

The Missouri Academy of Science, Mathematics and Computing

Dr. Cleopas T. Samudzi, Dean

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Dean: Cleopas T. Samudzi

The Missouri Academy of Science, Mathematics and Computing (Missouri Academy) is a residential program for high school-aged students who are academically gifted in science and mathematics, and have completed their sophomore year (or equivalent) in high school. Students enrolled in this two-year program live with their peers on the campus of Northwest Missouri State University in their own residence hall and complete a challenging program of college coursework taught by Northwest Missouri State University professors. This program replaces the last two years of traditional high school. At graduation, students receive an Associate of Science degree as well as a high school diploma. This program has been extremely successful since its inception in August 2000.

The primary goals of the Missouri Academy are: 1) to prepare students for continued success in higher education in the areas of science, mathematics and computing, and 2) to provide a solid foundation of education, integrity and quality and thus, to enable its graduates to have a lasting positive impact in society. Missouri Academy students participate in many university clubs and organizations that offer opportunities for enduring friendships, personal growth, recreation and leadership.

Many Missouri Academy graduates have gone on to attend in-state institutions such as the University of Missouri-Columbia, the University of Missouri-Rolla, Northwest Missouri State University, Washington University in St. Louis, Truman State University, and out-of-state institutions such as Boston University, University of Illinois, Cornell University, MIT, Caltech, University of Iowa, and so forth.

Missouri residents accepted to the Missouri Academy receive a scholarship covering tuition for two years. The Missouri Academy is committed to being affordable for all Missouri students regardless of family income. Therefore, depending on demonstrated need based on information provided on the FAFSA form, students receive scholarships to cover 50% to 100% of the room and board costs.

Applicants to the Missouri Academy must be currently enrolled in the tenth grade or equivalent. A minimum ACT or PLAN composite score of 23 and a mathematics score of 24, or a minimum SAT of PSAT composite score of 1100, with 600 in mathematics is required for eligibility. Geometry and Algebra II must be completed prior to beginning the first trimester at the Missouri Academy. Admission decision is based on: 1) cumulative GPA in the 8th, 9th and 10th grades, 2) standardized test scores, 3) evaluations from high school teachers, 4) student essays, and 5) mathematics/science career interests as well as student/family commitment.

Additional information and application forms can be obtained from the Missouri Academy by calling toll free (877) 398-4615, or by email at MASMC@nwmissouri.edu or on its website at www.nwmissouri.edu/MASMC.

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Director of Academic Affairs: Diana Schmitz

Statement of Mission

The Missouri Academy of Science, Mathematics and Computing is an innovative residential high school program at Northwest Missouri State University. Students selected for their high academic performance enroll in quality education provided by professors at the university. The driving force of the Missouri Academy is to prepare its graduates to succeed in science, mathematics and technology programs in any high education institution.

The Missouri Academy community is committed to student development and instills the principles of integrity and quality within its students, thus preparing them to contribute to society in ethical and meaningful ways. Upon successful completion of the program, these students earn a high school diploma and an Associate of Science degree.

DEGREE PROGRAM

The Missouri Academy has a structured curriculum leading to the Associate of Science degree in Mathematics and Science. This degree is designed for the Missouri Academy only, and not for traditional students at Northwest Missouri State University.

Associate of Science in Science and Mathematics

Science	Semester Hours
Biological/Life Sciences	
Bio 04-102/103 General Biology and Laboratory	4
Bio 04-140 General Microbiology	4
Chemical Sciences	
Chem 24-114/115 General Chemistry I and Laboratory	4
Chem 24-116/117 General Chemistry II and Laboratory	5
Physical Sciences	
Phys 25-120/121 Fundamentals of Classical Physics I and Laboratory	5
Phys 25-230/231 Fundamentals of Classical Physics II and Laboratory	5
Mathematics	
Math 17-117 Precalculus	4
Math 17-120 Calculus I	4
Math 17-121 Calculus II	4
Computing	
CSIS 44-140 Visual Basic Application Programming	3
CSIS 44-141 Computer Programming I	3
English/Communication	
Eng 10-111 Composition	3
Eng 10-112 Composition	3
English Literature Course (Eng 10-221 - 10-499)	3
Com 29-102 Fundamentals of Oral Communication	3

Social Science and Humanities

Hist 33-155 America—A Historical Survey	3
PolS 34-102 Introduction to American Government and Politics	3
Humanities approved elective*	3

Seminar/Colloquium

MOAC 81-102 Seminar: You and Your Community	1
MOAC 81-103 Colloquium	1

Total Degree Requirements **68**

*Humanities elective must be approved by the Missouri Academy Director of Academic Affairs.

For Missouri Academy students to graduate from the Missouri Academy in addition to the above requirements, they must: 1) must pass the U.S. and Missouri Constitution test, and 2) maintain a minimum cumulative GPA of 2.50 on a 4.0 scale.

Course Descriptions

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102 Seminar on You and Your Community (1 credit hour)

This seminar is designed for first-year Missouri Academy students. It explores skills that help the student to be academically successful. Students will also discuss living in, and contributing to, the community in which they live. The course provides a safe, nurturing environment for each to explore his/her personal identity and discover what it means to be a successful, positive, contributing member of the Missouri Academy and Northwest community.

103 Colloquium (1 credit hour)

Course is designed for second-year Missouri Academy students. Suitable topics will be selected from the following categories: 1) service-learning experiences and community service, 2) social responsibility and citizenship, 3) exploring connections between academic majors and professions/careers, and 4) structure and organization of higher education. Prerequisite: MOAC 81-102.