# of Mathematics and Science

## KENTUCKY'S FIRST RESIDENTIAL STEM ACADEMY

The Gatton Academy of Mathematics and Science in Kentucky is the Commonwealth's first two-year residential program for students interested in careers in science, technology, engineering, and mathematics. Instead of spending their junior and senior years in traditional high school settings, our 190 students take all their coursework at Western Kentucky University with regularly-enrolled college students. Students at The Gatton Academy earn not only a high school diploma, but also an Associate Degree of Interdisciplinary Studies. The Gatton Academy empowers Kentucky's exceptional young scientists and mathematicians to learn in an environment which offers advanced educational opportunities while living in a supportive community.

The Gatton Academy Western Kentucky University 1906 College Heights Blvd. #71031 Bowling Green, KY 42101

270-745-6565 academy@wku.edu wku.edu/academy @gattonacademy





## STUDENT SELECTION

Applicants are high school sophomores who have completed Geometry and Algebra II by the end of their sophomore year. The application process is competitive as approximately 95 students are selected each year, split evenly among males and females as space is available.

Students are selected based on:

- ACT or SAT scores (minimum 22 math ACT or 540 math SAT)
- Academic grades from 9th and 10th grade transcript
- Interests in advanced careers in science, technology, engineering, and math
- Responses to application essay questions
- Recommendation forms

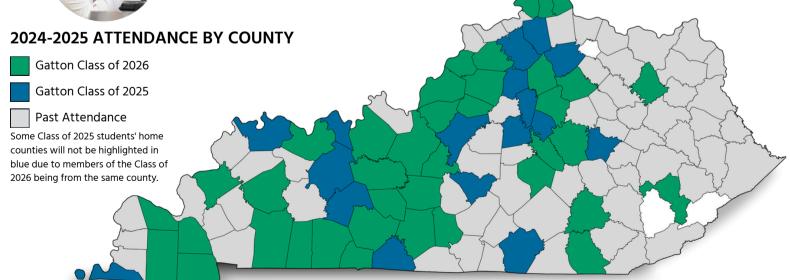
Interviews

# COST OF ATTENDANCE

Tuition, fees, housing, and an all-access meal plan is provided for each student by state funds. Families are responsible for paying for textbooks, though needs-based scholarships are available.

#### APPLICATION DEADLINE

Applications for the Class of 2028 must be completed and submitted by 11:59PM Central Time on February 1, 2026. Sophomores can create an application at www.wku.edu/academy.



#### **ACADEMICS**

The academic rigor of The Gatton Academy is meant to challenge students to excel at the highest levels, while drawing connections between the classroom and realworld research options. All coursework is taught at the college level by university faculty.

## **MATHEMATICS** (3-4 Courses)

Students are assigned their introductory math course based on prior coursework and placement exam scores administered by the Western Kentucky University Department of Mathematics.

MATH 117 Trigonometry (3 Hours)

MATH 136 Calculus I (4 Hours)

MATH 137 Calculus II (4 Hours)

MATH 237 Multivariable Calculus (3 Hours)

MATH 307 Introduction to Linear Algebra (3 Hours)

## **CORE SCIENCE** (5 Courses)

Students must take at least one biology, chemistry, computer science, and physics class. Additionally, students must complete at least one two-course STEM sequence.

BIOL 120/121 Biological Concepts: Cells, Metabolism, and Genetics/Lab (4 Hours)

BIOL 122/123 Biological Concepts: Evolution, Diversity, and Ecology/Lab (4 Hours)

CS 180 Computer Science I/Lab (4 Hours)

CS 290 Computer Science II/Lab (4 Hours)

CHEM 120/121 College Chemistry I/Lab (5 Hours)

CHEM 222/223 College Chemistry II/Lab (5 Hours)

PHYS 255/256 University Physics I/Lab (5 Hours)

PHYS 265/266 University Physics II/Lab (5 Hours)

## **ENGINEERING** (1 Course)

Students must take a project-based engineering course. SEAS 368 Problem Solving (3 Hours)

## **STEM ELECTIVES** (3-4 Courses)

Students choose from the following areas: agriculture, architecture, astronomy, biology, chemistry, communication sciences and disorders, computer science, engineering, environmental science, exercise science, geography, geology, healthcare administration, manufacturing, math, meteorology, nursing, physics, psychological sciences, and/or public health.

## **ENGLISH** (2 Courses)

Students who score 29 or higher on the English portion of the ACT or a 650 or higher on the Critical Reading portion of the SAT receive credit for English 100 and begin with

ENG 100 Introduction to College Writing (3 Hours)

ENG 200 Introduction to Literature (3 Hours)

ENG 300 Writing in the Disciplines (3 Hours)

## **US HISTORY** (Up to 1 Course)

Students who have not documented completion of US History by August 15 before enrollment at The Gatton Academy enroll in HIS 241 United States Since 1865

## **ACADEMY SEMINAR** (3 Courses)

ACMS 175 Junior Seminar I (1 Hour)

ACMS 175 Junior Seminar II (1 Hour)

ACMS 175 Senior Seminar (1 Hour)

## **INSTITUTIONAL ACCOLADES**



2022 Recipient of Inspiring **Programs in STEM Award,** Insight Into Diversity Magazine

students and alumni recognized by the Barry M. Goldwater Scholarship to date

**U.S. Department of State National Security** Language Initiative for Youth (NSLI-Y) Scholarships in 2024

research presentations given at academic conferences in 23-24 year

**National Merit Semi-**Merit Semi Finalists in

## **CLASS OF 2025 PROFILE**

66% of the Class of 2025 participated in research or STEM + Global Studies during 11th grade

presentations given at research conferences nationally & internationally

students placed in summer research internships

\*including Gatton Research Internship Grants, USDA-funded internships, and GM-funded internships

19.0% Qualify for Free-Reduced Lunch 12.8% Underrepresented Background 9.3% First-Generation College Students 8.1% From the Appalachian Region

As of August 2024, 86 students comprise the Class of 2025.

## **SCHOLARLY RESEARCH**

Learning from one-on-one mentorship from university faculty, students work on STEM research projects beyond the classroom and take research on as an extracurricular scholarly pursuit. Students share their findings through presentations at local, state, national, and international conferences.

## **COMMUNITY SERVICE**

Gatton Academy students are the Commonwealth's future leaders. As such, to develop leadership skills and understand the impact each individual makes on their community, Gatton Academy students complete a minimum of 60 service hours during their junior and senior years.

#### STEM + GLOBAL STUDIES

Students interested in intensive study in a foreign language may participate in The Gatton Academy's STEM + Global Studies program. Each semester, participants take one course in their chosen language: American Sign Language, Chinese, German, Japanese, Russian, or Spanish. Students take at least two semesters of language study and then may choose to complete the next two semesters in humanities coursework related to the region of their language. Students who participate in STEM + Global Studies often apply for competitive programs such the National Security Language Initiative for Youth (NSLI-Y).

## STUDY ABROAD

Students may participate in study abroad opportunities to England for three weeks to fulfill an English requirement or to Costa Rica for two weeks to fulfill a biology STEM elective. 64 students in the Class of 2025 have studied abroad.