

Game- Design and Development

Program Learning Outcomes

Learning outcomes represent culminating demonstrations of learning and achievement. In addition, learning outcomes are interrelated and cannot be viewed in isolation of one another. As such, they should be viewed as a comprehensive whole. They describe performances that demonstrate that significant integrated learning by graduates of the program has been achieved.

The graduate has reliably demonstrated the ability to

1. Analyze the difference in game genres in order to develop games that meet the needs of specific markets.
2. Analyze the history of video games to compare various approaches to game development.
3. Support the development of games by identifying and relating concepts from a range of industry roles - programming, design, and art.
4. Contribute as an individual and a member of a game development team to the effective completion of a game development project.
5. Develop strategies for ongoing personal and professional development to enhance work performance in the games industry.
6. Perform all work in compliance with relevant statutes, regulations, legislation, industry standards and codes of ethics.
7. Use game concepts to support the ongoing iteration, creation, design and development of games.
8. Apply game design elements to support the creation and ongoing iteration of unique gaming environments, levels, characters, assets and props.
9. Develop evolving and iterative game design documents that align with standard industry expectations and/or company practices.
10. Conceive, prototype, develop, test and evaluate procedures for the ongoing iteration, creation, design and development of games.
11. Engage in original world building and level design within a range of game engines.
12. Apply conceptual game design elements to support the ongoing iteration, creation, programming, design, and development of games.
13. Apply practical game design elements to support the ongoing iteration, creation, programming, design and developing of unique gaming environments, levels, characters, assets and props.
14. Apply programming principles and techniques to create operational games or game components.
15. Apply artificial intelligence and/or network implementation strategies to support real-time game environments and simulations.
16. Utilize game engine functionality at an advanced level to support real-time games and simulations.
17. Create original game props, characters and assets based on the concepts and requirements outlined in game design documents.
18. Contribute to world building and level design, including using a game engine.

19. Conceive, prototype, develop, test and evaluate procedures for the creation, design, programming, production and testing of games in a group environment.
20. Test, debug and correct game components to ensure efficient and appropriate game functionality.