

# THE SCIENCE ACADEMY OF SOUTH TEXAS



## Four-Year Course Sequence 2019- 2020

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English I Honors English II Honors	English II Honors #English III AP	#English III AP ■#English IV AP	■#English IV AP ■Advanced English Studies
Algebra I Honors Geometry Honors	Geometry Honors Algebra II Honors ■Pre-Calculus Honors	Algebra II Honors Advanced Quantitative Reasoning ■Pre-Calculus Honors ■#Calculus I AP	■Pre-Calculus Honors ■#Calculus I AP ■#Statistics AP ■#Calculus II AP
Integrated Physics & Chemistry Honors  *Principles of BioMedical Science  Biology I Honors	Chemistry Honors Environmental Systems Honors  Biotechnology *Human Body Systems	Physics Honors #Physics 1 AP #Physics 2 AP #Physics C AP #Chemistry AP #Biology AP #Environmental Science AP *Environmental Sustainability	Physics I Honors #Physics 1 AP #Physics 2 AP #Physics C AP #Chemistry AP #Biology AP #Environmental Science AP *Environmental Sustainability
World History Honors	World Geography	#U.S. History AP	#U.S. Government AP & #Economics AP Financial Literacy
*#Computer Science Principles AP	Spanish I Honors Spanish II Honors	Spanish II Honors ■#Spanish III AP/D	■# Spanish III AP/D #Spanish IV AP
*Introduction to Engineering Design (IED) <i>STEM Endorsement</i>	*Digital Electronics (DE)	*Engineering Science (POE)	*Engineering Design & Development *Computer Integrated Manufacturing (CIM) * Aerospace Engineering (AE) *Civil Engineering & Architecture (CEA) ----- #*Computer Science A AP #*Computer Science Principles
*Introduction to Engineering Design <i>Multidisciplinary Endorsement</i>	*Digital Electronics (DE)	Adv. Year Book I & II, AP Spanish IV, AP Psychology, Sociology, Aerobic Activity, Art AP, Sculpture I, Computer Science AP (Computer Science Principles PLTW), Advance Mathematics, Advance Science, Principles of Manufacturing (PM)	
Research/Technical Writing (Semester course)  Foundation Personal Fitness (Semester Course)	Art, Level I	Professional Communication (Semester Course)	Physical Education (Semester Course)
		College Transitions (Semester Course)	Elective (Semester Course)
		Physical Ed. & Health (Semester Courses)	

# Advanced Placement Course

■Dual Enrollment Course

\*Project Lead the Way Course

**FOUNDATION COURSES:** 4 ELA: English I, II, III, & IV; 3 MATH: Algebra, Geometry & Algebra II; 3 SOCIAL STUDIES - World History, US History, Government & Economics; 3 SCIENCE - Biology, IPC & Chemistry; 2 FOREIGN LANGUAGES – Spanish 1 & 2; 1 FINE ARTS – Art 1; 1 PHYSICAL EDUCATION – Foundations of Pers. Fit & Ind. Team Sports 9 ELECTIVES – Introduction to Engineering, Engineering Science (POE), Speech/Health, PE/SAT, World Geography, Spanish 3, Environmental Systems or Environmental Science AP, Independent Studies

**STEM Endorsement** - Courses required: Six (6) courses in STEM area. Completion of the foundation requirements, required courses include: Algebra II, Chemistry, and Physics. Additionally, five (5) courses must be completed from the following options: A) Computer Science Principles, Introduction to Engineering, Digital Electronics, Principles of Engineering, Principles of Biomedical Science, Human Body Systems, Environmental Sustainability, Civil Engineering & Architecture, Aerospace Engineering, Engineering Design & Development and/or any Advanced Mathematics or Science course. B) Five (5) mathematics courses; C) Five (5) science courses. We are in the process of Digital Electronics (DE) functioning as Mathematics and Engineering credit; Engineering Science (POE) and Engineering Design and Development (EDD) also functioning as a Science and Engineering credit.

**Multidisciplinary Endorsement** - Courses required: Six (6) in the Multidisciplinary area. Required courses include: Chemistry, Physics and Algebra II. Additionally, five (5) courses must be completed from the following options: Spanish IV, Advanced Journalism I & II, Art II or AP, Computer Science Principles AP, Computer Science A AP (Computer Science Applications PLTW), Psychology AP or Dual, Sociology, Aerobic Activity and/or any Advanced Mathematics or Science course.

**Arts & Humanities Endorsement** - Courses required: Completion of the foundation requirements and A) World History, World Geography, United States History, Government, Economics, both Psychology & Sociology and/or B) Spanish I, Spanish II, Spanish III and Spanish IV. C) English I, English II, English III, English IV and Advanced English Studies.

- English, Math, Science, and Social Studies courses are required each of the four years
- Pre-Calculus I Honors is required prior to or concurrently with Statistics AP
- If the required grade level's Engineering CTE course is full, the student will be placed in his/her second choice
- Science Academy will permit a student to choose, at any time, to earn an endorsement other than the endorsement the student previously indicated with parent consent.

#**Advanced Placement preparation is available in:** English III, English IV, Calculus I (AB), Calculus II (BC), Statistics, Chemistry, Biology, Physics I, Environmental Science, U.S. History, U.S. Government, World History, Economics, Art II, Computer Science Principles, Computer Science A, Spanish III, Spanish IV, and Psychology.

■**Dual Enrollment course at Science Academy are:** Pre-Calculus, Calculus I, Calculus II, Calculus III (option to receive credit at STC only during Spring semester of Cal II SciTech course), Statistics, English IV, Advanced English Studies, Spanish III. These courses earn a student both high school and college credit. Dual Enrollment teachers have a Master's degree in the area of study. Courses transfer to any public university in Texas.

\***Transcribed college credit is available through various PLTW partner universities (PLTW.org):** Introduction to Engineering Design, Computer Science Principles, Digital Electronics, Principles of Engineering, Aerospace Engineering, Computer Integrated Manufacturing, and Civil Engineering and Architecture. The credit is based upon the scores from an end of course exam and college and the submission of the specified application. There is no fee to take university EOC exams, but a filing fee with the university is required for each qualifying course the student requests be transcribed credit(s) through the university system.

●**Elective courses** from Home High Schools will be accepted and credit will be awarded within Science Academy's four-year course sequence.