

Perris Union High School District Course of Study

A. COURSE INFORMATION

Course Title: <small>(limited to 34 characters with spaces in Infinite Campus)</small> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">RCOE Intermediate eSports & Game Design</div> <input checked="" type="checkbox"/> New <input type="checkbox"/> Revised	Subject Area: <input type="checkbox"/> Social Science <input type="checkbox"/> English <input type="checkbox"/> Mathematics <input type="checkbox"/> Laboratory Science <input type="checkbox"/> World Languages <input type="checkbox"/> Visual or Performing Arts <input checked="" type="checkbox"/> College Prep Elective <input type="checkbox"/> Other Is this classified as a Career Technical Education course? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes, which pathway does this course align to? Pathway Name: <div style="border: 1px solid black; padding: 2px;">ICT Games and Simulation - Concentrator</div> CTE CDE Code: 175	Grade Level(s) <input type="checkbox"/> MS <input type="checkbox"/> HS <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input checked="" type="checkbox"/> 10 <input checked="" type="checkbox"/> 11 <input checked="" type="checkbox"/> 12		
If revised, the previous course name if there was a change <div style="border: 1px solid black; height: 20px; width: 100%;"></div>				
Transcript Course Code/Number: <div style="border: 1px solid black; height: 20px; width: 100%;"></div> <small>(To be assigned by Educational Services if it's a new course)</small> CREDIT TYPE EARNED: CALPADS CODE: <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; padding: 2px;">Elective</td> <td style="width: 50%; padding: 2px;">8141</td> </tr> </table>	Elective	8141		
Elective	8141			

Was this course <u>previously approved by UC for PUHSD?</u> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <small>(Will be verified by Ed Services)</small> Which A-G Requirement does/will this course meet? <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; padding: 2px;">G - Elective</td> <td style="width: 50%; padding: 2px;"><input type="checkbox"/> Pending</td> </tr> </table>	G - Elective	<input type="checkbox"/> Pending	<p style="text-align: center; background-color: yellow; margin: 0;">Credential Required to teach this course: To be completed by Human Resources only.</p> <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> <i>CTE Information and Communication Technologies</i> <i>Single Subject: Business, Industrial and Technology Education</i> </div> <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> </div> <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> <div style="display: flex; justify-content: space-between;"> Signature Date </div> <div style="display: flex; justify-content: space-between; margin-top: 5px;"> 08/06/2024 </div> </div>
G - Elective	<input type="checkbox"/> Pending		

Submitted by: Rebecca Beigle Site: CMI Date: 08/05/2024 Email: rebecca.beigle@puhsd.org	Unit Value/Length of Course: <input type="checkbox"/> 0.5 (half-year or semester equivalent) <input checked="" type="checkbox"/> 1.0 (one-year equivalent) <input type="checkbox"/> 2.0 (two-year equivalent) <input type="checkbox"/> Other:
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Approvals	Name/Signature	Date
Director of Curriculum & Instruction		08 / 06 / 2024
Asst. Superintendent of Educational Services		08 / 06 / 2024
Governing Board		



Course Instruction Plan (CIP) 2024-2025

Course Title		RCOE Intermediate eSports & Game Design			
Pathway Title		ICT - Games and Simulation		CALPADS Pathway Code	175
CALPADS Course Sequence Code		8141		Course Level	<input type="checkbox"/> Intro <input checked="" type="checkbox"/> Con <input type="checkbox"/> Cap <input type="checkbox"/> App Con
Pathway Duration		<input checked="" type="checkbox"/> 2-Yr <input checked="" type="checkbox"/> 3-Yr <input type="checkbox"/> 4-Yr		Grade Level	<input type="checkbox"/> 9 <input checked="" type="checkbox"/> 10 <input checked="" type="checkbox"/> 11 <input checked="" type="checkbox"/> 12
Total Hours	180	Classroom	180	CC/CVE	0
RCOE Course Code		ICT-175-03-02		Transcript Abbrev.	ICT-175-03-02
A-G		G		Date Approved	07/30/2024
Articulated		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Institution	
Articulated Course Title					
Course Status		<input checked="" type="checkbox"/> New <input type="checkbox"/> Revision		Previous Title	

