

Internship Program Overview

The MRTI internship program is a combination of work and study for upper-level high-school, undergraduate, and graduate students, or college graduates who are looking for experience. Internships are an excellent way for students to work in career-related positions which give them the experience and career direction they need. As employers who hire interns, we have the opportunity to grow our own future leaders and to bring in employees with a fresh perspective on the work world, the organization, and the task at hand. Throughout the spring, MTRI recruits using our internship flyers (see an example on appendix A) on local high schools and university campuses (e.g., Michigan Tech University, the University of Michigan, and Eastern Michigan University) to hire interns for 6 to 12 weeks in the summer.

Providing interns with relevant work ensures our internship program's success. Interns do work related to their major field of study or general interests that is challenging, that is recognized by MTRI as valuable, and that fills the requirements of the schools' internship credit, if applicable. Interns are given the opportunity to help provide assistance to a research project under a designated mentor. Their contributions to this project and any other tasks completed during the internship, are summarized by the intern during a formal presentation near the end of the internship. Depending on the nature of the project and the contributions the intern makes, the intern may have the opportunity to be recognized as a co-author on a symposium/conference poster or paper, a journal manuscript, an internal research report (white paper), or a formal sponsor report.

Internship requirements

There are three levels of internships available for MTRI. Internships are available to High School, Undergraduate, and Graduate students that have different levels of prerequisites. A description of the levels and applicant requirements are given below.

For all levels, interns will be hired into an hourly position at the Michigan Tech Research Institute, a part of Michigan Technological University. An hourly position provides an hourly wage with no medical, retirement or vacation benefits. Interns are required to be US citizens. If applicable/available, the internship can be used to fulfill requirements for the student's undergraduate or graduate program. Arrangements for this need to be made before the internship begins, and requirements of the granting institution need to be compatible with MTRI capacities.

High School: Depending on the age of the intern, the institute will comply with high school requirements as outlined on their work permit (supplied by the high school). High school level interns should know how to use Microsoft Office® programs and know how to follow directions from their managers. High school interns will be trained the basics of software or hardware that will be required during the internship. Examples are Geographic Information Systems (GIS), image processing, or web-design software and field data collection equipment (water quality sensors, etc.). Interns will learn how to perform entry-level tasks, such as georeference images with a GIS, acquiring remote sensing image products, collecting field data, or edit web site content and functionality, that will allow them to be effective in their position. All interns will give one presentation to a group of people as part of their training.

Undergraduate: Undergraduate students have the same requirements as listed above for High School level interns and the following additional skills. Undergraduate-level interns should be able to work independently on entry-level tasks, have exposure to mathematical statistics, and understand the basics of GIS, remote sensing, or a subject relevant to the internship field of focus (i.e. database management, electrical engineering). Undergraduate interns will be given the opportunity to build their skills based on the tasks required for the internship. They will have access to software and/or hardware to explore its

utility and be given direction from a mentor with expertise in the field of study. All interns will give one presentation to a group of people as part of their training.

Graduate: In addition to the requirements listed above for Undergraduate-level interns, Graduate students will need to know how to use software for simple to advanced analysis. Prior experience with programming and use of statistical software such as SAS, R, or MatLab is of value; programming or statistical analysis experience is required. Graduate students will need to be able to follow direction from their managers and work independently on projects with limited guidance. In addition, Graduate students will be expected to bring fresh ideas and solutions to the project. Graduate students will have access to software and/or hardware to explore its utility and be given direction from a mentor with expertise in the field of study. All interns will give one presentation to a group of people as part of their training.