

# HIGHER NITEC IN IMMERSIVE APPLICATIONS & GAME (2 YEARS)

## CERTIFICATION

Credits required for certification:

Sector Foundation Modules	: 6
Cluster Core Modules	: 6
Specialisation Modules	: 27
Internship Programme Modules	: 8
Life Skills Modules	: 9
Cross Disciplinary Core Modules	: 6
Electives	: 4
<hr/> Total	<hr/> : 66

## COURSE STRUCTURE

Module Title	Credits
<b>SECTOR FOUNDATION MODULES</b>	
Introduction to UI/UX	3
Web Development Essentials	3
<b>CLUSTER CORE MODULES</b>	
Software Development Practices	3
Programming Essentials	3
<b>SPECIALISATION MODULES</b>	
Gamification Concept	3
Game Programming	3
Game Asset Creation	3
Game Development	3
Game Level Production	3
Built Environment Visualisation	3
Immersive Applications	3
Geospatial Applications	3
Humanoid Programming	3
<b>INTERNSHIP PROGRAMME MODULES</b>	
Internship Programme	8
<b>ELECTIVES (GENERAL) AND LIFE SKILLS MODULES</b>	
For details, click <a href="#">here</a>	

*Note: The offer of electives is subject to the training schedule of respective ITE Colleges. Students are advised to check with their Class Advisors on the availability of the elective modules they intend to pursue.*

## MODULE OBJECTIVES

### Sector Foundation Modules

#### Introduction to UI/UX

On completion of the module, students should be able to apply User Interface (UI) and User Experience (UX) development process to produce low-fidelity and high-fidelity wireframes and prototypes for websites and mobile apps.

## Web Development Essentials

On completion of the module, students should be able to develop web pages using HTML and CSS.

## Cluster Core Modules

### Software Development Practices

On completion of the module, students should be able to apply their knowledge and skills in software development methods on recommended solutions.

### Programming Essentials

On completion of the module, students should be able to apply fundamental programming concepts and computational thinking for basic programs.

## Specialisation Modules

### Gamification Concept

On completion of the module, students should be able to conduct research, design contents and apply gamification approach to create game design document.

### Game Programming

On completion of the module, students should be able to apply programming concepts to implement game programs, perform game debugging and code optimisation using C# programming.

### Game Asset Creation

On completion of the module, students should be able to conduct art direction research and prepare art asset requirements. They will also be able to produce and perform checks on final 2D and 3D artworks.

### Game Development

On completion of the module, students should be able to integrate game scripts, perform rapid prototyping and present mini prototypes.

### Game Level Production

On completion of the module, students should be able to create, edit and beautify game levels in accordance with the game theme and genre set. Students should also facilitate game play sessions and refine the game levels from the feedback received.

### Build Environment Visualisation

On completion of the module, students should be able to use reality capture tools and technologies to replicate physical worlds into virtual environments as required in the areas of digital assets creation.

### Immersive Applications

On completion of the module, students should be able to immersive application by integrating user interface and audio in game engine for various immersive platform and mobile devices.

### Geospatial Applications

On completion of the module, students should be able to apply Geospatial concepts for decision making and integrate geospatial data to game engine for development of location-based applications.

### Humanoid Programming

On completion of the module, students should be able to program a variety of humanoid robot behaviours and perform basic hardware tests.

## Internship Programme Modules

### Internship Programme

On completion of the module, students should be able to apply and integrate the skills and knowledge that they have acquired to the industry and would have gained relevant work experience.

## Electives (General) and Life Skills Modules

For details, click [here](#).