Course of Study/Pathway	
Introduction	RCOE Introduction to Esports and Game Design
Concentrator	RCOE Intermediate Esports and Game Design
Capstone	RCOE Advanced Esports and Game Design
Applied Concentrator	N/A

O*Net Codes			
Code	15-1255.01	Title	Video Game Designers
Code	15-1252.00	Title	Software Developers
Code	15-1299.05	Title	Information Security Engineers
Code	15-1212.00	Title	Information Security Analysts

Course Description
<p>RCOE Intermediate ESports and Game Design builds on the Introductory class. It allows students to gain foundational knowledge in high-growth verticals (such as business, marketing, cybersecurity, etc.) as well as gain relevant industry certifications; helping students kickstart their careers. Within the Business and Marketing units, students learn how to create quality business plans for their hypothetical products, while getting certifications in the process. In the Cybersecurity and networking modules, students will perform hands-on labs using the cutting-edge Testout software. On module completion, students will have the skills necessary to pass the CompTIA Tech+ certification, a prerequisite to CompTIA Security+ certification (one of the most sought-after certifications in the hyper-growth field of Cybersecurity). They will also learn key soft skills of communication, teamwork, and leadership.</p>

Textbooks			
Title # 1		Edition/Year	
Author(s)		Publisher	
Website	GreatLearning.com		
Title # 2		Edition/Year	
Author(s)		Publisher	
Website	Testout.com		
Title # 3		Edition/Year	
Author(s)		Publisher	
Website			

Units of Instruction

Unit 1 Title	Fundamentals of Project Management
Unit 1 Engaging Title	Project Management: From Vision to Reality
Unit 1 Essential Question	What is project management? Why are project managers in high demand?
Unit 1 Description (3-5 Sentences)	Students will demonstrate an understanding of the principles of “project management” by mapping a hypothetical video game into the 7 project phases. As part of the exercise, students will identify key elements of the project lifecycle such as planning, resource management, teamwork, risk assessment, and monitoring. Students will also complete a “project management” quiz on “ greatlearning.com ” and receive a certification on successful completion.
Unit 1 Key Assignment	<p>To demonstrate mastery of the concepts of the fundamentals of project management, students will complete both a project management assignment as well as complete a quiz on greatlearning.com:</p> <p>Project Management Assignment:</p> <ol style="list-style-type: none"> 1. Select a Game: <ul style="list-style-type: none"> ○ Students will create an idea for a new video game. The video game can be any genre (educational, first person, role-playing, etc.) on any platform (mobile, PC, console). 2. Project Management Analysis: <ul style="list-style-type: none"> ○ Students will document the project management phases of the above game. Students must document the following: <ul style="list-style-type: none"> ■ Project Initiation: What is the main objective or mission of the game? How will the game make money? Why will the game be successful? ■ Project Planning: What is the budget, timeframe, and resources required? ■ Project Execution: What are the risks in execution? ■ Project Monitoring: How will you monitor progress? 3. Presentation: <ul style="list-style-type: none"> ○ Students will create a multimedia presentation (e.g., PowerPoint, video, or interactive website) to showcase their analysis. ○ The presentation should be no more than 10 slides. ○ Students must have at least 1 slide for each phase of the project management lifecycle.

	<p>4. Peer Review and Feedback:</p> <ul style="list-style-type: none"> ○ Students will share their presentations with their peers and provide constructive feedback on their analyses. Evaluation criteria include aspects such as clarity of explanation, relevance of examples, and creativity in presentation format. <p>Quiz and Certification</p> <ul style="list-style-type: none"> ○ Students will complete the project management module quiz on “greatlearning.com” and receive their certification. 				
Unit 1 Pathway Standard(s)	D7.0 Acquire and apply appropriate programming skills for rendering a single-player or multi-user game or simulation project, including program control, conditional branching, memory management, scorekeeping, timed event strategies, and implementation issues.				
Unit 1 Pathway – Performance Indicator(s)	D7.2 Plan program design and evaluate assigned game programming tasks. D1.5 Describe the business model commonly used in the game development industry.				
Unit 1 Anchor Standard(s)	5.0 Problem Solving and Critical Thinking				
Unit 1 Anchor – Performance Indicators	5.3 Use systems thinking to analyze how various components interact with each other to produce outcomes in a complex work environment.				
Unit 1 Curricular Resources	greatlearning.com				
Unit 1 Total Hours	20	Classroom	20	CC/CVE	0

