

Game & Simulation Foundations (2024)

Identify commonly used art and animation production tools in the game design industry. CTE-

IT.912.8208110.1

1 Identify, categorize and discuss art and animation tools commonly used in game design. CTE-IT.912.8208110.1.1

Understand intellectual property rights, copyright laws and plagiarism as it applies to creative assets. CTE-

IT.912.8208110.2

2 Understand intellectual property rights, copyright laws and plagiarism as it applies to creative assets. CTE-IT.912.8208110.2

Explain the importance of employability skill and entrepreneurship skills as it relates to game/simulation development. CTE-

IT.912.8208110.3

1 Identify and demonstrate positive work behaviors needed to be employable. CTE-IT.912.8208110.3.1

2 Maintain a career portfolio to document knowledge, skills, and experience. CTE-IT.912.8208110.3.2

3 Evaluate and compare employment opportunities that match career goals. CTE-IT.912.8208110.3.3

4 Identify and exhibit traits for retaining employment. CTE-IT.912.8208110.3.4

Identify tools and software commonly used in game development. CTE-

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1 Identify and discuss the popular game development tools currently used in the industry. CTE-IT.912.8208110.4.1

2 Identify and discuss popular gaming engines. CTE-IT.912.8208110.4.2

3 Identify and discuss popular world building tools. CTE-IT.912.8208110.4.3

Investigate career opportunities in the game industry. CTE-

IT.912.8208110.5

1 Describe job requirements for a variety of occupations within the game development industry. CTE-IT.912.8208110.5.1

2 Identify current employment trends and career opportunities in the game industry. CTE-IT.912.8208110.5.2

Demonstrate research and information fluency. CTE-IT.912.8208110.6

- 1 Play games to research and collect game play data.** CTE-IT.912.8208110.6.1
- 2 Evaluate, analyze and document game styles and playability.** CTE-IT.912.8208110.6.2
- 3 Determine the dramatic elements in games, including kinds of fun, player types and nonlinear storytelling.** CTE-IT.912.8208110.6.3

Demonstrate an understanding of the techniques used to evaluate game mechanics, game play, flow, and game design. CTE-IT.912.8208110.7

- 1 Test and analyze games to determine the quality of rules, interfaces, navigation, performance, play, artistry and longevity in design and structure.** CTE-IT.912.8208110.7.1
- 2 Research and evaluate the game analysis techniques used by the video game industry.** CTE-IT.912.8208110.7.2
- 3 Identify the key elements in a game and make intelligent judgments about whether the game succeeded or failed in its objectives.** CTE-IT.912.8208110.7.3
- 4 Evaluate professional reviews and write a critical analysis of a current video game.** CTE-IT.912.8208110.7.4

Explore the methods used to create and sustain player immersion. CTE-IT.912.8208110.8

- 1 Research and define the term “player immersion”.** CTE-IT.912.8208110.8.1
- 2 Explore and explain the factors that create player immersion in a game.** CTE-IT.912.8208110.8.2
- 3 Examine popular games and explain the methods each game uses to increase player immersion.** CTE-IT.912.8208110.8.3

Describe the game development life cycle. CTE-IT.912.8208110.9

- 1 Identify steps in the pre-production process including the proof of concept and market research.** CTE-IT.912.8208110.9.1
- 2 Describe the iterative prototyping process – Alpha, Beta, RTM.** CTE-IT.912.8208110.9.2
- 3 Determine platform, technology and scripting requirements.** CTE-IT.912.8208110.9.3
- 4 Implement techniques of scenario development, levels, and missions.** CTE-IT.912.8208110.9.4
- 5 Discuss game testing requirements and methods.** CTE-IT.912.8208110.9.5
- 6 Identify and describe maintenance, upgrade and sequel issues.** CTE-IT.912.8208110.9.6

Demonstrate the professional level of written and oral communication required in the game development industry. CTE-

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1 Use listening, speaking, telecommunication and nonverbal skills and strategies to communicate effectively with supervisors, co-workers, and customers. CTE-

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2 Organize ideas and communicate oral and written messages appropriate for the game development industry environment. CTE-IT.912.8208110.10.2

Understand the core tasks and challenges that face a video game design team. CTE-

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1 Identify and define the roles and responsibilities of team members on a video game design team. CTE-IT.912.8208110.11.1

2 Explore and discuss methods of communications and scheduling for design teams. CTE-IT.912.8208110.11.2

Demonstrate leadership and teamwork skills needed, as it relates to game/simulation development, to accomplish team goals and objectives. CTE-

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1 Employ leadership skills to accomplish organizational goals and objectives. CTE-IT.912.8208110.12.1

2 Establish and maintain effective working relationships with others in order to accomplish objectives and tasks. CTE-IT.912.8208110.12.2

3 Conduct and participate in meetings to accomplish work tasks. CTE-IT.912.8208110.12.3

4 Employ mentoring skills to inspire and teach others. CTE-IT.912.8208110.12.4