School: Millikan High School
Pathway Name: Sega
Industry Sector: Information and communication technologies

Pathway Vision: Design and Develop your future in Computer Science.
Pathway Mission: Through principles of design and computer programming, SEGA provides students with a challenging and supportive sequence of traditional academic and game design/development courses, while students develop curiosity, creativity, and empathy, independently and as a team, to influence the broader community.

2026-2027 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	1391: Level 1: Game Design (g)		1392: Level 2: Game Development (g)	1393: Level 3: Game Capstone (g)	'g' 1
Academic Core	History/Social Science	3		2271: Modern World History or 2318: AP World History	2263: Ethnic Studies: Our American Histories or 2236: AP US History	2241: Govt and Personal Finance or 2234: AP Govt and Personal Finance	'a' 2

*Try-outs or auditions may be required for this course

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	English	4	1401: English 1-2 or 1403: English 1-2 Accelerated	1408: English 3-4 or 1453: AP Seminar	1410: English 5-6 or 1458: AP English Language	1449: AP English Literature or 1474: English Reading Writing & Composition or 1470: Diverse Voices and Media Literacy	'b' 4
	Math	3	2986: Algebra 1 or 2971: Geometry Accelerated	2970: Geometry or 2964: Algebra 2 Accelerated	2963: Algebra 2 or 3057: Pre-Calculus or 2999: AP Pre-Calculus	Strongly Recommended: See 4th year Math Courses	'c' 3
	Lab Science	2	3865: Biology of the Living Earth	3876: Chemistry in the Earth System	Strongly Recommended: See Science Electives		'd' 2
	Language Other Than English (LOTE)	1 or VAPA	1831: Spanish 1-2 1801: French 1-2 1838: Spanish for Spanish Speakers 1-2	1832: Spanish 3-4 1803: French 3-4 1839: Spanish for Spanish Speakers 3-4	Strongly Recommended: See LOTE Electives		'e' 2
	Visual and Performing Arts (VAPA)	1 or LOTE	Dance 5-8* (not PE credit) 1082: Art Foundations 1-2 Instrumental Music* Vocal Music* 3353: Intro to Theater Art 2639A: Graphic Design 1-2				'f' 1
	Physical Education	2	3704: PE / Sport* / Dance / Marching Band*	3707: PE / Sport* / Dance / Marching Band*			
Elective Courses	Additional courses that provide pathway enrichment	3	See Global Elective Offerings				'g' 1

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Work-Based Learning	Required work-based learning opportunities		**CTE - Game Design:** EPortfolio; Resume; Brag Sheet; Create a Game Design Document; Career Research on California Career Zone and Career One Stop; Career Action Plan; Field Trip for Guest Speakers and WorkPlace Tour with ATT; Learning Javascript (Workplace skill); Learning Construct3 Game Development Platform. **Literacy workshop:** career specialist presentation/ resume writing SPED	**College & Career Fair**: Admissions/Acceptance information, financial aid, work study, & more	**CTE Game Development:** EPortfolio; Resume; Career Research on California Career Zone and Career One Stop; Career Action Plan; Further lessons on Construct 3 Platform; Learn Unity Game Development Platform (Workplace Skills); Workplace Tour with CSUDH - Esports stadium - to learn about careers surrounding the ESports fields	**CTE Game Capstone:** EPortfolio on Weebly (New platform for websites), finalized resume, Finalize Career Action Plan, Capstone Project creating an actual game, website or mobile app to present to industry professionals.	
Integrated Curriculum	Multidisciplinary Integrated Curriculum		**ELA & CTE Course** - Narrative about the background story and lore of the character they create for their original game in their game design course.	**ELA & Modern World History** -	**ELA** - Create cover letter and complete research on job they are applying for **CTE Game Development** - Resume and Mock Interview	**Personal Finance & CTE - Capstone course** - Creating a marketing plan for their capstone project. **ERWC or AP English Literature** - Creating a board game using game design principles and 3D printing the game pieces in CTE Capstone course	

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