Unit 2 Title	Digital Marketing Fundamentals
Unit 2 Essential Question	What is Digital Marketing and why is it one of the fastest growing segments within marketing?
Unit 2 Description (3-5 Sentences)	Students will demonstrate an understanding of digital marketing fundamentals by marketing a “fictional” new video game. Students will create a comprehensive marketing plan aimed at maximizing the game's visibility, engagement, and sales. Students will also complete a quiz on https://academy.hubspot.com/courses/digital-marketing and receive a certificate.
Unit 2 Key Assignment	<p>To demonstrate mastery of Digital Marketing Fundamentals, students will create a marketing plan using the outline below:</p> <ol style="list-style-type: none"> 1. Select a Game: <ul style="list-style-type: none"> ○ Students will choose a fictional video game title and concept that they believe has the potential to capture the interest of gamers. Consider factors such as genre, target audience, and unique selling points. 2. Conduct Market Research: <ul style="list-style-type: none"> ○ Students will conduct market research to identify the target audience for the game. Analyze demographics, and gaming preferences to tailor your marketing efforts effectively. 3. Create a Marketing Plan: <ul style="list-style-type: none"> ○ Students will develop a comprehensive digital marketing plan to promote the new video game. The plan should encompass the following elements: <ul style="list-style-type: none"> ■ Branding: Create a compelling brand identity for the game, including logo, tagline, and visual assets. ■ Digital Advertising: Articulate the advertising strategy across digital channels such as social media, search engines, and gaming websites. ■ Social Media Strategy: Develop a social media strategy to engage with the gaming community, including websites to market on and why, content calendar, posting schedule, and ad budget. ■ Influencer Partnerships: Identify the influencers and gaming personalities they will collaborate with to promote the game. ■ Public Relations: Develop press releases, media kits, and outreach strategies to secure coverage from gaming journalists and influencers. ■ Launch Event: Plan a virtual or in-person launch event to generate buzz and excitement around the game release. ■ Metrics and Measurement: Define key performance indicators (KPIs) to track the success of the marketing

	<p>campaign, such as website traffic, social media engagement, and game sales.</p> <ul style="list-style-type: none"> ○ Refer to the rubric for grading details. 					
Unit 2 Pathway Standard(s)	D1.0 Identify and describe critical game and simulation studies, the resulting societal impact, and the management, industry, and career requirements.					
Unit 2 Pathway – Performance Indicator(s)	<p>D1.5 Describe the business model commonly used in the game development industry.</p> <p>D 1.4 Describe the psychological impact of games on individuals and groups.</p>					
Unit 2 Anchor Standard(s)	5.0 Problem Solving and Critical Thinking					
Unit 2 Anchor – Performance Indicators	<p>5.1 Identify and ask significant questions that clarify various points of view to solve problems.</p> <p>5.2 Solve predictable and unpredictable work-related problems using various types of reasoning (inductive, deductive) as appropriate.</p> <p>5.3 Use systems thinking to analyze how various components interact with each other to produce outcomes in a complex work environment.</p>					
Unit 2 Curricular Resources	Hubspot.com					
Unit 2 Total Hours	<table border="1"> <tr> <td>20</td> <td>Classroom</td> <td>20</td> <td>CC/CVE</td> <td>0</td> </tr> </table>	20	Classroom	20	CC/CVE	0
20	Classroom	20	CC/CVE	0		

