

SCIENCE, MATH, COMPUTER SCIENCE HOUSE-EXTENDED DAY

SMCSH has two different program certificates. The more prestigious certificate is the “Certificate of Achievement with Research.” The second option is a “Certificate of Achievement” which does not have a research component. Students must successfully complete at least BC Calculus to obtain either of the SMCSH certificates.

	9	10	11	12
ENGLISH	Honors English 9	Honors English 10	AP Language and Composition Honors English 11	AP English Literature
SOCIAL STUDIES	Honors US History	AP National State & Local Government Honors National State & Local Government	AP World History Honors Modern World History	
SCIENCE	Advanced Science 1—Physics* Advanced Science 2—Chemistry*	Advanced Science 3—Earth Science* Advanced Science 4—Biology*	Students must complete a total of 6 semesters of SMCS electives** during their junior and senior years.	
RESEARCH	Research and Experimentation for Problem Solving 1 A/B*	SMCS Principles of Engineering*	Research Design* and Research Project A*	Research Project B
COMPUTER SCIENCE	Fundamentals of Computer Science A/B*	Algorithms and Data Structures A/B*		
MATHEMATICS	Magnet Geometry* Magnet Precalculus A/B* or Magnet Functions A/B*	Magnet Precalculus A/B Magnet Precalculus C/D Analysis 1 A/B or AP Calculus BC	Magnet Precalculus C/D Analysis 1 A/B or AP BC Calculus Vector Calculus A/B or Multivariable Calculus A/B AP Statistics* or Applied Statistics*/Linear Algebra	Analysis 1 A/B or AP Calculus BC Vector Calculus A/B or Multivariable Calculus A/B Linear Algebra Discrete Math
ELECTIVES	Physical Education Foreign Language—Spanish, French Fine Arts	Physical Education/Health Foreign Language—Spanish, French Fine Arts	Physical Education/Health Foreign Language—Spanish, French Fine Arts	Physical Education/Health Foreign Language—Spanish, French Fine Arts Internship

Courses may be linked and scheduled sequentially.

* Course is required for the SMCS Certificate of Achievement

** Research Project B, Cellular Physiology, Optics, Organic Chemistry, Thermodynamics, Quantum Physics, Analytical Chemistry, Biochemistry, Intro. to Physical Chemistry, Intro. to Genetic Analysis, Marine Biology, AP Chemistry, AP Biology, AP Physics B or C, Analysis of Algorithms, Computer Graphics, Software Design, Networking, Robotics, Materials Science, Writing Mobile Applications, Intro to Cyber Forensics/Security, Programming languages