communication skills.

Leadership

First-Year Experience Mentor	August 2024 – Present
Student Government Association	August 2024 – Present
Student Engagement Ambassador	August 2024 – Present
Student Programming Board	August 2024 – Present