Unit 3 Title	Foundations of Artificial Intelligence
Unit 3 Essential Question	What is Artificial Intelligence? Why is it in hyper-growth mode now?
Unit 3 Description (3-5 Sentences)	Students will demonstrate their understanding of fundamental concepts in artificial intelligence (AI) by completing a comprehensive quiz on “greatlearning.com”. Students will be challenged to answer a series of questions covering key topics such as machine learning, neural networks, natural language processing, ethics in AI, and real-world applications. Upon completion, students will earn a certification - recognizing their proficiency in AI concepts.
Unit 3 Key Assignment	<p>To demonstrate mastery of the ethics and standards of responsible AI use in ESports, students will complete a quiz on “greatlearning.com” and receive a passing score plus a certification:</p> <ol style="list-style-type: none"> 1. Pass the Quiz on greatlearning.com: <ul style="list-style-type: none"> ○ Students will access the quiz through the provided assessment tool. ○ Students will demonstrate their understanding of concepts such as: <ul style="list-style-type: none"> ■ Basic principles of machine learning and deep learning. ■ Types of neural networks and their applications. ■ Techniques used in natural language processing (NLP) and computer vision. ■ Ethical considerations and societal impacts of AI technology. ■ Real-world applications of AI in various industries such as healthcare, finance, transportation, and entertainment. 2. Certification: <ul style="list-style-type: none"> ○ Upon achieving a score of 90% or higher, students will receive a digital certificate recognizing their proficiency in the fundamentals of AI. ○ Students will share their certification with peers, educators, and prospective employers to showcase their knowledge and skills in artificial intelligence.
Unit 3 Pathway Standard(s)	D 8.0 Acquire and apply appropriate artificial intelligence (AI) techniques used by the game development industry.
Unit 3 Pathway – Performance Indicator(s)	D 8.1 Describe AI and how it relates to game and simulation design and development.
Unit 3 Anchor Standard(s)	11.0 Demonstration and Application

Unit 3 Anchor – Performance Indicators	11.2 Demonstrate proficiency in a career technical pathway that leads to certification, licensure, and/or continued learning at the postsecondary level.				
Unit 3 Curricular Resources					
Unit 3 Total Hours	20	Classroom	20	CC/CVE	0

Unit 4 Title	Technology Basics and Cybersecurity
Unit 4 Essential Question	What is Cybersecurity and why is it one of the fastest growing areas of Information Technology?
Unit 4 Description (3-5 Sentences)	Students will complete 3 lab assignments in this unit to demonstrate their understanding of the fundamentals of technology and cybersecurity. Students will complete 3 labs, where Lab 1 will authenticate on a device, Lab 2 will check for anti-malware on a machine and Lab 3 will run an OS path or Update.
Unit 4 Key Assignment	<p>To demonstrate an understanding of the fundamentals of technology and cybersecurity, students will complete 3 lab assignments on “Testout.com”. and receive a passing score (80% or higher) on each.</p> <p>Lab 1: Authenticating on a Device - Students will simulate a scenario where they must authenticate their access to a digital "vault" containing sensitive information. Through this practical exercise, students will gain insight into various authentication methods and best practices for safeguarding digital assets.</p> <p>Follow the steps on the TestOut, Cybersecurity module and complete the “Authenticating on a Device” lab.</p> <p>Lab 2: Check for Anti-malware on a Machine - Students will simulate a scenario where they must check for and remove malware from a compromised device. Through this practical exercise, students will gain insight into common malware threats and learn how to mitigate them effectively.</p> <p>Follow the steps on the TestOut, Cybersecurity module and complete the “Check for Anti-malware on a Machine” lab.</p> <p>Lab 3: Run an OS Patch or Update - Students will simulate a scenario where they must identify and apply necessary patches and updates to a virtual operating system. Through this practical exercise, students will gain insight into the patching process and learn how to maintain a secure computing environment. Follow the steps on the TestOut, Cybersecurity module and complete the “Run an OS Patch or Update” lab.</p>
Unit 4 Pathway Standard(s)	D2.0 Demonstrate an understanding of game and simulation analysis, design, standard documentation, and development tools.
Unit 4 Pathway – Performance Indicator(s)	D2.5 Know how to use tools and software commonly used in game/simulation development and become familiar with popular game tools and different gaming engines.
Unit 4 Anchor Standard(s)	5.0 Problem Solving and Critical Thinking

