



The School of Science and Engineering

PROFILE

SUMMARY STATEMENT

The School of Science and Engineering is a college preparatory program that provides a world-class education with an accelerated STEM focus. Students who love math, science, and engineering will feel right at home in SEM's distinctive culture.

DATA

| | | |
|---------------------------|--------------|---------------------|
| Enrollment | 500 students | grades 9-12 |
| Male 67% | Female 33% | |
| LEP and LEP Exit | 27% | |
| Econ Disadvantaged | 60% | |
| First Gen College | 50% | |
| SAT Average Highest Score | 1392 | (top 2% nationally) |
| ACT Average Highest Score | 30 | (top 5% nationally) |

UNIQUE PROGRAMS

Freshman Calculus: Most accelerated math program in North Texas; students cover Geometry, Algebra 2, Pre-Cal and AP Calculus AB in a single year and take the AP test in the spring. 100% pass rate for 10 years. Freshman Year

Fast Track Math: Students take Algebra 2, Geometry, and Pre-Calculus as Freshman and AP Calculus AB Sophomore year. 80% of SEM students complete AB calculus by the end of sophomore year; 100% take it by the end of Junior year.

Superlab: Dedicated Lab section for AP Physics and AP Chemistry. Students have time to complete a full set of college-level Chemistry and Physics labs.

ATTAM: Post-AP math course. Open to all SEM students. Students cover the fundamentals of linear algebra, differential equations, multivariable calculus, and discrete mathematics.

ACCOLADES

1. 100% Pass Rate, AP Calculus AB exam (all students take AP Calculus AB exam)
2. Niche Ratings: #1 Best Public High School in DFW; #4 Best High School in DFW
3. Texas School Guide, Children at Risk: #1 Public High School in North Texas
4. U.S. News and World Report: #3 in Texas; #13 in the Nation;
5. Washington Post: Public Elite Magnet List (unranked list)

COLLEGE PROGRAM

Our college access program is integrated into our school curriculum. SAT/ACT prep are part of the English classes; a designated team works with students individually to build their resume and later to help develop their application. 100% of SEM graduates enroll in 4-year colleges; last year, over \$20M in scholarship money was awarded to 109 students.

TYPICAL SCHEDULES

9TH AND 10TH GRADE

9th Grade

- Algebra 2
- Pre-Calculus
- Geometry
- Computer Science
- AP Biology
- AP Human Geography
- Accelerated English 1 and 2

10th Grade

- AP Calculus AB
- AP Physics 1
- AP Computer Science A
- Chemistry
- AP World History
- English Writing Intensive
- Foreign Language

11TH AND 12TH GRADE

Required (Taken any semester)

- AP English Language and Composition
- AP English Literature and Composition
- AP Macroeconomics
- AP United States Government and Politics
- AP United States History
- AP Calculus BC
- PLTW Principles of Engineering OR
Post-AP Computer Science
- Senior Capstone
- Fine Arts Credit
- PE
- Year 2 or 3 of a Foreign Language

Strongly Encouraged/Typically Taken

- AP Statistics
- AP Biology
- AP Chemistry
- AP Environmental Science
- AP Physics C: Electricity and Magnetism
- AP Physics C: Mechanics
- AP Physics 2: Algebra-Based
- ATTAM (post-AP math)
- Anatomy and Physiology

ELECTIVES OFFERED

- AP Art History
- AP Music Theory
- AP Studio Art
- AP Comparative Government and Politics
- AP European History
- AP Microeconomics
- AP Psychology
- AP French Language and Culture
- AP Latin
- AP Spanish Language and Culture
- AP Spanish Literature and Culture

SEE

WWW.SEMAGNET.ORG

FOR MORE INFO