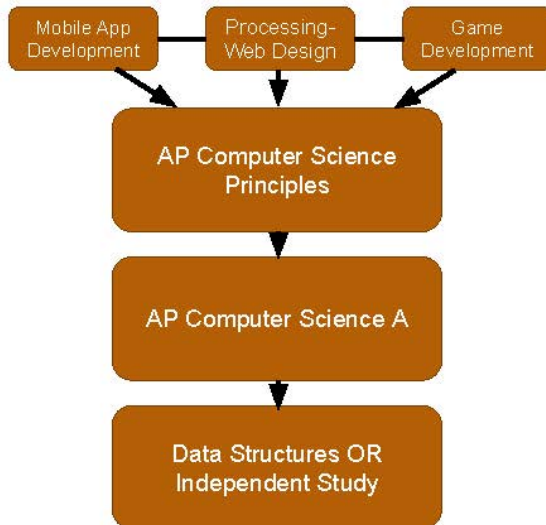


STEM Education at Arapahoe High School

Students interested in a STEM focused curriculum should enroll in classes recommended in the course sequences shown below. Students will not need to enroll in any specific math or science section; any class will work. Freshmen will need to enroll in one semester of Technology Studies where they will study Computer Aided Drafting (CAD). Sophomores will again enroll in one semester of Technology Studies where they will study Manufacturing and Architecture. During the junior and senior years the students will apply the Science, Technology, and Math concepts learned in the Engineering 1 and 2 classes. The other classes listed below are optional and will supplement each student's knowledge base and skills.

<p style="text-align: center;"><u>Freshman Year</u></p> <p>Science: Integrated Science or Biology</p> <p>Technology: Technology Studies CAD (Required) Design Projects(Optional) Woods(Optional)</p> <p>Engineering: None</p> <p>Math: Algebra 1 or Geometry</p>	<p style="text-align: center;"><u>Sophomore Year</u></p> <p>Science: Biology or Chemistry</p> <p>Technology: Technology Studies Manufacturing (Required) Architecture (Required) Design Projects(Optional) Intro to Comp. Sci.(Optional)</p> <p>Engineering: None</p> <p>Math: Geometry or Algebra 2</p>
<p style="text-align: center;"><u>Junior Year</u></p> <p>Science: Chemistry <i>or</i> Physics <i>or</i> AP Sciences</p> <p>Technology: Technology Studies(Optional) Design Projects(Optional) Woods(Optional) Intro to Comp. Sci.(Optional)</p> <p>Engineering: Engineering 1 -3D printing and CNC manufacturing emphasized</p> <p>Math: Algebra 2 or Trig/PreCalc</p>	<p style="text-align: center;"><u>Senior Year</u></p> <p>Science: Physics <i>or</i> Medicine <i>or</i> AP Sciences</p> <p>Technology: Technology Studies(Optional) Design Projects(Optional) Woods(Optional) Intro to Comp. Sci.(Optional)</p> <p>Engineering: Engineering 2 -Engineering design emphasized</p> <p>Math: Trig/PreCalc or Calculus</p>

Computer Science Course Pathway



ORDER & PRE-REQUISITES

Semester Classes (9 - 12):

1. Mobile App (No pre-req) (MWF)
2. Process-Web (No pre-req) (T/TR)
3. Game Dev (No pre-req) (T/TR)

Year Long Classes MWF(9 - 12)

1. AP CS Principles
 - a. Grades 9 - 12
 - b. Prereq Alg I
2. AP Computer Science A
 - a. Grades 10 - 12
 - b. Prereq Alg II and/or APCSP
3. Data Structures or Independent Study
 - a. Grades 11 - 12
 - b. Prereq AP CSA