



# MT. CARMEL SUNDEVILS

## INFORMATION TECHNOLOGY PATHWAY:

### COMPUTER SCIENCE

Year	Fall	Winter	Spring
Year 1 Pathway Sequence	<p><b>PLTW Intro to Computer Science</b> (ICS) <i>(No minimum math requirement)</i> 1 trimester /12 week course Students work in teams to create apps for mobile devices using MIT App Inventor®. They explore the impact of computing in society and build skills in digital citizenship and cybersecurity. In addition, students to create algorithms for games of chance and strategy.</p>		
Year 2 Pathway Sequence			<p><b>Intro to Computer Programming 1</b> Students are introduced to the JAVA programming language Students learn the programming concepts to be able to design a Rock, Paper, Scissors (Roshambo) game and a guessing game</p>
Year 3 Pathway Sequence	<p><b>AP Computer Science A 1*</b> <i>Recommend having had programming experience previously or successful completion of Honors Pre-Calc to be successful in this level of computer science.</i></p>	<p><b>AP Computer Science A 2*</b> Students complete curriculum in preparation for the Advanced Placement exam by Collegeboard for transferrable college credit. <i>(*course articulated with Palomar College CSCI 114 Programming Fundamentals II for 4 transferrable units at no cost to students)</i></p>	<p><b>Intro to Computer Programming 2</b> Students learn more about programming graphics and learn concepts to prepare to learn Data Structures in programming. <i>Meets UC /CSU "G" academic elective.</i></p>
Year 4 Pathway Sequence	<p>Palomar College <b>CSCI 210 Data Structures</b></p>	<p>Concurrent Enrollment with MCHS <i>Earn college credit while a high school student</i></p>	<p><i>Students responsible for paying Palomar College course fees and textbooks</i></p>