

Camas High School's Math, Science, & Technology (MST) Program Overview and Summer Internship Information

Program Summary

The goal of the Camas MST program is to instill the underlying values, skills, and behaviors that will enable students to enter careers in the fields of science, math and technology. During their high school career, students will conduct authentic scientific research and complete an internship in an area of their interest. The experience positions students to achieve success at institutes of higher learning. Highly qualified faculty members foster advanced exploration of math, science and engineering topics. Students at all levels are exposed to integrated, advanced course work that explores real-world problems. Key elements of the program revolve around the following guiding ideas and concepts:

- a strong emphasis on essential research design principles
- characteristics of successful interdisciplinary project design
- problem-based learning and strategies for successful communication

Camas Magnet Program – Application & Acceptance Criteria

On a yearly basis, approximately 30% of applicants are accepted into the MST program, about 32 students a year. The selection process includes a review of their overall GPA, a comprehensive application, teacher recommendations, and an entrance exam.

Magnet Students

MST students demonstrate the following skills and behaviors:

- High ability, aptitude, and interest in math, science, and technology
- A desire to engage in research and project-oriented learning
- Ability to persevere when faced with complex problems
- Ethical behaviors in all aspects of learning
- Creativity, resourcefulness, and participate in structuring their own learning
- Ability to be self-sufficient, to follow through, and to produce high-quality work
- A willingness to work in a team-oriented environment
- An interest in refining their oral, written, and visual communication skills
- Aspire to strengthen leadership skills and contribute as a 21st Century citizen

Internship

Research is the focus of the MST program. Students will have completed two year-long research projects by their junior year. As a capstone project, students are expected to secure an internship the summer before their senior year. These internships should be more than a job shadow (although that might be part of the experience). They should provide an opportunity for students to conduct authentic research under the guidance of an expert. Students present their research at our annual research symposium with a paper and poster. We are looking for companies willing to sponsor our students. Some basic requirements for these positions are:

- A minimum of 90 hours over the summer
- Research based, which could be helping a mentor with his/her project

Previous Magnet Internship Examples

| <i>Company</i> | <i>Project</i> |
|-----------------------------------|--|
| Logitech | Determining the Electrical Efficiency of Portable Bluetooth Speakers |
| U.S. Fish and Wildlife | Utilizing Environmental DNA to Detect New Zealand Mud Snail Infestations |
| Oregon Health Sciences University | Assessing Glaucoma Risk in Children with Sturge-Weber Syndrome or Port-Wine Stains |
| eWind Solutions | Efficiency of Airfoils and Ability to Improve Tethered Energy Drones |
| Therapeutic Associates | Pain Education and its Impact on Patient Recovery |

If you are interested in providing a student with an internship opportunity or would like additional information, contact Brianna Abraham: (360)833-5750 or brianna.abraham@camas.wednet.edu