

Centre for Machine Learning and Intelligence
Game Designing
Professional Certificate Course-Applicable for Post Graduate students
From the Academic year 2024-2025 onwards

Course Objectives:

Duration :40 Hours

1. To understand about the importance of game development
2. To understand the fundamentals of C# programming.
3. Learn to design intuitive and engaging AR interfaces suitable for various use cases

Unit 1: Introduction to Unity (10 hours)

Introduction to Games and XR, Introduction to Unity, Technical requirements, Unity Versions and Unity Hub, Unity project and Project structure, Materials & Shaders, Physics Components, Camera & Lights, Animations, Import & Exporting the assets and packages, Prefabs and parenting, Textures and Models.

Unit 2: Unity Scripting (10 hours)

Introduction to C#. Variables, functions & writing functions - Unity datatypes, classes, arrays & coroutines - Conventions & Syntax - Scope & Access modifiers - If statements & Loops - Methods & parameter - Basic C# programs, Events & Instructions. Spawning objects, Timing actions, Input system, Score system, Reward system, collision system, Ray casting, Navigation system, Physics system, Win or Lose systems, Creating gameplay & other experiences.

Unit 3: 2D Game - Flappy Tappy (10 hours)

Project Setup, adding 2D sprites Bird Animation, Physics, Movement Script Camera Follow & Obstacles User Interface, Levels, Game Over Scripts – Implementing UI - Change Platform, Build & Run.

Unit 4: 3D Game - 3D Maze Run (10 hours)

Project Setup, Level Design, first-person Camera, Coins Scripts, Physics, Movement Script - User Interface, Score, Timer, and Game Over scripts - Change Platform, Build & Run.

Course Outcomes:

1. To understand the fundamental knowledge of game engines, their features, and how to use them to create games.
2. To implement Unity or Unreal Engine to develop gameplay scripts.
3. To understand and apply industry standards and best practices for game development

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| Training Provided by | : Scopik Edutech Ltd., Chennai |
| Certifying Body | : Scopik Edutech Ltd., Chennai |
| Exam mode | : Online |
| Course Hours | : 40 |
| Course Fee | : Rs.4000 |