

Selena Ganues

selenag9626@gmail.com | (210) 993-2173 | San Antonio, TX 78216

EDUCATION

Bachelor of Science in Materials Science & Engineering (MSEN), *Texas A&M University, College Station, Texas* 05/2026
German Language Minor

SKILLS

- Wet-lab Experience
- Keyence Microscope Imaging
- Potentiodynamic Corrosion Testing
- Contact Profilometry

EXPERIENCE

NNSA-IMPACT Internship Sandia National Laboratories Undergraduate R&D 06/2024 - Present

- Perform research regarding the corrosion of stainless steel used to construct spent fuel canisters
- Carry out potentiodynamic scans and microscopic analysis of stainless steel coupons exposed to atmospheric corrosion
- Study the occurrence of corrosion in regards to rolling direction of steel and elemental composition of salt deposits
- Expand an in-development corrosion database that summarizes potentiodynamic experiments carried out under various conditions and parameters

PROJECTS

Samsung Austin Semiconductor Senior Capstone, Mitigation of Aluminum Whiskers in Semiconductor Bond Pads 08/2025 - 05/2026

- Fabricate simplified Samsung wafer geometry in clean room using sputtering tools
- Perform wafer curvature measurements using confocal microscopy to complete film stress measurements
- Analyze possible correlation between wafer stress, aluminum whisker formation, and surface roughness

LEADERSHIP

Women in Materials Science, Treasurer 05/2024 - 05/2026

- Manage budget for all programs hosted by the organization
- Plan youth outreach events in the community

MSEN, Ambassador 05/2024 - 05/2026

- Host outreach events to inform prospective first-year students about MSEN
- Conduct booths at A&M engineering events

Sophomore Advisor 2023 - 2024

- Facilitated group discussion among freshman
- Planned events and socials
- Managed University Honors social media
- Acclimated first-year University Honors Students.

American Institute of Chemical Engineers, Freshman Representative 2022 - 2023

- Organized socials and study sessions to encourage freshman involvement
- Informed freshman on all opportunities provided by the organization

German Language Tutor 09/2024 - 05/2026

- Tutor students in beginner German classes in person and online

EXTRACURRICULAR ACTIVITIES/COMMUNITY SERVICE

Global Engineering Brigades 2022 - 2023

- Created a pipeline map and water tank schematic to improve water supply in a Honduran rural community
- Raised \$1000 to donate to rural community for pipeline construction