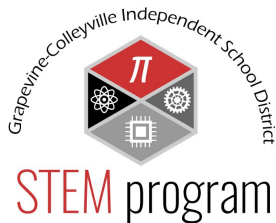


The STEM Academy at Grapevine High School



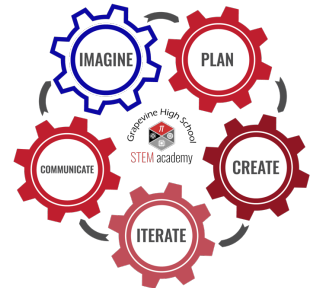
STEM Class of 2022 Profile



In GCISD we define STEM -- Science, Technology, Engineering and Math--as a curricular program that integrates the concept of STEM across core content areas and electives where appropriate. Our program has a strong emphasis on engineering and design thinking. Students use the lens of STEM by utilizing an engineering design process in all aspects of learning.

STEM in GCISD

STEM in GCISD is a K-12 program that is designed to engage students in core content through the engineering design process, inquiry learning and core-content integration. Students begin at Cannon Elementary learning the basics of the EDP, STEM Habits of Mind and technology as it is integrated throughout every aspect of the campus. Middle School STEM students are enrolled at Grapevine Middle School on an accelerated Math and Science pathway. This means that all middle school students will have completed Algebra and Biology by the time they leave GMS. Like Cannon Elementary, the STEM mindset and definition are evident in all areas of the campus through campus-wide design challenges, a STEM career conference for students, the engineering design process used in all content areas and an increased integration of Engineering and Coding throughout the campus. At Grapevine High School the excellence continues with a strong tradition of research and Advanced Placement classwork being added to the design challenges and STEM habits of mind and core content integration.



Senior Projects

Each year GCISD STEM Seniors complete a capstone project through the AP Capstone program. These projects allow students to choose their own topic and complete college level research.

College football rivalries statistical comparison to non-rivalry games

Teenage library book selections

NBA scoring data compared to player salaries

Social media music advertising compared to artist popularity

Individual campaign contributions in local elections and the effect on the elections

The possibility of using bioplastics to replace metals in non-skyscraper structures

School curriculum and demographics

LEED certified vs non-LEED certified schools

Water quality correlation to aquatic macroinvertebrates quantity and variation

Class of 2022 Notables

*A National Merit
Commended Scholar*

Student Involvement:

*Theater, C5 Club,
Volleyball, Debate, Cross
Country, Baseball, Swim
Team, Band, DECA,
Football, Lacrosse, FFA,
Rocketry Team,
Competitive Target Team*

Academic Success

2020-2021 SAT Comparison

	Evidence Based Reading and Writing	Math	Combined Total Score
STEM@GHS	593	564	1158
GHS	571	548	1119
GCISD	568	548	1116
Texas	505	498	1003
National	480	530	1010

2020-2021 ACT Comparison

	English	Math	Reading	Science	Total Composite
STEM@GHS	19	24	24.5	20	22
GHS	23.79	24.14	25.15	23.33	24.18
GCISD	24.02	24.21	24.77	23.52	24.12
National	20.1	20.4	21.2	20.6	20.7

Required STEM Courses

The following courses are taken by all GHS STEM students:

Pre-AP English 1
Pre-AP English 2
AP English 3 or
Dual Credit
English

Pre-AP Biology
Pre-AP Chemistry
AP Physics 1
Pre-AP Algebra 1
Pre-AP Algebra 2

AP Human
Geography
AP World History
Pre-AP Geometry

All GHS STEM students will graduate with a Texas High School STEM Endorsement and Multidisciplinary Endorsement.



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Class of 2022 Profile

