

Tyler Hayes

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EDUCATION

<i>University of North Carolina at Charlotte</i> , Charlotte, NC.	May 2025
Bachelor of Science in Mechanical Engineering	
<i>Honors: Magna Cum Laude (GPA: 3.73/4.0)</i>	
<i>University of North Carolina at Charlotte</i> , Charlotte, NC.	May 2026
Master of Science in Mechanical Engineering	
Concentration in Metrology and Manufacturing	

ENGINEERING EXPERIENCE

TRC Companies, Inc. Huntersville, NC

<i>Power Distribution Intern</i>	May 2024 - August 2024
<ul style="list-style-type: none">Collected data on distribution poles in the fieldCreated plans to attach new communication cables to distribution poles in SpidaCALCDesigned underground routes for fiber optic cablesShadowed power design engineers to learn how to design poles according to Duke Energy specifications	
Senior Design Capstone Project, Siemens Energy , Charlotte, NC	August 2024 - May 2025
<ul style="list-style-type: none">Developed a fixture to streamline the manufacturing of turbine gland seals and housingsReduced preparation time and improved the ease of manufacturing of gland seal componentsCreated an immersive virtual reality experience to communicate design intent and functionality effectivelyProduced a to-scale 3D-printed prototype to further demonstrate functionality	
Junior Design Project, UNC Charlotte , Charlotte, NC	January 2024 - May 2024

- Designed and built a functional gripper for a pick-and-place robotic arm
- Performed kinematic and force calculations to meet design and payload specifications
- Programmed and wired an Arduino Uno to autonomously and manually sort colored blocks

SKILLS

- My Portfolio: <https://tylerhayesengineering.com/portfolio>
- Proficient in CAD packages such as Creo, Fusion 360, Solidworks, and OnShape
- Hands-on experience programming and deploying Arduino and Photon 2 microcontrollers