

Brandon Phillips

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Sanford, North Carolina 27330

Education

Bachelor of Science in Mechanical Engineering	Expected May 2026
North Carolina State University	
Associate of Science	May 2023
Central Carolina Community College	
Associate of Engineering	May 2023
Central Carolina Community College	

Research Experience

Undergraduate Research Assistant	2024 – Present
Heiranian Lab, North Carolina State University	
<ul style="list-style-type: none">Engaged in understanding transport phenomena in nanoscale membrane poresApplied theoretical and computational models to contribute to the design and development of new membrane technologyInvestigated fluid dynamics under nanoconfinement in membrane pores, enhancing understanding across different scales	

Professional Experience

Engineering Intern	2022 – 2023
Mertek Solutions, Inc., Sanford, North Carolina	
<ul style="list-style-type: none">Assembled and machined high-precision parts for automated industrial machinesDeveloped a strong understanding of various manufacturing processesCollaborated with engineers to identify and implement opportunities for improvementBuilt and wired electrical panels for machines, involving PLCs, circuit breakers, fuses, relays and terminal blocks	

Professional Societies Membership

- International Society for Pharmaceutical Engineers (ISPE) | 2024 - Present