

Kaitlyn Davis

Flagstaff, Arizona

(928) 380 0802 | Khd49@nau.edu

LinkedIn: <http://www.linkedin.com/in/kaitlyn-davis-02bb683b1>

PROFESSIONAL SUMMARY

Senior Mechanical Engineering student specializing in design, analysis, and prototyping with applications in biomedical systems. Experienced in CAD modeling, mechanical testing, and system integration through capstone development of a robotic arm platform. Seeking a biomedical engineering internship or entry-level role focused on medical devices or assistive technologies.

EDUCATION

Flagstaff High School, 400 W Elm Ave, Flagstaff, AZ 86001 — *High School*

August 2018 - May 2022

Graduated from Flagstaff High School with a GPA of 3.7.

Coconino Community College, 2800 S Lone Tree Rd, Flagstaff, AZ 86001 — *High School/College*

August 2020 - May 2022

Dual Enrollment through Coconino Community College, where some college credit was earned while attending high school.

The University of Arizona, Tucson, AZ 85719 — *College*

August 2022 - December 2023

Mechanical Engineering.

Northern Arizona University, Flagstaff, AZ 86001 — *College*

January 2023 - Present

Mechanical Engineering, a transfer student studying mechanical engineering for my masters degree. Currently a senior and a current GPA of 3.03.

Relevant Coursework:

• Mechanics of Materials • Fluid Mechanics • Heat Transfer • Engineering Design • Materials Science • Dynamics • Manufacturing Processes • Biomaterials

ENGINEERING PROJECT EXPERIENCE

Lerner Robotic Arm — Capstone Design Project

Senior Design Project | August 2024 - Present

- Designed and modeled robotic arm components using SolidWorks to help rehabilitation for stroke patients

The team's main goal was to do the following:

- Performed engineering analysis (stress, torque, motion range, or kinematics) to validate design performance
 - Selected materials based on strength, manufacturability, and application constraints relevant to assistive or medical-device contexts
 - Built and tested prototype; collected performance data and iterated design based on results
 - Produced technical documentation including drawings, test results, and design rationale
 - Created Bill of Materials for the overall project
-

TECHNICAL SKILLS

Design & Analysis

CAD: SolidWorks

Engineering drawings & GD&T fundamentals

Basic FEA concepts (stress/deflection)

Prototyping

Data collection and technical documentation

Programming & Tools

MATLAB • C++ (Visual Studios, Arduino) • Excel • SimScale

Engineering Knowledge Areas

Biomaterials fundamentals • Materials selection • Statics & dynamics

LEADERSHIP & ACTIVITIES

Advanced Indigenous Science and Engineering Society (AISES) — Member, August 2018 - December 2023

- Was an active member while attending University of Arizona

Native American Science and Engineering Program — *The University of Arizona Program*

- Completed a Geoscience project based on water quality.

Native American Research Center (NARCH) Program — *Dine College Internship*

- Completed three modules CITI Training and researched public health.
-

CERTIFICATIONS / AWARDS

Native American Honors Society Award Earned in all four years in high school for excellence as a Native American Student

Chief Manuelito Scholarship

Scholarship for Native American students for the 2022-2023 academic term

Scholarship for Native American students for the 2023-2024 academic term

Scholarship for Native American students for the 2025-2026 academic term

Fifth Place in the 2022 AZ JSHS Virtual Poster Winner Entered the AZ JSHS Science Fair for the Native American Science and Engineering Program

NTUA Scholarship

Scholarship from the Navajo Tribal Utility Authority for the 2022-2023 academic term

Scholarship from the Navajo Tribal Utility Authority for the 2023-2024 academic term

Scholarship from the Navajo Tribal Utility Authority for the 2024-2025 academic term