

Cluster:	Engineering, Mechanical, and Information Technologies	Pathway:	Pre-Engineering PLTW
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(Name) High School Program Tech Prep Completer
Check your school's course offerings

Graduation Requirements	Grade 9	Grade 10	Grade 11	Grade 12
English - 4	English 9	English 10	AP English Language Or English 11	AP English Literature or English 12
Social Studies - 3	US Government	AP European History or World Civilizations	AP US History or US History	AP US Government or AP Economics or other Social Studies Elective
Mathematics – 3/4 (Choose a sequence)	Geometry or Algebra I	Algebra II or Geometry	Pre-Calculus or Algebra II	AP Calculus or Pre-Calculus or Math Elective
Science - 3	Biology	Chemistry or Earth, Space Science	Physics or Chemistry or Physical Science or AP Elective	AP Science or Other Science Elective
Physical Education - .5/1 Health Education - .5	.5 PE	.5 Health	.5 PE	
Fine Arts - 1	.5 Fine Arts	.5 Fine Arts		
Technology Education - 1	Introduction to Technology .5 and Fundamentals of Technology .5			
Dual Completer Foreign Language - 2 and/or Adv.Tech - 2	Language Spanish I	Language Spanish II	AP Language or Advanced Technology	AP Language or Advanced Technology
Suggested Electives		PSAT Prep	SAT Prep	Professional Career Internship
CTE Completer Requirements	Principles of Engineering (1)	<i>(Foundation course)</i> Introduction to Engineering Design (1)	*Digital Electronics (1) Computer Integrated Manufacturing (1)	Engineering Design and Development (1)

Examples of careers students are preparing to enter: Engineering Technician or Engineering Technician Assistant (Provides an engineering background for students who plan to pursue an advanced degree in engineering).

<http://www.aacps.org/aacps/boe/commu/slc/engineering.htm>

Sample Two Year College Program Sequence

Community College's Engineering Program for the Associate of Science Degree – 66 credits required – Upon completion of the Engineering curriculum, students may transfer to a B.S. degree program in engineering, or enter the job market as well-prepared, high-level engineering and physical science technicians. Articulated credit is awarded to high school students who complete the five-course PLTW program sequence. <http://www.aacc.edu/catalog/>

Semester 1	Semester 2
General Chemistry I Introduction to Engineering (articulated credit for IED) Calculus I and Analytic Geometry English Composition and Rhetoric Humanities – General Ed	General Chemistry II Calculus II General Engineering Physics I (articulated credit for Physics) Mechanics I (Statics)
Semester 3	Semester 4
Calculus III General Engineering Physics II Mechanics II (Dynamics) Social Science – General Ed 1 course from additional – CHE, MTH, EGR, PHY elective	Differential Equations General Engineering Physics III Arts elective – General Ed Social Science – elective 1 course from additional - CHE, MTH, EGR, PHY elective