

Game Development Modules - 2024

Overview:

This specialization typically teaches students how to design and create video games using programming languages and game engines. Students learn about game development principles, computer graphics, game physics, and artificial intelligence. They also gain hands-on experience in coding and creating games using popular game engines such as Unity or Unreal Engine. Throughout the course, students will work on individual or group projects to develop their skills in game programming and create their own playable games. The course also covers topics such as game design, game marketing, and the business aspects of the gaming industry.

Modules:

| SI. No. | Modules | Credit Points | Semester | Hrs/Week | | |
|---------------|--|------------------|----------|----------|---|---|
| | | | | L | т | Р |
| 1 | Game Design and Theory | 2 | 3 | 2 | 0 | 0 |
| 2 | Game Analytics and Cybersecurity in Game development | 2 | 3 | 2 | 0 | 0 |
| 3 | Game programming using Unity | 4 | 4 | 0 | 2 | 4 |
| 4 | Game Programming Patterns | 2 | 5 | 0 | 1 | 2 |
| 5 | Multiplayer game development using Unity | 4 | 5 | 0 | 2 | 4 |
| 6 | AI/ML in Games using Unity | 2 | 6 | 0 | 1 | 2 |
| 7 | AR/VR Development using Unity | 3 | 6 | 0 | 1 | 4 |
| 8 | Porting, Optimization, Testing, and Publishing Games | 1 | 6 | 0 | 1 | 0 |
| Total Credits | | 20 | | | | |