HPGaming Garage

Esports Management and Game Development Academy





Accelerating Game Entrepreneurship and Skills



The rush of driving an ATV at full throttle, the thrill of escaping enemy grounds, or the luxury of building a city of your own - games offer a limitless world.

Have you ever wondered how such hypnotic scapes are built? HP Gaming Garage offers an exciting selection of courses for Esports enthusiasts aspiring to build their career in the gaming industry.

With curated modules across:

Esports	Game	Game	GenAl in
Management	Design	Programming	Game Development

Learners are prepped for future jobs in the Gaming, Media & ICT industry.

Esports Management



Electronic sports (Esports) or competitive gaming has been growing rapidly in popularity to become a multibillion-dollar industry. Esports management prepares students for supportive aspects of this exciting sector. From managing esports teams and events to marketing and content creation, there are many ways to get involved and build a rewarding career.

Esports Management Modules

Introduction to Esports

- What is Esports
- Esports Mediums
- Popular Esports Gaming
- Genres of Esports
- Real Sports vs. Esports

Esports Ecosystem and Stakeholders

- Esports Ecosystem
- Esports Stakeholders

Careers and Opportunities in Esports

Coaching and Team Dynamics in Esports

- Coaching in Esports
- Esports Teams

Game Publishers and Esports

• Game Publishers

Management and Business in Esports

- Managerial Issues in Esports
- Esports Investment

• Careers in Esports

Organizational Aspects of Esports

- Esports Platforms
- Structure of Esports Organizations

Sponsorship and Growth in Esports

Esports Sponsorship

Planning and Executing Esports Events

- Esports Events
- Esports Marketing
- Esports Tournament Operations

Levels and Competition in Esports

- Levels of Esports
- Esports Players

Game Design



The conceptualization, development, and implementation of all the elements that make up an entire game constitutes game design. It includes gameplay, art, sound, and storytelling. The field of game design has grown significantly in recent years, as video games have become a major form of entertainment with an estimated 3 billion users worldwide.

Game Design Modules

Introduction to Game Design

• Course Intro

Playing, Analyzing and Understanding Games

- Design Concepts
- History of Games

Nature of Games

• What is "fun"?

Story Writing in Games

• Linear Storytelling

User Interface and User Experience

• UI/UX Design

Setting Up and Running a Playtest

Playtesting

Game Balance and its Tools

Game Balance

Game Prototyping

Rapid Prototyping

Interaction in Gaming

- Dynamics and Feedback Loops
- Decision-Making

Writing and Communicating Plans

- Design Documentation
- Rules Writing
- Team Communication

Kinds of Fun and Players

• Kinds of Fun/Player Types

Growth in Game Design

• Careers in Game Design

Subspecialties of Game Design

- Level Design (PvE)
- Level Design (PvP)

Game Programming



Game programming involves coding and testing video games using programming languages, tools, and techniques. With the game industry continuing to expand at an unprecedented pace, game programming offers diverse career opportunities, including, development, testing, audio engineering, graphics programming, and Al programming.

Game Programming Modules

Introduction to the Game Industry and Production

- Introduction to the game industry
- Game production pipeline

Game Engines and Programming

Programming behind games

Game AI, Animation and Art

- Artificial Intelligence
- Asset creation for gamers
- 3D animation for gamers
- Integrating assets with animations in game engines
- Engine best practices

- Game engines
- Understanding the basics of programming Part 1
- Understanding the basics of programming Part 2

Game Engines and Mechanics

- Game engine Unity Part 1
- Game engine Unity Part 2
- Game engine Unity Part 3
- Game mechanics Part 1
- Game mechanics Part 2

From Programming Breakdown to Game Production

- Programming breakdown through a self-developed game
- Production management methods
- Producing the game in a production company
- Managing the budget in the game industry

Generative Al in Game Development



Generative AI is transforming game development by automating tasks, enhancing creativity, and introducing dynamic elements across various aspects of game creation. This course delves into how AI can elevate narrative design, character creation, music composition, and more, offering students hands-on experience with cutting-edge technology.

Generative Al in Game Development Modules

Introduction to GenAl in Game development

Introduction To Generative AI

Setting up and Running Unreal Engine 5

- Introduction to Unreal Engine 5
- Your First Game with Unreal Engine 5

Harnessing AI for Games Development

- Al Powered Narrative
- Al Powered Concept Art
- Al Powered Texturing
- Al Powered Music
- Al Powered Modeling
- Al Powered Characters
- Al Powered Animation for Characters

• Blueprints In Unreal Engine 5

Setting Up and Running Unity 3D

- Introduction to Unity 3D
- Unity 3D Features
- Basic C# Scripting for Unity3D Part 1
- Basic C# Scripting for Unity3D Part 2