	11.0 Demonstration and Application Demonstrate and apply the knowledge and skills contained in the Information and Communication Technologies anchor standards, pathway standards, and performance indicators in classroom, laboratory, and workplace settings, and through career technical student organizations such as Future Business Leaders of America and SkillsUSA.				
Unit 4 Anchor – Performance Indicators	<p>5.1 Identify and ask significant questions that clarify various points of view to solve problems.</p> <p>5.4 Interpret information and conclude, based on the best analysis, to make informed decisions.</p> <p>11.1 Utilize work-based/workplace learning experiences to demonstrate and expand upon knowledge and skills gained during classroom instruction and laboratory practices specific to the Information and Communication Technologies sector program of study.</p>				
Unit 4 Curricular Resources	greatlearning.com				
Unit 4 Total Hours	30	Classroom	30	CC/CVE	0

Unit 5 Title	Computer Hardware Fundamentals			
Unit 5 Essential Question	What's Inside a Computer? What is the Function of each Component?			
Unit 5 Description (3-5 Sentences)	Students will embark on a journey to explore the inner workings of a computer by dismantling and examining its hardware components. Through hands-on exploration and guided activities, students will gain a deeper understanding of the key components that make up a computer and their functions.			
Unit 5 Key Assignment	<p>Students will complete the “Explore the Inside of a Computer” lab module on “Testout.com” with a passing score of at least 80%.</p> <p>Lab: Complete the “Explore the Inside of a Computer” module where students will learn how to identify, replace, and dismantle the following:</p> <ol style="list-style-type: none"> 1. The Motherboard 2. The Firmware and BIOS 3. The Random Access Memory (RAM) 4. The Central Processing Unit (CPU) 5. The Graphics Processing Unit (GPU) 6. Storage 7. The Network Interface Card (NIC) 			
Unit 5 Pathway Standard(s)	D2.0 Demonstrate an understanding of game and simulation analysis, design, standard documentation, and development tools.			
Unit 5 Pathway – Performance Indicator(s)	D2.9 Demonstrate an understanding of interface design, hardware constraints on games, including processors and I/O devices, and nonhardware constraints.			
Unit 5 Anchor Standard(s)	<p>10.0 Technical Knowledge and Skills Apply essential technical knowledge and skills common to all pathways in the Information and Communication Technologies sector, following procedures when carrying out experiments or performing technical tasks. (Direct alignment with WS 11-12.6)</p> <p>11.0 Demonstration and Application Demonstrate and apply the knowledge and skills contained in the Information and Communication Technologies anchor standards, pathway standards, and performance indicators in classroom, laboratory, and workplace settings, and through career technical student organizations such as Future Business Leaders of America and SkillsUSA.</p>			
Unit 5 Anchor – Performance Indicators	<p>10.1 Interpret and explain terminology and practices specific to the Information and Communication Technologies sector.</p> <p>11.1 Utilize work-based/workplace learning experiences to demonstrate and expand upon knowledge and skills gained during classroom instruction and laboratory practices specific to the Information and Communication Technologies sector program of study.</p>			
Unit 5 Curricular Resources	Testout.com - Tech+ module			
Unit 5 Total Hours	10	Classroom	10	CC/CVE 0

