



MST@MSU

Math, Science and Technology

July 10—July 23, 2016

Audience

The Math Science Technology at Michigan State University (MST@MSU) Program is a two-week summer residential and commuter program for academically talented students who have completed grades 6-9 with a minimum age of 12. The eligibility criteria are: ACT Math score of 21 or Composite of 23, or SAT score of Math or Critical Reading 530 or Combined Total of 1010. In 2016, a total of 98 students participated; fifty-eight (58) males and forty (40) females; eight (8) 6th graders, forty-one (41) 7th graders, thirty-six (36) 8th graders and thirteen (13) 9th graders.

Funding

MST@MSU programming and scholarships are funded by the W. B. and Candace Thoman Foundation and the Dorothy Lawshe Endowment. Student tuition covers the remaining program costs. Twenty-one (21) students were awarded financial aid scholarships.

Objectives

The academic focus of the MST@MSU program is on mathematics, science, technology and the applications in these areas. The goal is to match the intellectual abilities of talented adolescents with rigorous and challenging coursework which provides enrichment, but does not duplicate coursework that is part of the regular K-12 school curriculum.

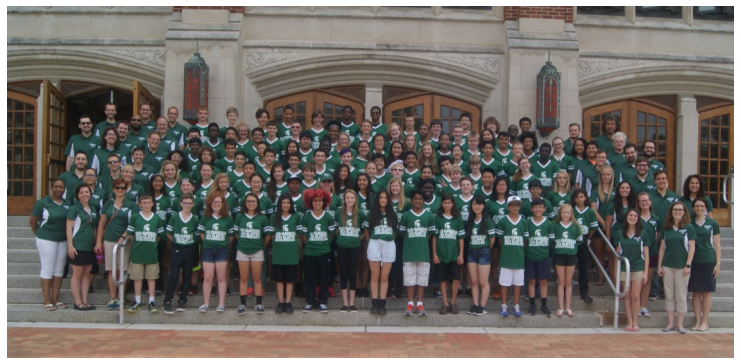
MST@MSU offers opportunities for students

- * to experience active learning as they investigate problems that can be solved through a better understanding of mathematics, science, engineering, and technology
- * to focus on intensive areas of study that allow for interdisciplinary research using tools of mathematics, science, and technology
- * to link the tools of many career fields while focusing on real world problems

Description

MST@MSU students select two academic courses and one special session clinic to attend each day for the two weeks of this residential and commuter program. Classes are held on the MSU campus, using campus classrooms, labs and special facilities. Taught by MSU faculty who were assisted by area high school teachers, students participate in two-hour lectures/labs in the morning and afternoon, followed by a 90 minute special clinic. There were thirty-one (31) instructors, and ten (10) residential supervisory staff.

Each evening has time scheduled for homework, presentations or use of campus facilities. Students attend a presentation by the Honors College on college, went ice skating at the Munn Arena, visited the Abrams Planetarium, used of the IM pool and gymnasiums plus nightly activities planned by the program on-site coordinators and residential assistants. Students have 24/7 supervision in the dorm, to and from class, and during the evenings.



Outcomes

- * 94% of students rated the program as Excellent or Good
- * 97% of students said they would attend another GATE program in the future.

Parents were asked about the impact the MST program had on their child. Responses included:

"He has really enjoyed working with college professors at MST @ MSU. He feels like he is a 'college student' in a sense. Being on the campus has helped him decide that he wants to attend MSU for undergrad."

"My daughter said she learns more here in two weeks than all year in school. It absolutely fires her up and she loves meeting other kids like her yet with distinctly different lives. Her confidence sky rockets after this every year."

"The environment is incredible with having students working as a team since most of them struggle with this. The staff is wonderful and provide a great example for the participants. The faculty are inspiring and so kind to open their labs to our students. It is such a life changing experience for the participants."

Academic courses included: Neuroscience, Chemistry, 3D Geometry, Engineering, Video Game Design, Cinematic Creation, Genetics and Biotechnology, Physics, and Nuclear Astrophysics.

Workshops included: Archery, Architecture, Culinary Arts, Entrepreneurship, Astronomy, Music, App Design.

Additional Information

2016 was the 27th year for the MST@MSU program on the MSU campus. The program drew students from Connecticut, Illinois, Indiana, and Iowa, as well as Michigan.

Contact Information

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