



AACPS STEM High School Program

STEM Magnet High School Program - Required Courses

Note: Recommended AACC courses to support STEM/BMAH students are noted in additional document. Students also need to complete all courses in their chosen STEM pathway of study.

Science - 4.0 credits minimum/5.0 credits recommended (Science course in all four years of high school)

- Systems Science A (1.5 Credits)
- Systems Science B (1.5 Credits)
- Science Research III (0.5 credit)
- Honors or AP Science Course (1.0 Credit) or AACC Science or Engineering Course

Math - 4.0 credits minimum/6.0 credits recommended (Math course in all four years of high school)

- Geometry (1.0 credit)
- Algebra I (1.0 credit)
- Algebra II (1.0 credit)
- AP Statistics (1.0 credit)
- Honors or AP Pre-Calculus (1.0 credit)
- AP Calculus AB or BC (1.0 credit)
- AACC Math course beyond Algebra II (dual credit, if needed)

Problem/Project-Based Learning – 2.5 credits minimum (PBL course in all four years of high school)

- Global Community Citizenship through PBL I (0.5 credit)
- PBL II (0.5 credit)
- PBL III (0.5 credit)
- PBL IV Research Data Analysis - Capstone (1.0 credit) - *for Non-engineering STEM students*
- PBL IV Engineering Design & Innovation - Capstone (1.0 credit) - *for Engineering STEM students at NCHS only*
- EDD – Capstone (1.0 credit) - *for Engineering STEM students at SRHS only*

Engineering, Computer Science, & Technology Education - 1.0 credit minimum

- AP Computer Science Principles (1.0 credit)
- STEM Principles of Engineering - IED (PLTW) (1.0 credit) - *Engineering students at SRHS only*

English - 4.0 credits minimum (English course in all four years of high school)

- Honors or AP English Course - Grade9 (1.0 credit)
- Honors or AP English Course - Grade 10 (1.0 credit)
- Honors or AP English Course - Grade 11 (1.0 credit)
- Honors or AP English Course - Grade 12 (1.0 credit)
- AACC English Course (as dual credit, if needed for high school graduation)

Social Studies - 4.0 credits minimum (Social Studies course in all four years of high school)

- Honors US History Hybrid (1.0 credit)
- Honors or AP US Government (1.0 credit)
- Honors or AP World History (1.0 credit)
- AP Human Geography (1.0 Credit)
- AACC Social Science Course (1.0 credit)

World Language - 3.0 credits minimum (in the same language)

- World Language Level I
 - World Language Level II
 - World Language Level III
 - AACC World Language course beyond Level II (dual credit, if needed)
- NOTE: ASL courses may be taken as electives but not as the main WL courses.*

Physical Education/Health - 2.0 credits minimum

- Fitness for Life (0.5 credit)
- Phys Ed (PE) Elective (0.5 credit)
- Health A (0.5 credit)
- Health B (0.5 credit)

Fine Arts - 1.0 credit minimum

- Foundations of Art (0.5 credit)
 - Digital Photography (0.5 credit)
- NOTE: A Music course (0.5 credits) may be substituted for an Art course.*

Business Education - 1.0 Credit minimum

- STEM/ BMAH Internship or apprenticeship (1.0 credit)

NOTE: Please work with your School Counselor to make sure you meet all STEM Program Requirements while also taking additional AACPS elective courses required for graduation. As you enroll in AACC courses, make sure you know which ones you need to take as 'dual credit' courses for high school graduation.