Unit 6 Title	Fundamentals of Networking
Unit 6 Essential Question	Why is understanding Networking critical for Cybersecurity?
Unit 6 Description (3-5 Sentences)	<p>This assignment aims to provide students with a foundational understanding of networking principles and the importance of cybersecurity in maintaining secure connections.</p> <p>Students will complete 3 lab assignments on “Testout.com” to demonstrate an understanding of networking concepts.</p> <p>Lab 1: Explore Network Identifiers Students will delve into the fundamentals of network identifiers, focusing specifically on IP addresses. Students will learn how to interpret and analyze IP addresses, understand their significance in networking, and explore practical applications in real-world scenarios.</p> <p>Lab 2: Build a Small Office Network Students will engage in hands-on learning to design and build a small office network from the ground up. Students will apply networking concepts such as IP addressing, subnetting, network devices, and security measures to create a functional and secure network infrastructure.</p> <p>Lab 3: Explore Network Communications Students will understand how data is exchanged between devices on a network. Students will explore networking protocols, data transmission methods, and network devices to gain insight into the underlying mechanisms of digital communication.</p>
Unit 6 Key Assignment	<p>To demonstrate mastery of the fundamentals of networking, students will complete the labs on “TestOut” and receive a passing score (80% or higher) on each.</p> <p>Lab 1: Explore Network Identifiers Students will delve into the fundamentals of network identifiers, focusing specifically on IP addresses. Students will learn how to interpret and analyze IP addresses, understand their significance in networking, and explore practical applications in real-world scenarios. Follow the steps on the TestOut, Networking module and complete the “Explore Network Identifiers” lab.</p> <p>Lab 2: Build a Small Office Network Students will engage in hands-on learning to design and build a small office network from the ground up. Students will apply networking concepts such as IP addressing, subnetting, network devices, and security measures to create a functional and secure network infrastructure. Follow the steps on the TestOut, Networking module and complete the “Build a Small Office Network” lab.</p> <p>Lab 3: Explore Network Communications</p>

	Students will understand how data is exchanged between devices on a network. Students will explore networking protocols, data transmission methods, and network devices to gain insight into the underlying mechanisms of digital communication. Follow the steps on the TestOut, Networking module and complete the “Explore Network Communications” lab.
Unit 6 Pathway Standard(s)	D2.0 Demonstrate an understanding of game and simulation analysis, design, standard documentation, and development tools. D7.0 Acquire and apply appropriate programming skills for rendering a single-player or multi-user game or simulation project, including program control, conditional branching, memory management, scorekeeping, timed event strategies, and implementation issues.
Unit 6 Pathway – Performance Indicator(s)	D2.9 Demonstrate an understanding of interface design, hardware constraints on games, including processors and I/O devices, and nonhardware constraints. D7.1 Identify functions of information processing describe basic network terminology and network security and demonstrate an understanding of operating systems, environments, and platforms.
Unit 6 Anchor Standard(s)	10.0 Technical Knowledge and Skills Apply essential technical knowledge and skills common to all pathways in the Information and Communication Technologies sector, following procedures when carrying out experiments or performing technical tasks. (Direct alignment with WS 11-12.6) 11.0 Demonstration and Application Demonstrate and apply the knowledge and skills contained in the Information and Communication Technologies anchor standards, pathway standards, and performance indicators in classroom, laboratory, and workplace settings, and through career technical student organizations such as Future Business Leaders of America and SkillsUSA.
Unit 6 Anchor – Performance Indicators	10.1 Interpret and explain terminology and practices specific to the Information and Communication Technologies sector. 11.1 Utilize work-based/workplace learning experiences to demonstrate and expand upon knowledge and skills gained during classroom instruction and laboratory practices specific to the Information and Communication Technologies sector program of study.
Unit 6 Curricular Resources	Testout.com
Unit 6 Total Hours	15 Classroom 15 CC/CVE 0

Unit 7 Title	Future of Technology
Unit 7 Essential Question	What is the future of technology? Where should I focus my career?
Unit 7 Description (3-5 Sentences)	<p>The objective of this assignment is to quiz students on emerging technologies and trends that are shaping the future of technology. Students will demonstrate their understanding of key concepts, potential applications, and the impact of these technologies on society by both:</p> <ol style="list-style-type: none"> 1. Completing a quiz and scoring at least 80% on Testout.com 2. Completing a reflection question. <p>The reflection question encourages high school students to think critically about the potential impact of emerging technologies on society, industries, and daily life. By considering their role in shaping the future of technology, students can explore potential career paths, areas of study, and opportunities for innovation and contribution to society.</p>
Unit 7 Key Assignment	<p>To demonstrate an understanding of the future of technology and technology trends, students will complete both a quiz and a reflection question.</p> <p>Quiz: Students will complete the “Future of Technology” quiz on “TestOut” and receive a passing score (80% or higher).</p> <p>The scope of the quiz will include:</p> <ol style="list-style-type: none"> 1. Quantum Computing 2. Automation 3. Storage 4. Robotics 5. Virtual Reality 6. 3D Printing <p>Reflection Question: Students will complete the following reflection question. "How do you envision emerging technologies shaping the world in the next 10 years, and what role do you see yourself playing in this technological future?"</p> <ol style="list-style-type: none"> 1. Must be at least 300 words. 2. Submit on Google Docs
Unit 7 Pathway Standard(s)	<p>D8.0 Acquire and apply appropriate artificial intelligence (AI) techniques used by the game development industry.</p> <p>D1.0 Identify and describe critical game and simulation studies, the resulting societal impact, and the management, industry, and career requirements.</p>
Unit 7 Pathway – Performance Indicator(s)	D8.1 Describe AI and how it relates to game and simulation design and development.

