MSE MENTORS

Fall 2026

PURDUE UNIVERSITY MATERIAL ADVANTAGE



Jake Broy

Why MSE? I chose MSE because it allows for complete freedom when it comes to what you want to do. You can truly work in any industry which allows for you to find something you truly love and pursue it. Other majors like mechanical engineering allow for similar freedom, but the size of materials engineering allows for a much more tight-knit community where people are collaborating instead of competing.

Why mentor? When I was a freshman I had a mentor named Nate. Nate was very helpful, especially with the way that he showed me what a future in material engineering at Purdue would look like. I was still in FYE and he was the final nail in the coffin when it came to my decision to choose materials engineering and I would love to be able to play that role for a incoming freshman/sophomore.

Industry experience? This summer I was doing research at Karlsruhe Institute of Technology in Germany. I was working on refractory alloys and did a lot of sample preparation, treatment and characterization.

Research experience? I have been in Dr. Anasori's nanomaterials lab since second semester freshman year and Dr. Youngblood's cellulose processing lab since second semester sophomore year. I am still active in both these labs and they gave me different yet invaluable knowledge of MSE academia and industry.

Hobbies? I love to go on walks/runs, read and write, cook, and watch sports. I am also the president of the Purdue Fighting Game Club which I have a huge passion for.



Helen Brzozowski

Why MSE? I chose MSE because everyone needs a materials engineer! I found security in the fact that there are endless industry options. I knew a background in materials engineering could take me anywhere and that variety appealed to me! I also liked how it can be a more chemistry focused engineering. The smaller class size was another reason, it gave me comfort to know I would see familiar faces in all my classes and get to know my professors.

Why mentor? I want to share my experiences, connections and love for MSE with people new to the major. I want to be a supportive and helpful mentor whether that's explaining thermo concepts or reaching out to professors about research opportunities. I hope to help others find a home in MSE and manage any road bumps along the way!

Industry experience? Both my summer internships have been doing undergrad research, REU (University of Dayton) and SURF (Purdue).

Research experience? I have been doing research (during the semester and summer) on the reaction synthesis of porous Ni surfaces with Prof Sandhage and Prof Trumble. I've also done a summer research experience for undergrads (REU) at the University of Dayton working on porous carbon sorbents to treat textile industry waste-water.

Hobbies? I love spending time in nature, typically going on walks while stoping to try identify all the plants and bugs I see. I enjoy sitting in gardens to watch pollinators too! I love to watch and rewatch ghibli films as well as read (mostly literary fiction, nature books, and some sci-fi).



Pratyush Chettri

Why MSE? It's such a broad field! I love learning how physics, chemistry, and engineering come together into such a variety of applications.

Why mentor? I have learned how valuable discussing with a mentor can be during my time at Purdue. I am excited to welcome and encourage new MSE students in their journey and help them succeed.

Research experience? I've worked with Dr. Anasori's lab for the past year and a half where I synthesized two-dimensional nanomaterials called MXenes and their precursor layered ceramics called MAX phases.

Hobbies? I play piano and a little bit of trumpet! I also enjoy cooking (food is pretty much materials science), reading, and riding my bike everywhere.



Nichole Graham

Why MSE? I love getting to be hands-on and exploring how materials shape everything around us, and MSE lets me dig into that curiosity while solving real, practical problems. Also, everyone in the MSE community is approachable and supportive, creating a collaborative environment.

Why mentor? I am very grateful to have had wonderful mentors here at Purdue, and I want to be able to pass the value of mentorship on. Starting something new can be daunting, and I enjoy providing encouragement and resources that help students navigate MSE.

Research experience? For the past year I have been on Prof. Trice's Research Group for Hypersonic Materials working on energy absorbing ceramics, and creating ceramic particles on a joint project with Prof. Martinez's group.

Industry experience? I was a Materials & Process Engineering Intern at Moog Inc. this past summer, where I was conducting failure analysis of aerospace and military components. I had a previous internship at Comcast designing fiber optic systems.

Hobbies? I love being outdoors, everything from hiking to skiing, as well as running, reading and crafting!



Brianna Hensley

Why MSE? My love for chemistry and hands-on work translated perfectly to this major! I had no idea this major existed when I came to Purdue, as I intended to go into AAE, but through EYMs, I decided MSE was the perfect amount of niche and broad for future jobs!

