

**SOPHMORE OR FRESHMAN IN MSE?**

# **MEET YOUR STUDENT MENTORS**



<https://forms.gle/cKbi1SpCbKQJ6TWe6>

MSE Mentor Corps kick-off event - connect with upperclassmen mentors with academic and industry experience over crafts and games.

**November 4th 6-8pm  
ACS (ARMS 2201)**

**M<sup>SE</sup>  
ENTOR CORPS**



## Han Burgess

Junior | [Burges28@purdue.edu](mailto:Burges28@purdue.edu)

**Why MSE:** The chemistry and hands-on approach.

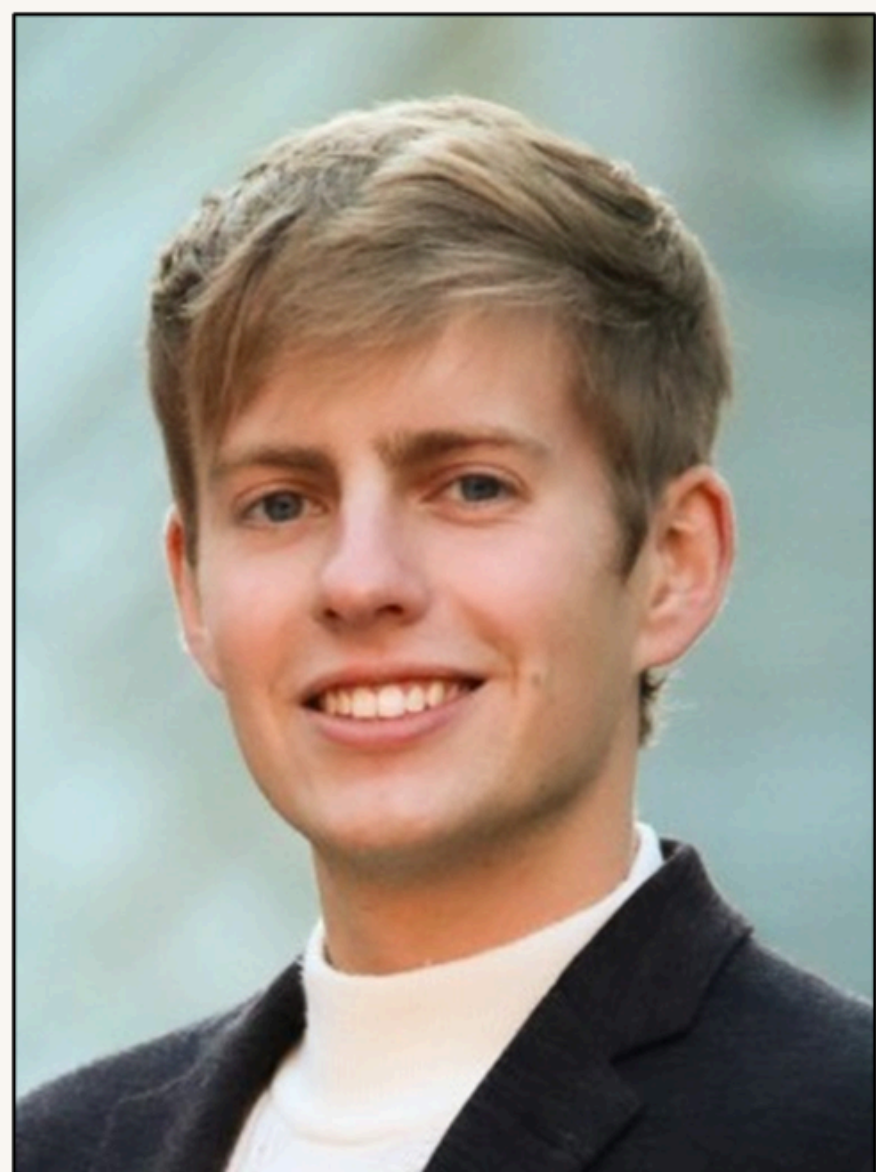
**Why mentoring:** Previous mentorship experience and would have loved having this program when I was younger.

**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](mailto: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](mailto: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](mailto: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 | [snesmith@purdue.edu](mailto:snesmith@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](mailto: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](mailto: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](mailto: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](mailto: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.