	D1.6 Examine and categorize the significant processes in the production of interactive games.				
Unit 7 Anchor Standard(s)	<p>3.0 Career Planning and Management Integrate multiple sources of career information from diverse formats to make informed career decisions, solve problems, and manage personal career plans. (Direct alignment with SLS 11-12.2)</p> <p>5.0 Problem-Solving and Critical Thinking Conduct short, as well as more sustained, research to create alternative solutions to answer a question or solve a problem unique to the Information and Communication Technologies sector using critical and creative thinking, logical reasoning, analysis, inquiry, and problem-solving techniques. (Direct alignment with WS 11-12.7)</p>				
Unit 7 Anchor – Performance Indicators	<p>3.5 Integrate changing employment trends, societal needs, and economic conditions into career planning.</p> <p>5.4 Interpret information and conclude, based on the best analysis, to make informed decisions.</p>				
Unit 7 Curricular Resources	Testout.com				
Unit 7 Total Hours	15	Classroom	15	CC/CVE	0

College and Career Transition Plan (CCTP) Unit

Unit 8 - Title	RCOE College and Career Transition Plan (CCTP)
Unit 8- Essential Question	Where will my decisions lead me in life?
Unit 8- Description (3-5 Sentences)	<p>This unit of instruction links student interests to potential careers through exploration and research. Students will develop a post-secondary career plan that identifies and maps out a course of action that incorporates college and career opportunities. Within the twelve (12) topics, students will complete interest surveys, career-related documents (i.e., applications, resumes, letters of introduction, letters of recommendation), and mock interviews with the express goal of preparing students to graduate from high school academically and socially prepared for college, the workforce, and civic responsibility. Additionally, students will analyze the importance of financial literacy through topics such as credit, creating a budget, and saving and investing.</p> <p>Lessons:</p> <ul style="list-style-type: none"> ● Work, Job, and Career ● The Career Plan ● Job Applications (Portfolios – Part 1) ● The Letter of Introduction (Portfolios – Part 2) ● Resume (Portfolios – Part 3) ● Letters of Recommendation (Portfolios – Part 4) ● Interviewing ● Career Research and Reflection ● Financial Literacy (Part 1 – The Basics) ● Financial Literacy (Part 2 – Credit) ● Financial Literacy (Part 3 – Creating a Budget) ● Financial Literacy (Part 4 – Saving and Investing) ● Stock Market Basics ● Real Estate Investing Basics
Unit 8- Key Assignment	<p>1) RCOE College and Career Transition Guide: This project will incorporate the development of a 5-10-year career plan, preparing a portfolio (letter of introduction, resume, and letters of recommendation), and practicing job applications and mock interviews.</p> <p>2) Financial Literacy: This project will include identifying elements and deductions on a paycheck, researching loan options based on creditworthiness, creating a budget, and planning for retirement.</p>
Unit 8- Pathway Standard(s)	D1.0 Identify and describe critical game and simulation studies, the resulting societal impact, and the management, industry, and career requirements.
Unit 8- Pathway – Performance Indicator(s)	D1.9 Describe the impact of the game and simulation industry on the economy
Unit 8 Anchor Standard(s)	3.0 Career Planning and Management
Unit 8 Anchor – Performance Indicators	<p>3.1 Identify personal interests, aptitudes, information, and skills necessary for informed career decision-making.</p> <p>3.2 Evaluate personal character traits, such as trust, respect, and responsibility, and understand the impact they can have on career success.</p>

