

Game Development

Introduction

The Game Development Certificate is designed to provide knowledge that how games are created and designed. The video game industry is enormous, and those with the necessary technical talents can take a variety of different paths within it.

During this course, students will have the chance to acquire the skillsets necessary to function in the technical framework of the following stage in computer programming through this game development certificate. Students' digital and organizational abilities will build a foundation for thriving in the 21st century. Students will be able to create computer games from the ground up for this certificate. It's the perfect line of work for people who wish to build a career in video games. **Scope of Game Development**

You can pursue a career in game creation based on your interests because the field's potential is enormous. You can pursue multiple occupations in game design in addition to being a game designer such as Game Animator, Programmer, Level Designer, Digital Animator, Graphics Simulator, QA Game Tester, Game Audio Engineer, Creative Game Director, Game System Designer, 2D and 3D Game Designer, etc.

REQUIREMENTS:

- Intermediate/O/A-levels
- Basic Programming Skills

- Basic Computer Skills

CURRICULUM:

Week	Lecture	Topics
1	1	Introduction to Unity
2	2	Installation of Unity, Unity Game Objects, Unit and Y Components
3	3	Unity Interface
4	4	Unity 2D Introduction, 2D Sprite Sheet
5	5	Transform and Object Parenting
6	6	Internal Assets
7	7	Unity Scripting
8	8	Variables and Functions, Conventions and Syntax
9	9	Work with Unity Datatypes and Variables
10	10	Work with Unity If-statements Loops and Arrays
11	11	Mid Term Paper
12	12	Unity Classes, Scope and Access Modifiers

Week	Lecture	Topics
13	13	Understanding Collisions
14	14	Understanding Prefabs And Instantiates
15	15	Unity Console
16	16	Unity Sounds
17	17	Materials and Shaders
18	18	Unity Coroutines
19	19	Unity UI Introduction
20	20	UI Buttons Creations
21	21	UI Slider Creation
22	22	UI Text Editing And Formatting
23	23	Final Project
24	24	Final Term Presentation

Outcomes:

- Develop a complete game using Unity
- Upload Game content store or AppStore
- Develop games on other game-developing engines.

BENEFITS:

- Develop ability to solve problems
- Improve design abilities
- Create teamwork abilities

Affiliation & Collaboarations

