

Innovera Academy

Course Outline

Unity Game Design Accelerator

Format: 48 hours, project-based, Self-Paced or Instructor-Led

Level: Beginner to Intermediate — no prior game development experience required

Course Description: The Unity Game Design Accelerator is a 48-hour fast-track, project-based bootcamp designed to take participants from beginners to capable game developers. Over the course of the program, trainees build 2 portfolio-ready games, mastering the Unity engine, AI implementation, and collaborative development workflows using GitHub. The program culminates in a live final project presentation, emphasizing speed, innovation, and career-readiness.

Module-by-Module Breakdown

Mod.	Title	Hours	Topics & Learning Objectives	Deliverable
1	Unity & Game Design Fundamentals	6	Unity Editor navigation: scenes, GameObjects, components, prefabs Core game design principles: game loops, mechanics, player experience Version control basics: setting up Git/GitHub for a game project	First playable Unity scene, with project tracked in a GitHub repo
2	C# Scripting for Game Development	8	C# fundamentals for Unity: variables, functions, classes, MonoBehaviour Scripting player input, movement, and physics-based interactions Debugging and testing scripts inside the Unity Editor	Scripted player movement and interaction system
3	World Building & Player Mechanics	8	Level design and environment/world building Camera systems, collisions, and refined player mechanics Assembling mechanics into a cohesive playable level	Portfolio Game #1 — a complete playable prototype level
4	AI & Advanced Game Mechanics	8	Implementing NPC behavior: pathfinding and state machines Enemy AI and combat systems for an FPS context Advanced mechanics: weapons, hit detection, physics-driven interactions	AI-driven enemies integrated into the in-progress FPS prototype
5	User Interfaces, Polishing & Publishing	8	Building UI/UX: menus, HUDs, in-game interfaces Game polish: audio, lighting, visual effects, performance optimization Publishing pipeline: builds, target platforms, deployment basics	Polished, publish-ready build of the FPS prototype

Mod.	Title	Hours	Topics & Learning Objectives	Deliverable
6	Capstone Project & Portfolio Development	10	Finalizing Portfolio Game #2: the complete FPS prototype Collaborative development workflow using GitHub (branches, reviews, pull requests) Preparing and rehearsing the live final project presentation	Portfolio Game #2 (finished FPS prototype) + live final presentation

Total: 48 hours across 6 modules

Key Features

- 48-hour fast-track, project-based bootcamp — Self-Paced or Instructor-Led
- Build 2 portfolio-ready games, including a complete FPS prototype
- Master the Unity engine, C# scripting, and core game design principles
- Hands-on AI implementation for NPC behavior and enemy systems
- Learn collaborative development workflows using GitHub
- Culminates in a live final project presentation for career-readiness
- Beginner-friendly — no prior game development experience required