

Science, Technology, Engineering and Mathematics

EDUCATION LEVELS	GRADE	English/ Language Arts	Math	Science	Social Studies/ Sciences	Other Required Courses Other Electives Recommended Electives Learner Activities	*Career and Technical Courses and/or Degree Major Courses for Engineering and Technology Pathway	SAMPLE Occupations Relating to This Pathway
<i>Interest Inventory Administered and Plan of Study Initiated for all Learners</i>								
SECONDARY	9	English/ Language Arts I	Algebra I or Geometry	Biology	State History Civics	All plans of study should meet local and state high school graduation requirements and college entrance requirements. Certain local student organization activities are also important including public speaking, record keeping and work-based experiences.	Click here to view the course catalog: https://www.graderesults.com/cte Industry-Based Certification Tests & Preparation Courses	<ul style="list-style-type: none"> ▶ Aeronautical Engineer ▶ Aerospace Engineer ▶ Agricultural Engineer ▶ Agricultural Technician ▶ Application Engineer ▶ Architectural Engineer ▶ Automotive Engineer ▶ Biomedical Engineer ▶ Biotechnology Engineer ▶ CAD Technician ▶ Chemical Engineer ▶ Civil Engineer ▶ Communications Engineer ▶ Computer Engineer ▶ Computer Programmer ▶ Construction Engineer ▶ Electrical Engineer ▶ Electronics Technician ▶ Geothermal Engineer ▶ Industrial Engineer ▶ Manufacturing Engineer ▶ Manufacturing Technician ▶ Marine Engineer ▶ Mechanical Engineer ▶ Mining Engineer ▶ Nuclear Engineer ▶ Petroleum Engineer ▶ Product/Process Engineer ▶ Survey Technician ▶ Systems Engineer ▶ Transportation Engineer
	10	English/ Language Arts II	Geometry or Algebra II	Chemistry	U.S. History			
	11	English/ Language Arts III	Algebra II or Trigonometry Pre-Calculus or Statistics	Physics	World History World Geography			
	<i>College Placement Assessments-Academic/Career Advisement Provided</i>							
	12	English/ Language Arts IV	Trigonometry or Pre-Calculus/ Calculus or AP Calculus or Math Analysis	AP Science or Structured Com- puter Program Language	Economics Entrepreneurship			
<i>Articulation/Dual Credit Transcribed-Postsecondary courses may be taken/moved to the secondary level for articulation/dual credit purposes.</i>								
POSTSECONDARY	Year 13	English Composition English Literature	Algebra or Trigonometry Calculus I Calculus II	Chemistry Physics I	Psychology Global Issues	All plans of study need to meet learners' career goals with regard to required degrees, licenses, certifications or journey worker status. Certain local student organization activities may also be important to include.	Click here to view the course catalog: https://www.graderesults.com/cte Industry-Based Certification Tests & Preparation Courses	
	Year 14	Speech/ Oral Communication Professional and Technical Writing	Introduction to Differential Equations Calculus III Statistics	Physics II Biology	American History Sociology Ethics and Legal Issues			
	Year 15	Continue courses in the area of specialization.						
	Year 16							