	3.4 Research the scope of career opportunities available and the requirements for education, training, certification, and licensure. 3.9 Develop a career plan that reflects career interests, pathways, and postsecondary options.				
Unit 8 Curricular Resources	<i>The Job Hunting Handbook</i> (Dalstrom)				
Unit 8 Total Hours	20	Classroom	20	CC/CVE	0

Course Assessments

1st Semester Common Assessment (10 Hours)	
Narrative	<p>Students will demonstrate content learned in the first semester by creating a “pitch” deck to a hypothetical investor.</p> <p>The topic for this pitch deck is the following:</p> <p>“You are requesting 20 million dollars in venture capital money to create a new company (using Artificial Intelligence) to solve customers' cybersecurity problems more efficiently than the current market leaders; CrowdStrike and Palo Alto Networks”. You need to research the companies' market and come up with a compelling “pitch deck” to convince an investor to invest in your company.</p> <p>Students will work in pairs to create and pitch the content. Refer to the rubric for details.</p> <p>There are 12 sections to this pitch deck of which 6 should be completed in Semester 1 and the other 6 will be completed in Semester 2.</p> <p>The pitch deck should have the following format (1-6):</p> <ol style="list-style-type: none">1. Cover Slide:<ul style="list-style-type: none">● Company logo.● Name of the business.● Tagline or brief description.2. Problem Statement:<ul style="list-style-type: none">● Identify the problem your product/service solves.● Provide statistics or anecdotes to illustrate the problem.3. Solution:<ul style="list-style-type: none">● Describe your product/service.● Highlight its key features and benefits.● Explain how it addresses the problem statement.4. Market Opportunity:<ul style="list-style-type: none">● Showcase the size and growth potential of the target market.● Provide data on market trends, demographics, and customer needs.5. Traction:<ul style="list-style-type: none">● Highlight any milestones, achievements, or validation.● Include metrics such as sales figures, user growth, partnerships, or press coverage.

	<p>6. Business Model:</p> <ul style="list-style-type: none">● Explain how your company makes money.● Describe your pricing strategy and revenue streams.
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Final Common Assessment (15 Hours)

Narrative

Students will demonstrate content learned in the first semester by creating a “pitch” deck to a hypothetical investor.

The topic for this pitch deck is the following:

“You are requesting 20 million dollars in venture capital money to create a new company (using Artificial Intelligence) to solve customers' cybersecurity problems more efficiently than the current market leaders; CrowdStrike and Palo Alto Networks”. You need to research the companies' market and come up with a compelling “pitch deck” to convince an investor to invest in your company.

- Students will work in pairs to create and pitch the content. There are 12 sections to this pitch deck of which 6 should be completed in Semester 1 and the other 6 will be completed in Semester 2.
- As part of the Final Common Assessment, you will pitch your idea to your peers. Refer to the rubric for grading details.

Below are the 6 that need to be completed as part of the Final Common Assessment.

7. Marketing and Sales Strategy:

- Outline your plan for acquiring customers.
- Describe your marketing channels, tactics, and customer acquisition cost (CAC).
- Explain your sales process and distribution strategy.

8. Competitive Analysis:

- Identify key competitors.
- Highlight your competitive advantages (e.g., unique features, pricing, technology, expertise).
- Differentiate your product/service from competitors.

9. Team:

- Introduce key team members and their roles.
- Highlight relevant experience, skills, and achievements.
- Explain why your team is uniquely qualified to execute the business plan.

10. Financial Projections:

- Present financial projections for the next 3-5 years.
- Include revenue forecasts, expenses, and profitability.
- Provide assumptions and methodology behind the projections.

11. Funding Ask:

	<ul style="list-style-type: none">● Clearly state the amount of funding you are seeking.● Explain how the funding will be used (e.g., product development, marketing, expansion).● Specify the terms of the investment (e.g., equity stake, convertible note). <p>12. Call to Action:</p> <ul style="list-style-type: none">● Invite investors to ask questions or schedule follow-up meetings.● Provide contact information for further communication. <p>BONUS: Refer to the Rubrik for bonus points for students who complete the CompTIA Tech+ certification.</p>
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Entered by:

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