R. Tanner Coles

480-296-1227 - rtanner.coles716@gmail.com

Aspiring Mechanical Engineer seeking an internship with engineering firms to apply technical knowledge in AutoCAD, thermal analysis, and coding to support company projects.

Skills

- AutoCAD (Solidworks and Onshape)
- Programming (MATLAB and C)
- Ansys Fluent
- Excel
- Kinematics Software

Education

Northern Arizona University **Aug 2022 - Present**

- Pursuing Bachelor's of Science in Mechanical Engineering under the Sanghi College of Engineering (SCE)
- Important Courses: ME 386W: Engineering Design, ME 450: Heat Transfer, ME 535: Wind Energy Engineering, ME 476C: Capstone
- Current GPA: 3.59

Westwood High School **Aug 2018 - May 2022**

- Earned diploma from the International Baccalaureate Program

Work Experience

Tutor, Lumberjack Mathematics Center, NAU **Jan 2023 - Dec 2025**

- Improved my communication skills in order to better express difficult ideas and concepts, and develop problem-solving methods with students.
- Assisted 10 students per hour within the Math Lab, improving my own understanding of foundational mathematics concepts.

Cook, Nimarco's Pizza Flagstaff **Jun 2024 - Present**

- Managed food preparation and customer service in a high-paced and collaborative environment.

Extracurriculars

Theta Tau, Professional Engineering Fraternity **Aug 2024 - Present**

- Pillars of Professionalism, Service, and Brotherhood
- Positions: Rush Chair (Recruitment) Fall 2024, Treasurer Fall 2025 - Present
- Joined a community of SCE peers that emphasizes the professional and service-centered aspects of our specialized fields.

Project Experience

Intro to Engineering Design EGR 186 **Aug 2022 - Dec 2022**

- Gore Project: Created an exercise-centered device involving bands, and created prototypes involving the combination of pieces made from AutoCAD and salvaged materials.

Applied Mechanics: Dynamics ME 252 **Jan 2024 - May 2024**

- Newton's Cradle: Derived and validated equations of motion within MATLAB to model energy transfer within a multi-body system.
- MATLAB Project: Used a coding language to solve energy and velocity problems involving roller coasters. Use of looped computations and plotting to finalize calculations.

Wind Energy Engineering ME 535 **Aug 2025 - Dec 2025**

- Final Project: Analysis of Vertical Wind Turbine using Ansys. Creation of boundary conditions and flow areas for computational simulation.
- Obtained Ansys Professional Certification: Getting Started with Ansys Fluent

Advanced Thermal Analysis ME 530 **Aug 2025- Dec 2025**

- Final Project: Mathematical Analysis of a 2D domain with heat dissipation.