

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-

IT.912.8208110.4

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-

IT.912.8208110.10

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

IT.912.8208110.10.1

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-

IT.912.8208110.11

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-

IT.912.8208110.12

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