



Han Burgess

Junior | Burges28@purdue.edu

Why MSE: The chemistry and hands-on approach.

Why mentoring: Previous mentorship experience and would have loved having this program when I was younger.

Work experience: Rolls-Royce internships in failure investigation and non-destructive.

Research: Superabsorbent polymers and concrete (Prof. Erk).

Future Goals: R&D (polymer industry), possibly 4+1 masters.

Hobbies: Spikeball, blacksmithing, IM sports, weightlifting, donating blood, volunteering at local dog shelter.



Thomas Deucher

Senior | tdeucher@purdue.edu

Why MSE: Leading edge technologies.

Why mentoring: Freshman year received informal mentorship from Akul Seshadri through Blacksmithing.

Work experience: Battelle, NASA, and SpaceX in high temperature and sensing materials.

Research: Ceramics additive manufacturing (Prof. Trice) and machine learning for experiments (Profs. Titus and Strachan).

Future Goals: PhD to leading a research team.

Hobbies: Roller-skating, saxophone, drawing, reading.



Brianna Hensley

Junior | Bhensle@purdue.edu

Why MSE: Hands-on aspect and use of chemistry.

Why mentoring: As an MSE Ambassador, looking to promote tight-knit community of MSE students.

Work experience: Co-op student through Office of Professional Practice, metallurgical engineering at Copeland and manufacturing engineering at Owen Corning.

Future Goals: Hands-on metallurgy, manufacturing plant.

Hobbies: Volleyball, swimming, baking, MSE Ambassadors, SWE, IM sports, and reading.



Logan Mick

Senior | Lmick@purdue.edu

Why MSE: Blend of chemistry and physics.

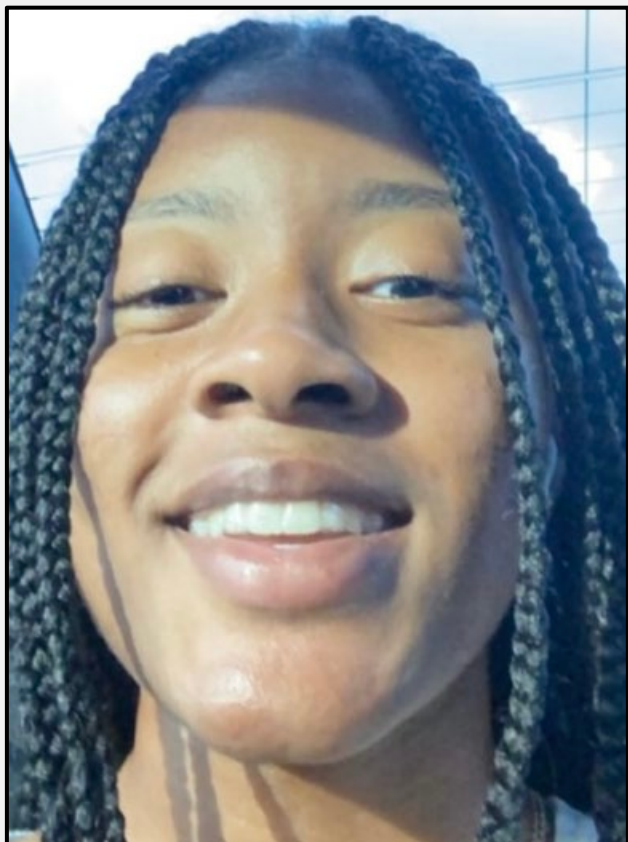
Why mentoring: Upperclassmen helped throughout classes during first few years, method of paying it forward.

Work experience: Portland Forge as process engineer.

Research: Undergraduate and summer research on hydrogel additives for concrete and mortar strength (Prof. Erk).

Future Goals: PhD in modeling of steel (Prof. Krane).

Hobbies: 3D printing, design, video and board games, cooking, watching football/basketball, Tau Beta Pi, PUMA.



Sabria Nesmith

Senior | snsmith@purdue.edu

Why MSE: Versatility and hands-on nature of the major.

Why mentoring: Looking to share enjoyment in MSE.

Work experience: TA for FYE and undergraduate research.

Research: CdTe solar cell defect analysis (Prof. Mannodi) and machine learning force field for carbides (Prof. Strachan).

Future Goals: Professional masters, move into leadership, and work on characterizing materials.

Hobbies: Volleyball, gym, traveling, movies, cooking, reading, bowling, go-karting, painting.



Emma Sampey

Junior | esampey@purdue.edu

Why MSE: Involved with EPICS project introducing MSE.

Why mentoring: Freshman year had mentoring offering familiarity in MSE, and currently is an MSE Ambassador.

Work experience: Caterpillar Co-op working in heat treat, data management, failure analysis, and R&D. At Purdue was able to work on the 2024 Cast in Steel competition for the Halligan bar.

Future Goals: Pursue masters through 4+1 program.

Hobbies: Corec, studying with friends, knitting, boba.



Reece Tippery

Junior | rtippery@purdue.edu

Why MSE: Leveraging chemistry and physics at atomistic level to enable advancement of frontier of technology.

Why mentoring: Foster the department's positive attributes.

Work experience: Purdue Energetics Research Center and Maine Advanced Structures and Composites summer research in polymeric material characterization.

Research: Rheology of hydrogels (Prof. Erk).

Future Goals: PhD in MSE.

Hobbies: Cooking, baking, IM volleyball.



Nate Weddington

Senior | nwedding@purdue.edu

Why MSE: Chemistry, physics, and relevant research.

Why mentoring: Received help as an underclassman.

Work experience: Northrup Grumman in development and design of test plans, parts, and thermal analysis of materials.

Research: Semiconductor and microelectronics with low temperature SnBi solder (Profs. Handwerker and Blendell).

Future Goals: Enter industry at Northrup Grumman.

Hobbies: Basketball, new foods, travel, IM sports, NSBE, SCALE, being a "funny guy".



Evan Williams

Senior | will2459@purdue.edu

Why MSE: Read about shear thickening in body armor in high school, researched what degree works on that science.

Why mentoring: Looking to grow the MSE community.

Work experience: Cook Polymer Tech as validation engineer. Full and part-time research at Purdue.

Research: Soft material mechanics, liquid crystal phase characterization, rheology (Prof. Erk).

Future Goals: Continue education with PhD.

Hobbies: Cooking, F1 racing, cricket, hockey.