School: **Monte Vista High School**
Academy/Pathway: **ICT / Game Design**

Grossmont Union High School District

Level	Grade	English Language Arts	Math	Social Studies	Science	Career Technical Education	Other Required Courses or Recommended Electives	Additional Pathway Information
Secondary	**9**	English 1, 2	Integrated Math I	Geography	Science Y1	**Game Design 3, 4 T851 / T852, UC-g**	P.E. Y1 WorldLanguage 1, 2 Visual and Performing Arts Y1	**Occupations Requiring Less Than a Baccalaureate Degree** • Computer Support Specialist • Communications Technician • Computer Maintenance Technician • LAN (Local Area Network) Administrator • Network Systems & Data Communication Analysts • Programmer • Software Technician Technical Support Representative
	10	English 3, 4	Integrated Math II	World History	Science Y2	**Game Design 3, 4 T851 / T852, UC-g** **Game Design 5, 6 T853 / T854, AR**	P.E. Y2 WorldLanguage 1, 2 World Language 3, 4 Visual and Performing Arts Y1	
	11	English 5, 6	Integrated Math III	U.S. History	*Science Elective*	**Game Design 3, 4 T851 / T852, UC-g** **Game Design 5, 6 T853 / T854, AR**	P.E. Y2 WorldLanguage 1, 2 World Language 3, 4 Visual and Performing Arts Y1	**Occupations Requiring a Baccalaureate Degree** • Software Developer / Programmer / Architect • Software/Systems Engineer • Systems Analyst / Developer • Business Analyst / Web Developer • Communications Engineer
	12	English 7, 8	*Math Elective*	Am. Gov. / Econ.		**Game Design 5, 6 T853 / T854, AR**	P.E. Y2 World Language 3, 4 World Language 5, 6 Visual and Performing Arts Y1	
Key		**Minimum UC a-g Entrance Requirement**	**Required by GUHSD for Graduation**	**Recommended for College Admissions**	**CTE Concentrator Course**	**CTE Capstone Course**	**CTE Meets UC a-g Entrance Requirements** **Articulated Course**	**Grossmont Community College Program Offerings:**

The course sequence listed below is for illustration only. A student's actual course sequence may vary.

- Associates Degree (Gen Ed. required) in Computer Science Information Systems w/ an emphasis in:
  - **Computer Programming** (28-30 Units) (See Left)
  - Web Design (18-20 Units)
  - Cybersecurity & Networking (25-26 Units)

Post-Secondary	13	CSIS 112 / CIS 190 *Windows Operating Systems*	CSIS 113 / CIS 191 *Introduction to Linux*	CSIS 119 / CS 119 *Introduction to Computer Programming*	**Select TWO of the following:**
					CSIS 132 / CIS 211 *Introduction to Web Development*
					CSIS 133 / CIS 213 *Intermediate Web Development*
					CSIS 135 / CIS 215 *Introduction to JavaScript Programming*
					CSIS 165 *Assembly Language and Machine Architecture*
					CSIS 250 *Introduction to Python Programming*
					CSIS 276 / CIS 240 *Introduction to SQL*
					CSIS 290 *Introduction to C# Programming*
					CSIS 295 *Android Application Development with Java*
						• Certificate of Achievement in Computer Science Information Systems (no Gen. Ed. required)
						
						• Certificate of Proficiency (12 Units)
						  ○ Information Technology Technician
						  ○ Network and Cybersecurity Technician
						
						Cuyamaca Community College Program Offerings:
						• Associates Degree in Computer Information Science
						  ○ Networking, Security and System Administration
						  ○ Web Development
						
						• Certificates of Specialization
						  ○ Cisco Certified Network Associate Certificate
						  ○ Cisco Network Professional Certificate
						  ○ Cyber Security Specialist Certificate
						  ○ Computer Programming Certificate
						  ○ Computer Support Technician Certificate
						  ○ Web Design Certificate
						  ○ Web Programming Certificate

	14	CSIS 293 / CS 182 *Introduction to Java*	CSIS 294 / CS 282 *Intermediate Java Programming*	CSIS 296 / CS 181 *Introduction to C++ Programming*	CSIS 297 / CS 281 *Intermediate C++ Programming* **WBL Plan 22-23:** • Guest speakers • Virtual tours • Employability Certifications • Industry Tours **LMI Highlights for Pathway 22-23:** • Average annual earnings are $137,846; • 5% projected growth rate; • Over 60k people are employed in the industry sector.	