

GAME DEVELOPMENT (GDM)

GDM 102 Introduction to Game Design 3 sem. hrs.

Games sit at the intersection of technology, art, and culture, so success within the games industry requires you to understand all three. This course explores why we love games, what role they play in society, and the industry that produces them. You'll also learn the basics of game development. This course was developed in partnership with Unity and the IGDA to help everyone interested in the games industry start on the right foot. This online class has optional live sessions.

GDM 201 Content & Systems Design 3 sem. hrs.

If you've ever enjoyed the experience of playing a video game, you've had a first-hand lesson in how important content and systems design are. The experience of a game is driven by four major components: content, systems, narrative, and user experience. This class will help you learn to design all four components, and build a deeper understanding of the game development process and an introduction to concepts in scripting. This online class has optional live sessions.

GDM 202 Game Engines I 3 sem. hrs.

The Unity engine powers nearly 50% of all games and nearly 75% of mobile games. This course, built in collaboration with Unity and the IGDA, will introduce you to developing games in Unity. By the end of this course, you'll learn how to build a fully functioning game within the Unity system, including all key elements. This online course has optional live sessions.

GDM 301 Adv. Programming (C# Program) 3 sem. hrs.

C# is a modern, general-purpose, object-oriented programming language with a range of uses, most notably creating desktop applications, web applications, web services and building games using the Unity engine. This course is intended to give students a working knowledge of the C# programming language and the .NET framework, as well as an understanding of C#'s application to the Unity Game Development Engine. Prerequisites CSC 101: Programming for Everyone I CSC 102: Programming for Everyone II CSM 204: Data Structures

GDM 302 Game Engines II 3 sem. hrs.

This course is intended to provide students with the skills and knowledge to bring their mastery of the Unity game engine and C# programming up to a professional standard. Students will learn how to perform a range of vital code-based tasks within the Unity platform, and will grow their skills in building core gameplay functionality, supporting systems and platform-specific optimizations. This course was built in collaboration with Unity. Upon successful completion, students will be prepared to sit for the Unity Certified Associate: Programmer exam. Prerequisites GDM 102: Introduction to Games GDM 201: Content & Systems Design GDM 202: Unity I: Working with Unity GDM 301: C# Proficiency

GDM 400 Capstone Pro- Building A Game 3 sem. hrs.

This course is intended as a culmination of all a student's work in the Unity Game Development major. Students will work in groups to build a game in the unity engine that uses real-time 2D or 3D visuals and showcases their understanding of the core principles of game design. Students will pitch their game, design, prototype, build and test their game. Students will be evaluated based on the quality of their game, and their internal project management processes. Offered Spring. Prerequisites All prior Game Development Courses CSC 101: Programming for Everyone I CSC 102: Programming for Everyone II CSM 204: Data Structures CSM 202: Algorithms