











#### **UGDF** Introduction

Unity Game Design foundation is a **6 months intensive project-heavy** course that focuses on the core foundation of game development. Over the course of 6 months, students learn everything they need to know about game development using Unity, from the basics of coding to advanced topics such as network and Al. Students also get hands-on experience working on **real projects** with our **experienced instructors**. The course is structured in such a way that anyone from any background, with an interest in coding can easily understand and learn game development. By the end of the program, the student's projects will be evaluated by professional game developers from top game companies in India.

### What is Game Development?

Careers in Game Development have become very lucrative as the Gaming Industry grows at an exponential rate. On the other hand, there are still misconceptions about Game Development in India. Let's take a look at what Game Development actually is.

In simple concept, Game Development is the practice of **creating functionality** and **codebases** for video games. Game development involves mastering the basics of programming and applying this knowledge to solve the various problems that arise while creating video games.

In general, video game development is a mix of creativity, problem solving, server side knowledge, client side knowledge, mixed with technical expertise, which determines how game mechanics will function. Developing games is an enormous field of study that involves not just knowing how and why to do a certain thing but using all the tools at your disposal and coming up with better solutions.





## **About 1UP Academy**

We are educators and professionals and we believe in creating game creators. We at 1UP Academy believe that empowering students interested in creating games with the right skills and guidance can lead them to a successful career in game development. Everyone has the potential to become a professional game creator with the right skills and knowledge. In India, we envision a future where there are quality game creators creating astounding games and putting India at the forefront of the global gaming industry.

## **About the Program**

Unity Game Development Foundation or UGDF is a specialisation course in Game Development. In this course, students will learn from the basics of coding to advanced topics such as network and Al. Here are the games that students will create in this course:





## Students will Learn:



- Game Development Pipeline.
- Unity Scripting Basics.
- C# Programming.
- OOPs Concepts.
- Data Structures.
- 2D Game Development with Unity Engine.
- Rapid Prototyping with Unity Engine.
- Physics-Based Game with Unity Engine.
- 3D Game Development with Unity Engine.
- Lighting and Texturing Pipeline.
- Game Optimization.
- Pro Builder Basics.
- 3D Animations Pipeline.
- Cinemachine.
- Multiplayer Game Basics.
- Cracking Mock Tests.
- Cracking Interview Questions.
- Building Industry level Portfolio.















### **Program Structure**

The course will be held 3 days a week: **Mondays, Wednesdays and Fridays**. These will be **live lectures** with the course mentors. Remaining days are reserved for completing assignments/projects and researching given topics.

#### Month 01

Month 1 focuses on getting students familiar with coding basics and the different terminologies associated with programming. Students will learn C# and OOPs concepts this month. They will also start creating their very own game in this month, a text based adventure game.

#### Month 02

After students have cleared the basic level of programming, month 2 will introduce them to the Unity Game Engine. Students will learn all the ins and outs of this engine and learn to develop game mechanics for games. They will learn to create a 2D Side Scrolling Game from scratch this month.

#### Month 03

This month focuses on advanced topics such as Raycasting, Data Structures, Inventory system using a 2D Top Down Game as a base. Students will also learn how to prototype any project rapidly. This will be immensely useful when they join any studio.



#### Month 04

Slowly the course will transition from 2D concepts to 3D concepts within Unity Game Engine. The entire process of publishing games will also be discussed in this section. Topics such as Navmesh, Advanced AI, Game Optimization will be also taught.

#### Month 05

This month will focus on creating a FPS game from scratch. Terrain tools, Probuilder, 3D Animations, Camera, Lighting are some of the topics that will be taught this month. Students will also create a small multiplayer game in this section.

#### Month 06

The last month is reserved for students to work on their portfolio. There will be mock tests and mock interviews to get them ready for job interviews in the future. Students will also participate in a game jam with real-world rewards waiting for the winners.













# Career Paths Unlocked (after completing the course)

- ✓ Game Programmer.
- Gameplay Programmer.
- ✓ Al Programmer.
- ✓ UI/UX Programmer.
- Network Programmer.

#### **Contact**

We are available Monday to Saturday from 10 AM to 7 PM



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