School: CAMS
Pathway Name: CAMS
Industry Sector: Math and Science

Pathway Vision: Our vision is for students to experience an ambitious and challenging curriculum with a focus on Science, Technology, Engineering, and Mathematics which maximizes individual potential and ensures students are well-equipped to meet the challenges at post-secondary institutions and in the world around them.

Pathway Mission: To develop the talents of motivated students to become thoughtful and productive members of an increasingly global and technological society. We aim to increase the nation's pool of graduates in Mathematics and Science by offering rigorous and innovative college-preparatory curriculum that fosters the joy of discovery and promotes a collaborative culture of ethical and innovative problem-solving.

2027-2028 Course of Study
Graduating Class of 2031

		HS Grad Req.	9th grade	10th grade	11th grade	12th grade	UC/ CSU A-G Req.
Technical Core	**Required Technical Core** *3-course thematic sequence: CTE, PLTW, or Technical*	3	**1371: AP Comp Sci Princ** **and** **2503: Principles of Engineering (PLTW) (g)**	**1378C: AP Comp Sci A** **and** **3867: Intro. to Biotechnology (d)**		**1387: Software Design and Development (Computer Science required)**	'g' 1
					3868: Intermediate Biotechnology (d) (Biotech required)	**3875: Advanced Biotechnology (d) (Biotech required)**	
						2529: Honor PLTW Capstone (Engineering required)	
Academic Core	History/Social Science	3		**2318: AP World History Modern**	**2236: AP US History**	**2241: US Government/ Personal Finance**	'a' 2

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	English	4	**1403: English 1-2 Accelerated**	**1457 AP Seminar Eng 10**	**1458: AP English Language**	**1449: AP English Literature**	'b' 4
	Math	3	**2971: Geometry Accelerated or 2964: Algebra 2 Accelerated**	**2964: Algebra 2 Accelerated or 2999: AP Pre-Calculus**	**2999: AP Pre-Calculus 3158: AP Calculus AB, or 3159: AP Calculus BC**	**3158: AP Calculus AB or 3159: AP Calculus BC 3157 AP Statistics**	'c' 3
	Lab Science	2	**3870: Medical Biology or 4032: AP Environmental Science**	**3832: Chemistry 1-2 Honors**	**3854: AP Physics 1**	**3815 Ant/Phys Honors or 3855: AP Physics 2 AP Environmental Science AP Chemistry**	'd' 2
	Language Other Than English (LOTE)	1 or VAPA	**1760: Japanese 1-2, 1831: Spanish 1-2, or 1840: Spanish for Spanish Speakers 5-6**	**1761: Japanese 3-4, 1832: Spanish 3-4, or 1860: AP Spanish Language**	**1762: Japanese 5-6 or 1833: Spanish 5-6**	**1781: AP Japanese Language or 1860: AP Spanish Language**	'e' 2
	Visual and Performing Arts (VAPA)	1 or LOTE	**1303: Intro. to Design and Engineering (f)**				'f' 1
	Optional Pathway-Aligned Elective Course			**2511: Computer Integrated Manufacturing (PLTW) (g) (Engineering focus)**	**Networking and Cyber Defense (Computer Science focus) 2515: Aerospace Engineering (PLTW) (g) (Engineering focus) 2507: Digital Electronics (g)(Engineering focus)**		'g' 1
	Physical Education	2	**3704: Intro to Kinesiology 9**	**3707: Adv Kinesiology 10**			
Global Elective Courses	Additional courses that provide pathway enrichment	3	**2323: AP Human Geography 3451 Orchestra 1-2 3483: Dance 1-2 (f) 2227: Introduction to Psychology (g) 2231: Introduction to**	**3157: AP Statistics (c) 3451 Orchestra 1-2/3452 Orchestra 3-4 3484: Dance 3-4 (f) 3483 Dance 1-2 2800: Student Council 2830: Dig Design &**	**3157: AP Statistics 3451 Orchestra 1-2/3452 Orchestra 3-4 3453: Orchestra 5-6 3485: Dance 5-6 (f) 2833: School Annual 2800: Student Council**	**3486: Dance 7-8 (f) 2800: Student Council 3714: Fitness/ Conditioning 2515 Aerospace Engineering (g)**	

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			Sociology (g) **2830 Dig Design & Yearbook** **2800: Student Council**	**Yearbook** **2231: Intro to Psych/Soc(g)** **2507:Dig Electronic (g)** **2511:Comp, Int. Mfg (g)**	**3714: Fitness/ Conditioning** **2830 Dig Design & Yearbook** **2507:Dig Electronic (g)** **2511:Comp, Int. Mfg (g)** **2224: AP Psychology** **2515 Aerospace Engineering (g)** **2232: Ethnic Studies** **1456: AP Research** **3820: AP Chemistry** **CSUDH Electives (a – g)**	**2224: AP Psychology** **2511:Comp, Int. Mfg (g)** **2507:Dig Electronic (g)** **2830 Dig Design & Yearbook** **1456: AP Research** **3815: Anatomy/ Physiology Honors (d)** **CSUDH Electives (a – g)**	
Work-Based Learning	Required work-based learning opportunities		**Career Fair** **Resume Writing Module** **Cabrillo Marine Aquarium Field Trip with Biology Lab**	**Career Fair** **Mock Interview** **Manufacturing Day** **CyberPatriot Competition** **Biotechnology Lab Exploration** **Water Treatment Facilities** **Bioscience LA Career Day** **LA Airforce Base**	**Career Fair** **Biotechnology Project with Mentor Interaction** **Engineering-themed projects** **CyberPatriot Competition** **SNAP HQ** **Bioscience LA Career Day** **LA Airforce Base**	**Biotechnology Simulated Work Experience** **Engineering Simulated Work Experience/ Internship** **Software and Design Experience** **CyberPatriot Competition** **SNAP HQ** **Bioscience LA Career Day** **LA Airforce Base**	

Integrated Curriculum	Multidisciplinary Integrated Curriculum		**Pizza Box Innovation Project- Engineering, English, Math, Biology** **Zombie Apocalypse IDP Computer Science, English, Math, Biology**	**Simulated Biotechnology Company Using Science to Solve a Global Problem - Biotechnology, History, Math, English Chemistry** **College and Career Investigation - English, History, Math and Science**	**Mars Mission Project - History, English, Math, Physics, Biotechnology, Engineering, Computer Science**	**Capstone Experience in Engineering, Biotechnology, and/or Computer Science**	

Key:
Red: Biotech
Green: Engineering
Blue: Computer Science