

Cluster:	Engineering, Mechanical, and Information Technologies	Pathway:	Pre-Engineering PLTW
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**Meade High School
Tech Prep Completer Program**

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 Elective Course of Study		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>

Two Year College Program Sequence - Recommended

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