

# Tyler J. Rottkamp

MECHANICAL ENGINEER | GRADUATION MAY 2027

910 South Milton Rd, Flagstaff, AZ | 480.482.0035 | [tjrottkamp@gmail.com](mailto:tjrottkamp@gmail.com)

## Professional Experience

**NAU | Bioengineering Devices Lab** **2026-Current**

- Help clean up blood vessel models and other things around the lab
- Assist with blood flow and clot experiments
- Viscosity testing the fake blood at different temperatures

**Nimarco's Pizza | Cook** **2025-Current**

- Line cook position
- Trained new hires

**NAU | Adaptive Materials and Systems Lab Assistant** **2025-2025**

- Test magnetic shape memory alloys (MSMAs) in tension and record their recovery
- Compile results and send to professor for further research with my lab notes
- Assist in testing the MSMAs response in actuation and mechanical systems

**Raising Cane's | Certified Trainer** **2021-2025**

- Certified Crew Position
- Trained new hires

**Desert Shadows Schools | Flag Football Assistant Coach** **2019-2022**

- Coached at Desert Shadows Elementary and Middle Schools
- Worked with players on physical and strength training
- Assisted in development of plays and strategies

## Education

**Northern Arizona University** **2024 - Present**

Major: M.S. Mechanical Engineering

- Advanced Master's Program
- Sustained GPA requirement of 3.25

**Northern Arizona University** **2022 - Present**

Major: B.S. Mechanical Engineering

- The National Society of Leadership and Success (NSLS: 2023, 2024, 2025)
- Machine Shop certified (2023)

**Horizon High School** **2019 - 2022**

- National Junior Honors Society (NJHS: 2016, 2017)
- Horizon Engineering Club (HEC: 2018, 2019)
- National Honors Society (NHS: 2019, 2020, 2021, 2022)
- Football Team Captain (2018, 2019, 2021) State Champions - 2021

- Unweighted GPA: 3.89

## **Skills and Abilities**

- Proficient in CAD/SolidWorks
- Proficient in MATLAB
- Problem-solving, Communication, and Leadership
- Design Process
- Solving Systems of Equations
- Materials Testing/Lab Work
- Manufacturing/Fabricating
- Lathe and mill

## **Project Experience | Horizon/NAU**

- WL Gore Autonomous Pinecone Collector | ME476C/486C
- SMA Adjusted Aerodynamic Flap | ME575
- Heat and Wave Equation Code, Tridiagonal Solver, Euler's/Newton's | MAT362
- Retractable Studded Tires | ME386W
- Kitchen Arthritis Assistant | ME286
- Design and build Mini-Bridge | ME186
- Tennis Ball Trebuchet | HEC