



MANUFACTURING & MATERIALS
JOINING INNOVATION CENTER

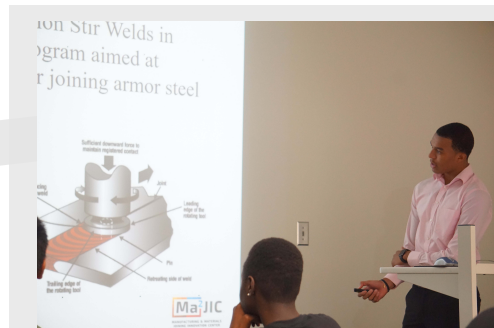
Summer 2024 Internship Program

www.ma2jic.osu.edu



OVERVIEW

The Manufacturing and Materials Joining Innovation Center (Ma2JIC) is hosting a **paid** summer internship program. This program matches high school students with current graduate students to assist with an on-going research project related to Welding Engineering. Students will conduct research in an engineering laboratory and may also participate in data analysis, coding, and modeling. Our summer interns will have unique experiences evaluating and testing materials under the supervision of their graduate student. Our program is very competitive and typically accepts less than five students each summer. The **8 week** internship program begins **June** and concludes in **August**. These dates can be flexible depending on high school release dates. Interns are expected to work up to 24 hours per week. This position is flexible and we can accommodate academic, sports or family obligations within reason.



"This internship has definitely helped me to adapt to working independently, and to comprehend concepts that are possibly out of my grasp. This will help me in college with a more independent work setting."
-Zach Zehala, Summer 2019 Cohort



BACKGROUND

The Ma2JIC Summer Internship Program is funded by an award from the National Science Foundation which encourages the inclusion of underrepresented groups in STEM education programs. Participating students will present a "capstone" presentation and poster of their work at the end of the summer for the Welding Engineering program and guests. Previous interns have worked on research projects such as Liquid Metal Embrittlement and Microstructural Characterization of Friction Stir Welded Armor Steel, please visit our website to learn more about Welding Engineering.

ELIGIBILITY & APPLICATION PROCEDURE

Qualified students are typically rising juniors or seniors and have taken advanced coursework in STEM, have successfully completed laboratory science courses, and/or have participated in STEM extracurriculars. Students are **not** expected to have advanced knowledge of material science. Interested students should submit a resume, unofficial transcript or list of STEM courses taken, a personal statement about why they are interested in this program, and a recommendation letter from an educator familiar with their STEM abilities.

Application materials should be sent directly to spisak.13@osu.edu by February 16th. Interviews will take place over the phone or in person from February 26th until March 8th, and decisions will be made shortly after the interviews.

INFORMATION

Applications are due no later than February 16th, including the letter of recommendation.

If you have any questions about the program, contact Heather Spisak at spisak.13@osu.edu

For more Information about the Ma2JIC Summer Internship Program please visit our website at (bit.ly/2DvUyPf) or scan the QR code below.

Our office is located at 1248 Arthur E. Adams Dr. Columbus, OH 43221

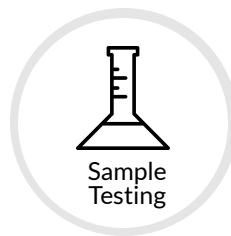
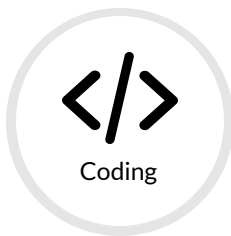
Parking at our office is free and located near several OSU bus lines.



Internship Experience



The Ma2JIC Summer Internship Program was developed to expose students to welding engineering and laboratory sciences who may otherwise not have the opportunity, allowing them to learn more about education and career pathways in engineering. During the course of the internship students are assigned a small research project and work independently on every aspect of their project. This is where they learn many of the skills needed to conduct research in a traditional engineering research lab. This entails a number of key skills within the discipline of engineering that students will learn and practice with the help of their graduate mentor. These skills including but not limited to preparing metallurgic samples, creating test welds, using design and simulation software, microscopy analysis, data analysis and software programming.



Perspective From Past Interns



"By participating in this internship, I was able to learn about my strengths and weaknesses. I am also able to practice skills that I learned in high school at the internship, such as writing research papers and working with microscopes. I am now aware that the science field is definitely something that interests me and something I would like to pursue further in college." - Mallory, Fall'18 Cohort

"This internship is good preparation for college. You are working with college students on campus. You are also getting experience with engineering, which is what I want to study in college. I realized that I am more creative than I thought and I really enjoy creating 3-D models because depending on what you are making, it could be difficult but it is rewarding once you finish." - Alex, Fall'18 Cohort



This internship provided me with a solid foundation on what it means to conduct research in a lab setting. What I enjoyed the most is how hands on this entire experience is. You always get to try and participate in the activities. You're not a bystander. "- Rama, Fall'18 Cohort