Why mentor? I have always gravitated towards leadership positions due to the sense of fulfillment I get when I help others. Coming into MSE, I wish I had had someone to get me situated into the first year of my major, so I felt compelled to want to be that person for someone else. I can't wait to meet you all!

Industry experience? I just finished the 3-Rotation Co-op Program through the Office of Professional Practice and worked at Copeland in their Metallurgy Lab, as well as Owens Corning in Kansas City and Alabama as an engineer in glass and door manufacturing.

Hobbies? I love reading, swimming, playing volleyball and board games, as well as glassblowing and blacksmithing when I have the time :)

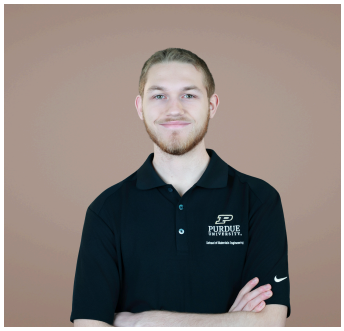


Ania Kedziora

Why MSE? I chose MSE because it gave me so much freedom to work in many different engineering disciplines in the future, not having to worry about narrowing down my options before I learned the coursework. The group of tight-knit, passionate student & staff I encounter daily continues to drive my passion for this discipline.

Why mentor? As a first-generation student, I found it incredibly daunting to navigate college life in a way that would set me up for success. MSE has provided me with countless resources to make this transition seamless, & I want to be able to provide that help to others.

Hobbies? I love my sorority, running, baking, crocheting, & studying in Lambertus Hall:)



Kyle Klaas

Why MSE? In high school, I discovered that I love chemistry, physics, and engineering. When looking at all the different majors, I found that materials allowed me to combine the three the best. I really loved how small changes to the chemistry and microstructure can change the properties of the whole material. I was also drawn in by the hands on nature of the major.

Why mentor? So far in my time in college, I have made many friends who have shared lots of wonderful advice that has helped me time and time again. I want to be that person for others around me.

Industry experience? So far I have worked at Mark Andy in a mechanical CAD role designing parts for industrial printers. I have also worked at Thomas and Skinner doing process engineering and working in their magnetic laboratory.

Research experience? I have been a member of the Zhang research group since the Spring of my freshman year.

Hobbies? My hobbies include board games, sports (mainly intramurals), blacksmithing, and books.



Yelena Rangel-Rodas

Why MSE? I really enjoy seeing how the concepts we learn in class such as structure, processing, and testing are applied in manufacturing and industry settings. I also love the hands-on aspect of MSE labs.

Why mentor? I've seen how valuable it can be to have someone you can go to for advice or questions when navigating MSE, especially through my experiences with the program as a mentee. I want to provide that same guidance and support to other students.

Industry experience? This past summer, I had a metallurgy internship at SDI's GalvTech facility, where I investigated the variation in Rockwell B Hardness results for samples with and without zinc after the galvanizing process. I also previously worked as a Process Engineering Intern with Schafer Powder Coating Inc.

Research experience? I will be working with Prof. Martinez's Research Group this semester, and this will be my first experience participating in research within MSE.

Hobbies? I love crafting, especially papercrafts and scrapbooking. I also really enjoy spending time outdoors and trying new recipes!



Rachel Stout

Why MSE? I previously didn't know MSE was even an option before coming to Purdue. It was like the perfect combination of everything I was interested in was presented to me and I had no choice but to say yes. I'm able to think critically, work with my hands, and see the impacts of what I'm doing in the real world.

Why mentor? MSE feels like such a hidden gem to me, and I love the opportunity to work with people new to the major to show them all the great opportunities and resources available.

Industry experience? I interned the past 3 summers at Honda's Anna Engine Plant in Ohio. I worked in a lab environment with a small team conducting failure analysis, performing non-destructive and destructive testing, and other types of analysis. I presented my findings in reports to requesting departments after I collected the data. This allowed me to practice my lab skills independently and connect what I'm learning in class to the real world

Research experience? I knew that all my interest was industry-directed, so I've opted to not partake in any research.

Hobbies? I have always enjoyed crafting with my hands, and most recently I've been into crocheting. I also like playing cozy video games when I have the time!