Florida CTE

Game & Simulation Design (2026)

Create a working game or simulation as part of a team. The student will be able to: 28.0	**1** Create a storyboard describing the essential elements, plot, flow, and functions of the game/simulation. 28.01
	2 Create a design specification document to include interface and delivery choices, rules of play, navigation functionality, scoring, media choices, start and end of play, special features, and development team credits. 28.02
	3 Using a simple game development tool, create a game or simulation. 28.03
	4 Present the game or simulation. 28.04
Create a game design production plan that describes the game play, outcomes, controls, interface and artistic style of a video game. The student will be able to: 29.0	**1** Use industry standard game design production documents to create a game design production plan. 29.01
Categorize the different gaming genres. The student will be able to: 30.0	**1** Research, compare and categorize the different gaming genres. 30.01
	2 Analyze examples of different gaming genres. 30.02
	3 Define and use the necessary vocabulary related to gaming and the different genres. 30.03
Identify popular games and identify commonality between them. The student will be able to: 31.0	**1** Analyze and deconstruct game environments and interactions. 31.01
	2 Compare and contrast the top selling video games in terms of player interaction, plot complexity, and reward. 31.02
	3 Categorize gameplay elements by player type (killer, talker, explorer and achiever). 31.03
Un pr requirements of game	**)escribe the design process from conception to production.** 32.01

Skip to main content

design. The student will be able to: 32.0	**2** Explain the iterative nature of game design through the different stages of design iterations including pre-alpha, alpha, beta, release candidate, going gold and support. 32.02
	3 Develop design plans, for example, character sketches, documentation and storyboards for proposed games. 32.03
Understand the general principles of storytelling for game design. The student will be able to: 33.0	**1** Identify the essential elements of a story. 33.01
	2 Describe how creative writing is used as a game design tool. 33.02
	3 Compare and contrast methods of delivering a story in a game. 33.03
Understand character archetypes and character design. The student will be able to: 34.0	**1** Research and identify common character archetypes used in computer games. 34.01
	2 Design character prototypes to physically match archetype. 34.02
	3 Create character backstory and profile. 34.03
Develop a game design document. The student will be able to: 35.0	**1** Create a game strategy overview, character overview, and storyboard overview. 35.01
	2 Define the rules of play and multi-player options. 35.02
	3 Define strategic positioning of game immersion dynamics and psychological effect. 35.03
	4 Describe how game layout charts are used in game design. 35.04
	5 Understand the use of storyboards in the game design industry with regard to environmental illustrations, level designs, character designs, model sheets and GUI designs. 35.05
Understand the process of creating and designing player choice and other game designer strategy considerations. The student will be able to: 36.0	**1** Describe the use of artificial intelligence challenges in game design and the need for giving the player rest time between challenges. 36.01
	2 Evaluate the impact of randomness in game design especially as it pertains to pattern recognition. 36.02
	3 Identify techniques used in the industry to help the player to navigate. 36.03
	4 Discuss the principles of player-centric design. 36.04
	5 Examine and discuss design elements that encourage continuous active engagement both mental and physical. 36.05

Skip to main content

	6 Analyze design elements that maintain player interest and vary the degree of challenge. 36.06
	7 Discuss the need for a balance of design elements for the purpose of rewarding and frustrating players. 36.07
Create and design the game flow as it relates to story and plot. The student will be able to: 37.0	1 Identify techniques of introducing the story plot and beginning play. 37.01
	2 Describe story plot development techniques for the middle of play in game design. 37.02
	3 Analyze and discuss planning techniques for climax and finale of games. 37.03
Assess common principles and procedures in game flow design. The student will be able to: 38.0	1 Assess missions and scenarios game flow techniques. 38.01
	2 Describe common use of mission design and campaigns. 38.02
	3 Evaluate usage of static versus dynamic campaigns. 38.03
Describe player challenge rule creation elements. The student will be able to: 39.0	1 Research common design methods for clearing obstacles or series of obstacles. 39.01
	2 Describe common design elements introducing skill, luck and combinations including escalating challenges to games. 39.02
	3 Identify common design elements used to vary weapons, characters and tools. 39.03
	4 Discuss the incorporation of risk reward and adaptive challenges (AI). 39.04
Understand the use of inventory systems in game design. The student will be able to: 40.0	1 Discuss the various methods of describing items in player's inventory in contemporary game design. 40.01
	2 Review and discuss industry methods of communicating how inventory items can have an effect on game play. 40.02