



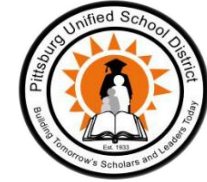
# PITTSBURG HIGH SCHOOL – RISING 9<sup>TH</sup> GRADERS

## CAREER TECHNICAL EDUCATION PATHWAYS\* AND COURSES, 2024-2025

<https://tinyurl.com/CTE-Pittsburg>

A-G Designations are in Parentheses

CC – College Credit from Los Medanos College or Diablo Valley College (student receives college and high school credit)



PHS PATHWAY NAME	COURSE SEQUENCE		ELECTIVE COURSES CONNECTED WITH PATHWAY	
<b>ENGINEERING TECHNOLOGY</b>	Intro to Engineering Design (F) (CC - LMC)	Principles of Engineering (D) (CC - LMC)	<ul style="list-style-type: none"> <li>Digital Electronics (D)</li> <li>Drones (G) (CC-DVC)</li> <li>Engineering Research &amp; Development (D)</li> <li>Robotics (G)</li> </ul>	
<b>WEB DESIGN</b>	Computer Science Discoveries (D)	Designs for the Web (F)	<ul style="list-style-type: none"> <li>AP Computer Science Principles (D)</li> <li>AP Computer Science A (C) - math intensive</li> </ul>	
<b>GRAPHIC DESIGN</b>	Computer Graphics (F)	Advanced Computer Graphics (F)	<ul style="list-style-type: none"> <li>Game Design (G) (CC-DVC in progress)</li> </ul>	
<b>PHOTOGRAPHY</b>	Digital Photography (F)	Advanced Photography (F)		
<b>FILM/VIDEO PRODUCTION</b>	Video Production (F)	Broadcast Journalism (G) (Television Production)		
<b>MULTIMEDIA SOUND PRODUCTION</b>	Digital Recording Studio (F)	Advanced Audio Production (G)		
<b>CONSTRUCTION TECH</b>	Wood 1 (--)	Construction Tech (G)		
<b>AUTOMOTIVE</b>	Auto 1 (--)(CC-LMC)	Advanced Auto (--)		<ul style="list-style-type: none"> <li>Electric &amp; Autonomous Technology (--)</li> </ul>
<b>SPORTS MEDICINE</b>	Sports Medicine (D)	Advanced Sports Medicine (G)		
<b>BIOTECHNOLOGY</b>	Principles of Biomedical Science (D)	Medical Chemistry (D) (For 10-12 graders, PBS is not a pre-requisite)		<ul style="list-style-type: none"> <li>Medical Interventions (D)</li> <li>Human Body Systems (D)</li> <li>Public Health (G)</li> </ul>
<b>BARBERING &amp; COSMETOLOGY</b>	Barbering 1 (--)			
<b>PUBLIC SAFETY</b>	Law Enforcement (--)			
<b>EDUCATION &amp; CHILD DEVELOPMENT</b>	Early Childhood Education 1 (CC-LMC)	Early Childhood Education 2 (CC-LMC)		

\*A pathway is 2 sequential year-long courses revolving around a specific career industry. Students benefit by learning about specific skills, knowledge, and career opportunities in an industry of their interest. The combination of hands on experience in the industry and rigorous classroom curriculum offers students a quality experience and exposure to college and career options after high school.

## Benefits of CTE programs

(most of this data can be found on the California Department of Education website):

“Students can actually come right out of [CTE] programs and be employable right out of high school. That’s not typical from a normal high school career. These CTE programs are building a base workforce.” Randy Walden, Advanced Manufacturing Specialist, of Nevada Governor’s Office of Economic Development.

### DURING HIGH SCHOOL

1. **Absences:** Participation in CTE is predictive of fewer absences as well as reduced probability of excessive absences. (<https://doi.org/10.1080/13636820.2020.1765841>)
2. **Attendance:** CTE motivates students to attend school more frequently and be more engaged, and therefore improve core academic skills.
3. **Dropout Rates:** High-risk students are 8 – 10 times less likely to drop out in the 11<sup>th</sup> and 12<sup>th</sup> grades if they enroll in a CTE program.
4. **Behavior Problems:** CTE has been found to increase school connectedness, thereby reducing behavioral problems related to suspensions and expulsions.

### POST-SECONDARY PREPARATION

5. **ACT Scores:** A [2019 study](#) found that students who completed a CTE pathway scored significantly higher on the ACT composite math, science, English, reading and writing assessments than those who did not participate in one.
6. **High School Graduation Rate:** The average high school graduation rate for CTE concentrators – students who take multiple courses in one CTE program area – is 94% compared to the national rate of 85%.
7. **College & Career Readiness:** Eighty (80) percent of students in college prep and rigorous CTE courses met college and career readiness goals versus only 63 percent of students taking only college prep.

### COLLEGE

8. **College-going Minority Students:** Attendance in a CTE program more than doubles the rate of college entrance for minority students.
9. **College & Persistence:** CTE significantly increases not only the high school graduation rate, but also results in a higher percentage of students going to college and persisting through graduation.

### EMPLOYMENT

10. **Wages:** CTE provides cutting-edge, rigorous and relevant career and technical education that prepares youth for a wide range of high-wage, high-skill, high-demand careers.
11. **Full Time Employment:** CTE concentrators are more likely than non-concentrators to be employed full time and have higher median annual earnings 8 years after graduation.
12. **Employment Preparation:** CTE prepares students for the world of work by introducing them to workplace competencies, and makes academic content accessible to students by providing it in a hands-on context.
13. **Soft Skills:** They provide students with not only career and academic skills, but soft skills that are needed for the modern workplace, such as: critical thinking, communication, team work, citizenship, integrity, ethical leadership, research tools, creativity, and innovation.