

## HIGHER NITEC IN TECHNOLOGY – IMMERSIVE APPLICATIONS & GAME

Course Code: HT2IG / Plan Code: HT2IG

### COURSE OBJECTIVE

This course equips students with skills and knowledge to create games and immersive applications for various sectors including retail, education, healthcare, real estate, media and entertainment.

### COURSE STRUCTURE

#### Core/Specialisation Modules

S/N	Module Details	Module Code	Module Objectives
MSC: Gamification & Asset Creation			
C1	Gamification Concept 30 (T) 30 (P) Credits 3 Prerequisite: Nil	GD43001FP	On completion of the module, students should be able to conduct research, design contents and apply gamification approach to create game design document.
		Equivalent Code GD4111FP	
C2	Game Asset Creation 20 (T) 40 (P) Credits 3 Prerequisite: Nil	GD43003FP	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.
		Equivalent Code GD4213FP	
MSC: Game Programming & Development			
C3	Game Programming 30 (T) 30 (P) Credits 3 Prerequisite: Nil	GD43002FP	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.
		Equivalent Code GD4112FP	
C4	Game Development 30 (T) 30 (P) Credits 3 Prerequisite: Nil	GD43004FP	On completion of the module, students should be able to integrate game scripts, perform rapid prototyping and present mini prototypes.
		Equivalent Code GD4113FP	
MSC: Game Level & Visualisation			
C5	Game Level Production 10 (T) 50 (P) Credits 3 Prerequisite: Nil	GD43005FP	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.
		Equivalent Code GD5111FP	
C6	Built Environment Visualisation 30 (T) 30 (P) Credits 3 Prerequisite: Nil	GD53001FP	On completion of the module, students should be able to use reality capture tools and technologies to replicate physical worlds into virtual environments for digital assets creation.
		Equivalent Code GD5213FP	
MSC: Immersive & Geospatial Applications			
C7	Immersive Applications 20 (T) 40 (P) Credits 3 Prerequisite: Nil	GD53002FP	On completion of the module, students should be able to develop immersive application by integrating user interface and audio in game engine for various immersive platform and mobile devices.
		Equivalent Code GD5213FP	
C8	Geospatial Applications 30 (T) 30 (P)	GD53003FP	On completion of the module, students should be able to apply Geospatial concepts for decision making and integrate geospatial data
		Equivalent Code Nil	

	Credits 3 Prerequisite: Nil		to game engine for development of location-based applications.
--	--------------------------------	--	--

Abbreviations: T - Theory, P - Practical, MSC - Modular Skills Certificate

### CREDITS FOR CERTIFICATION

Total of 24 credits from successful completion of 8 Core/Specialisation modules.

Applicants who do not meet the entry requirements for Core/Specialisation modules will need to complete 12 credits from 4 Foundation modules before taking Core/Specialisation modules.

### Foundation Modules

S/N	Module Details	Module Code	Module Objectives
F1	<b>Digital Media Technologies</b> 30 (T) 30 (P) Credits 3 Prerequisite: Nil	<b>IT33001FP</b>	On completion of the module, students should be able to apply their knowledge and skills in processing appropriate digital media formats for various platforms delivery.
		Equivalent Code Nil	
F2	<b>Fundamentals of Data</b> 20 (T) 40 (P) Credits 3 Prerequisite: Nil	<b>DE33001FP</b>	On completion of the module, students should be able to import data from external sources, perform basic data manipulation and present simple visualisation of the data.
		Equivalent Code Nil	
F3	<b>Introduction to UI/UX</b> 10 (T) 50 (P) Credits 3 Prerequisite: Nil	<b>IT33002FP</b>	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.
		Equivalent Code Nil	
F4	<b>Web Development Essentials</b> 20 (T) 40 (P) Credits 3 Prerequisite: Nil	<b>IT33003FP</b>	On completion of the module, students should be able to develop web pages using HTML and CSS.
		Equivalent Code Nil	

Abbreviations: T - Theory, P - Practical

### VENUE

ITE College Central

Note:

- 1) The training schedule of lessons is subject to change.
- 2) Depending on the demand, not all the modules in the CET *Higher Nitec* in Technology courses will be offered in each intake. Where the modules are offered and there is insufficient enrolment, the classes will be cancelled and a full refund will be given to the affected students.