3679 Program Vocational Learning Outcome

Program Vocational Learning Outcomes describe what graduates of the program have demonstrated they can do with the knowledge and skills they have achieved during their studies. The outcomes are closely tied to the needs of the workplace. Through assessment (e.g., assignments and tests), students verify their ability to reliably perform these outcomes before graduating.

1. Analyze the differences 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. Analyze game engines and make recommendations for the most appropriate game engine to support new and existing projects.

8. Apply advanced theories and principles of mathematics and science as required for 2D and 3D games.

9. Support real-time game environments and simulations using elements such as system architecture, graphics programming, and sound/audio to optimize performance.

10. Optimize programming code to achieve high performance, high speed and reduced memory utilization, for all types of games.

11. Develop artificial intelligence strategies and tactics to support real-time game environments and simulations.

12. Implement network solutions and co-ordinate user groups to ensure seamless network interaction among different groups in on-line game communities.