



# Mt. Carmel High School

## CTE Industry Sectors



### Arts, Media & Entertainment (AME)

The AME Pathway focuses on music, painting, drawing, dancing, and performing. It requires independent thinking and self-discipline. Student organizations may include Photography Club.



### Health Science & Medical Technology

This Pathway is one of the fastest growing industries in San Diego County, and nationwide. Students who enjoy caring for others will fit perfectly in this field. Topics that will be covered include biotechnology, patient care, public health, and medical research laboratories. Student organizations in this field may include, Catalyst for Success, Future Doctors of America, Future Nurses Club, and Red Cross Club.



### Engineering & Architecture

The E & A Pathway provides learning opportunities for students interested in preparing for careers in areas such as architecture, industrial design, and civil engineering. Student organizations in this field may include Amateur Radio Club, All Girls STEM, STEM Society, Science Olympiad, and Sundevil Robotics.



### Information & Communication Technology (ICT)

The ICT Pathway provides students with computer, software, networking, telecommunications, programming, and information systems skills. This pathway meets the national criteria for high wage & high skill jobs. Student organizations may include MC Sun.



### Public Services

The PS Pathway prepares students with a broad-based foundational knowledge in careers that involve public safety. The careers in this pathway include those in fire services, emergency medical services, wildland services, and emergency management. Students in this pathway are able to compete in the Fire Science Challenge.



### Transportation

The Transportation Pathway is responsible for ensuring that people and things get to the right place, at the right time, for the right price. Students will be able to explore careers such as auto repair, auto refinishing and other related fields. Student organizations in this pathway may include Sundevil Motorsports Club.



### Building & Construction Trades

The Building & Construction Pathway prepares students to work with their heads and hands to design buildings and landscapes. Students will learn math, technology skills, and job experience in this industry.



## CTE Pathways at MCHS

In order to become a pathway completer, a student must complete 20 credits in both a concentrator and capstone course OR two capstone courses in the **same** pathway. Students who achieve **CTE Pathway Completion** will receive a **certificate**, a **notation on their transcript**, and a **special diploma seal** for each pathway they complete.



### Arts, Media and Entertainment Industry Sector

Design, Visual and Media Arts Pathway	Level	UC/CSU A-G	College Credit
Photography 1-2	Concentrator	(f) Visual Arts	Palomar PHOT 120
<b>Photography 3-4</b>	Capstone	(f) Visual Arts	
3D Computer Animation 1-2	Concentrator	(f) Visual Arts	
<b>3D Computer Animation 3-4</b>	Capstone	(f) Visual Arts	
<b>3D Computer Animation 5-6</b>	Capstone	(f) Visual Arts	
<b>Studio Art (Drawing, 2D, &amp; 3D)</b>	Capstone	(f) Visual Arts	
<b>AP Studio Art (Drawing, 2D, &amp; 3D)</b>	Capstone	(f) Visual Arts	
Performing Arts Pathway	Level	UC/CSU A-G	College Credit
Drama 1-2	Concentrator	(f) Theater	
<b>Drama 3-4</b>	Capstone	(f) Theater	
<b>Drama 5-6</b>	Capstone	(f) Theater	
<b>Theater Arts Study &amp; Performance 7-8</b>	Capstone	(f) Theater	
Production & Managerial Arts Pathway	Level	UC/CSU A-G	College Credit
Digital Media Production 1-2	Concentrator	(f) Visual Arts	
<b>Digital Media Production 3-4</b>	Capstone	(f) Visual Arts	Palomar DBA 170
<b>Digital Media Production Advanced</b>	Capstone		
Technical Theater Production/Theater 1-2	Concentrator	(f) Theater	
<b>Technical Theater Production/Theater 3-4</b>	Capstone	(f) Theater	



## Engineering & Architecture Industry Sector

Engineering Design Pathway	Level	UC/CSU A-G	College Credit
PLTW Intro to Engineering Design 1-2	Concentrator	(d) Engineering	Palomar ENGR 101
<b>PLTW Honors Principles of Engineering 1-2</b>	Capstone	(d) Engineering	Palomar ENGR 126
<b>PLTW Engineering Design &amp; Development</b>	Capstone	(d) Engineering	



## Information & Communication Technology Industry Sector

Software & Systems Development Pathway	Level	UC/CSU A-G	College Credit
Intro to Computer Science	Concentrator		
Introduction to Computer Programming 1	Concentrator	(g) Comp Sci	
Introduction to Computer Programming 2	Concentrator	(g) Comp Sci	
<b>AP Computer Science A 1-2</b>	Capstone	(c) Mathematics	



## Health Science & Medical Technology Industry Sector

Biotechnology Pathway	Level	UC/CSU A-G	College Credit
<b>Biomedical Technology</b>	Capstone	(d) Science	Miramar BIO 131

*\*This is an incomplete pathway so does not help students with pathway completion*

Healthcare Operational Support	Level	UC/CSU A-G	College Credit
Sports Medicine/Athletic Training 1-2	Concentrator	(g) Interdisciplinary	
<b>Sports Medicine/Athletic Training 3-4</b>	Capstone	(g) Interdisciplinary	



## Public Services Industry Sector

Emergency Response Pathway	Level	UC/CSU A-G	College Credit
Fire Science 1-2	Concentrator		Palomar FIRE 51 & FIRE 100
<b>Fire Science 3</b>	Capstone		Palomar FIRE 51 & FIRE 100
<b>First Responder</b>	Capstone		Palomar EME 100



## Transportation Industry Sector

Systems Diagnostics, Services, & Repairs Pathway	Level	UC/CSU A-G	College Credit
Auto Technology 1-2	Concentrator		
<b>Auto Technology 3-4</b>	Capstone		Mira Costa Auto 130
<b>Auto Technology 5-6</b>	Capstone		Mira Costa Auto 102

**\*\*\*Pathway offerings available to Mt. Carmel students located at other schools\*\*\***



## Building & Construction Trade Industry Sector

Available as a 5.5 course after school at Poway High School

Residential & Commercial Construction 1-2	Level	UC/CSU A-G	College Credit
Construction Technology 1-2	Concentrator		
<b>Construction Technology 3-4</b>	Capstone		