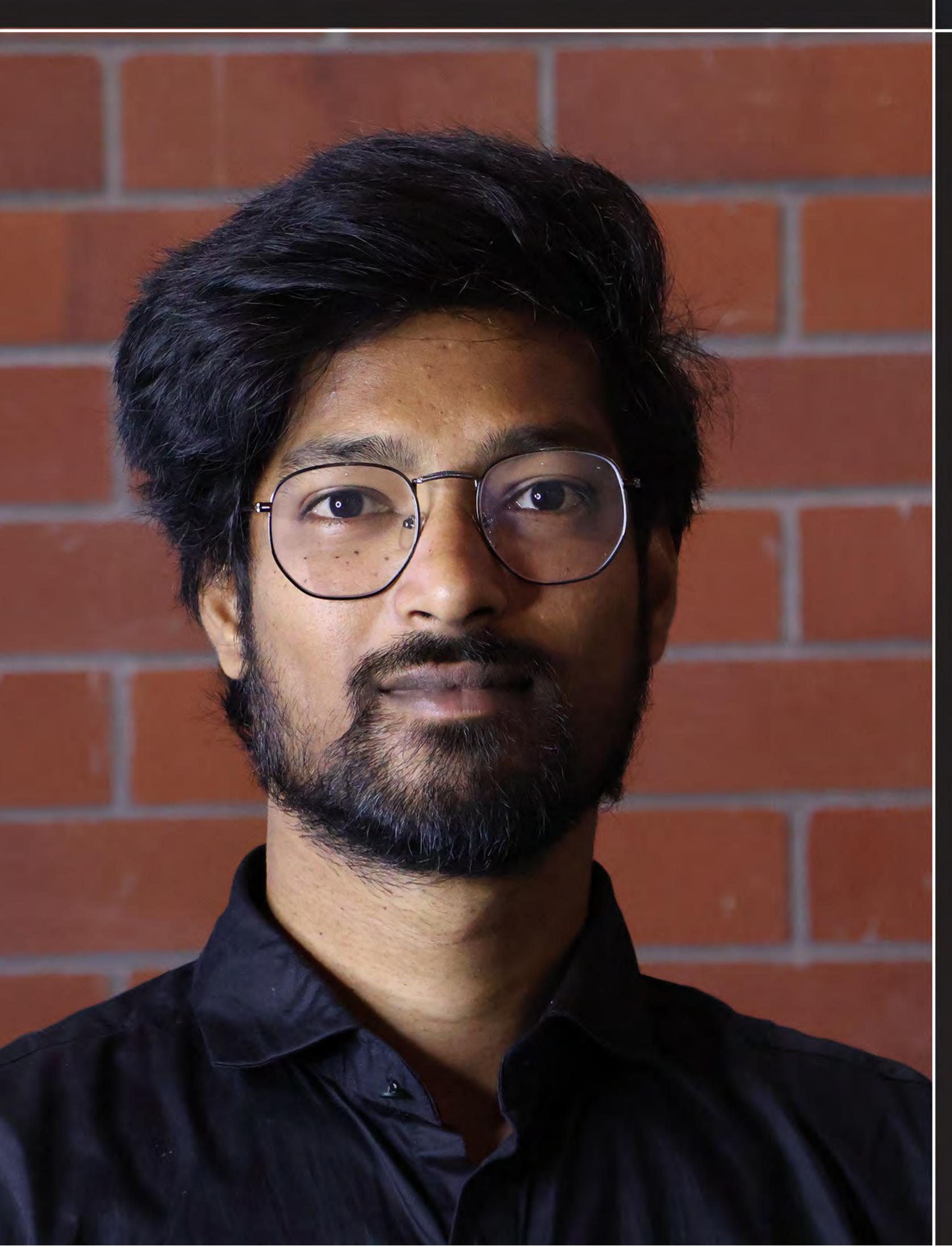
To know more about our courses, visit <u>https://www.edx.org/school/hp</u>

Faculty

Kevin Mitchell

Kevin Mitchell is the Founder and Managing Director of College EsportsX, a consultancy, event production, and product development company, that caters to the international college gaming community and hosts CEX events in various countries across the globe. He also serves as Adjunct Professor at Emerson College, teaching courses on Esports Management and Business. Formerly, he was the Business Development and Strategic Intelligence Director for National Amusements (NAI), where he focused on the intersection of entertainment and technology. An industry veteran, Kevin has worn many hats over the course of his career in Gaming and Esports: from emerging technology evangelist to convergent media specialist.





Raja Ravi

Raja Ravi Chandra Prasad Kanakamedala is the Game Director at Artemisia College of Art & Design (ACAD). ACAD is one of the select few colleges in Asia to be certified by Unreal Engine as an official Academic Partner. In his role at ACAD, Raja has helped students to develop 200 plus games and level prototypes using Unity and Unreal engines. Raja has been in the field of Game Design, Development and Testing since 2013, and has also worked with numerous indie game studios and renowned game publishers, such as Rockstar Games. His current projects include creating AR/VR game prototypes for Epic Games.convergent media specialist.

lan Schreiber

lan Schreiber is a Co-founder of Global Game Jam, the largest in-person game creation event in the world. He has worked on five published game titles and has developed training/simulation games for two Fortune 500 companies. He has taught game design and development at a variety of schools and workshops, and has been on the faculty of Ohio University, Columbus State Community College, Rochester Institute of Technology, and Savannah College of Art and Design. He has also shared his expertise in the gaming field through three books that he has co-authored - Challenges for Game Designers, Breaking into the Game Industry and Game Balance.





Carlos Bott

Carlos Bott is an experienced game developer with

a 35-year history releasing games: Babylon 5: Starship Commander, MLB: Ballpark, MLB: AtBat and Original Gamer Life. He is the Course Leader of Games Development at Ravensbourne University London, and has also taught at DeMontfort University Leicester, SAE Institute in Singapore, Dubai and Emeryville (USA), the University of the Philippines and the University of Maryland. He's as well the founder of FractalDev Games Studios and consults in metaverse gaming & Al with MLB, Lowe's, Target, Walmart and RedRobot (Japan).

