TEIGUE KELLY

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https://teiguekellyp.com

EDUCATION

The Pennsylvania State University Expected: May 2027

College of Engineering GPA: 3.96

Bachelor of Science, Nuclear Engineering

Dean's List: 2/2 Semesters

SKILLS

MATLAB	COMSOL	MS Office	
C++	Python	JavaScript	
AutoCAD	SolidWorks	HTML	

UNDERGRADUATE RESEARCH

Modeling Heat Flow with PDEs

Personal Research Project

Penn State Altoona January 2025 – Current

- Utilizes MATLAB to create UIs that model the flow of heat through multiple media with differing thermal diffusivities
- Investigates the impact of a metal's thickness and thermal properties on its ability to conduct heat to a surrounding fluid

Optimizing Solar Panel Band Gap Efficiency

Data Collection

Penn State Altoona September 2024 – Current

- Generates meshes of light absorbance data for nanowire models with COMSOL
- Uses MATLAB to create Tauc plots from imported data and solve for the band gap efficiencies of varying nanowire materials, geometries, lengths, and thicknesses

CLASSES (*= Completion by May 2025)

Thermodynamics*	Quantum Mechanics*	Experimental Chemistry I
Fluid and Thermal Physics*	Strength of Materials*	Electricity and Magnetism
Partial Differential Equations	Dynamics*	Programming with C++
Technical Writing	Statics	Physics Mechanics

COURSEWORK

Writing and Speaking

- Wrote informative and persuasive papers on nuclear energy topics such as cost overruns and meltdowns for English: Rhetoric and Composition
- Wrote a technical description of surface-level nuclear waste disposal for English: Technical Writing
- Taught a casual audience how nuclear power plants produce electricity in a detailed but easy-to-follow 5-minute speech for Communications: Effective Speech

Science

- Collected data using lab techniques such as titration and spectrophotometry for Experimental Chemistry I
- Used MS Excel's graphing capabilities to plot a force-vs-distance curve demonstrating Coulomb's law for Electricity and Magnetism

ACTIVITIES

Quizbowl (4-vs-4 Intercollegiate Academic Trivia Competition)State College, PATeam MemberAugust 2023 – Current

- Communicates with teammates to coordinate practices, tournament attendance, and travel details
- Demonstrates hard work and perseverance by facilitating multiple top finishes as an underclassman
- Notable results:
 - o NAQT New York Sectional (2024) 1st place
 - ACF Winter at Lehigh University (2024) 3rd place
 - Booster Shot Online (2024) 4th place