

## HIGHER NITEC IN TECHNOLOGY – GAMES PROGRAMMING & DEVELOPMENT

Course Code: HTGPD

### COURSE OBJECTIVE

This course provides students with the skills and knowledge to write game codes using scripting and programming languages to support game development on various platforms.

### COURSE STRUCTURE

S/N	Module Details	Module Code	Module Objectives
C1	<b>Game Design Principles</b> 48 hrs (T) 72 hrs (P) Credits: 7 Prerequisite: Nil	GD4111FP	On completion of the module, students should be able to conduct market research, determine game genre and features, create game design documents, integrate game audio and craft gamification approaches. They will also be able to build and present mini prototypes.
		Equivalent Code GD4005PA GD4101FP	
C2	<b>Game Level Production</b> 30 hrs (T) 90 hrs (P) Credits: 7 Prerequisite: Nil	GD5111FP	On completion of the module, students should be able to outline game stories, analyse user interface (UI) requirements, create game scenes, conduct peer review sessions and refine game designs.
		Equivalent Codes GD4006PA GD5101FP	
C3	<b>Programming Fundamentals</b> 36 hrs (T) 84 hrs (P) Credits: 7 Prerequisite: Nil	GD4112FP	On completion of the module, students should be able to implement game programs, perform game debugging and code optimisation, refine game features, analyse game specifications and perform basic hardware troubleshooting.
		Equivalent Codes GD4009PA GD4102FP	
C4	<b>Interactive Development Techniques</b> 24 hrs (T) 96 hrs (P) Credits: 6 Prerequisite: Nil	GD4114FP	On completion of the module, students should be able to analyse game design documents, conduct feasibility studies, evaluate game engines, implement game programs, implement AI in games and deploy games to server.
		Equivalent Codes GD4010PA GD4104FP	
C5	<b>Game Programming</b> 36 hrs (T) 84 hrs (P) Credits: 7 Prerequisite: Nil	GD4113FP	On completion of the module, students should be able to implement game programs, create game scenes, integrate game user interfaces (UI) and game audio. They will also be able to build and present mini prototypes.
		Equivalent Codes GD5204PA GD4103FP	
C6	<b>Mobile Game Development</b> 36 hrs (T) 84 hrs (P) Credits: 7 Prerequisite: Nil	GD5112FP	On completion of the module, students should be able to integrate game user interfaces (UI), apply physics in games, perform code optimisations and iterative development/rapid prototyping, generate technical documentations and implement multi-platform programming.
		Equivalent Codes GD5205PA GD5102FP	

Abbreviations: T – Theory, P – Practical

### CREDITS FOR CERTIFICATION

Total of 41 credits from successful completion of 6 modules.

### 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.