Module Specification

Game Development Evolution

Version: 2024-25, v3.0, 27 Mar 2024

Contents

Part 1: Information

Module title: Game Development Evolution

Module code: UFCFF5-30-1

Level: Level 4

For implementation from: 2024-25

UWE credit rating: 30

ECTS credit rating: 15

College: College of Arts, Technology and Environment

School: CATE School of Computing and Creative Technologies

Partner institutions: None

Field: Computer Science and Creative Technologies

Module type: Module

Pre-requisites: None

Excluded combinations: None

Co-requisites: None

Continuing professional development: No

Professional, statutory or regulatory body requirements: None

Part 2: Description

Overview: Videogame technology evolves significantly faster than most other mainstream entertainment media. Since it's inception in the 1970s, expectations, work practice and the technical hurdles of game development have evolved rapidly.

This module looks at current and historical production processes, game development concepts and how technical assets and components are integrated into viable software in a commercial game, set across a range of platforms and devices.

Students will also explore the changes regarding the legal, social and ethical issues around game development.

Features: Not applicable

Educational aims: The core aim of this module is to foster an understanding of how hardware and development practice evolve and impact upon each other, but also to explore the processes modern day game studios use to develop commercial titles for a range of platforms.

Outline syllabus: The following topics are covered:

Industry standard development process and project management.

Games Technology: History and evolution of hardware and interfaces.

Technical design, conceptualisation, UX, developing appropriate technical documentation.

Game theory and its application through game design.

Interaction, gameplay mechanics, and accessibility.

IP, legal, copyright and licensing, localisation, sustainability.

Network technology, porting, emulation, backwards compatibility.

History of games hardware, middleware and dedicated game development environments.

Development processes in a typical commercial game studio.

Part 3: Teaching and learning methods

Teaching and learning methods: Lectorals will take the form of industry focused studio-style workshops.

These will feature individual and group based work will run alongside lecture content. Using a flipped classroom approach, students will collaborate to respond to questions and tasks using materials provided. This will take the form of small scale group research task, as well as presenting their findings.

These tasks will support and inform the modules assessment directions, providing a

platform for the students to demonstrate their skills regularly and in the summative assessment tasks.

Module Learning outcomes: On successful completion of this module students will achieve the following learning outcomes.

> **MO1** Assess implications of technology change on development process using appropriate industry standard technical documentation.

> **MO2** Present sound conceptual development ideas for small scale game projects

> **MO3** Research game licensing, localisation, IP ownership and asset management

> **MO4** Consider key issues of game development for console, online, PC & mobile titles.

Hours to be allocated: 300

Contact hours:

> Independent study/self-guided study = 228 hours

> Face-to-face learning = 72 hours

> Total = 300

Reading list: The reading list for this module can be accessed at readinglists.uwe.ac.uk via the following link https://uwe.rl.talis.com/modules/ufcff5-30-1.html

Part 4: Assessment

Assessment strategy: Formative assessment will be undertaken regularly in studio/workshop sessions.

Summative assessment will take the form of a portfolio of research and development tasks depending on current industry trends. These will collate throughout the year, based upon the concepts developed in workshop sessions and in a final small scale

group project.

As well as development work, portfolios will be required to show synthesis of relevant technical, legal and professional issues in game development and/or the sector itself.

For practical development/design work the primary areas of consideration will vary greatly depending on the concepts being covered each year.

The resit strategy is the same as for first sit.

Assessment tasks:

Portfolio (First Sit)

Description: Development portfolio of research and development tasks depending on current industry trends. These will collate throughout the year, based upon the concepts developed in workshop sessions in an individual portfolio of work and in a final small scale group project.

Weighting: 100 %

Final assessment: Yes

Group work: No

Learning outcomes tested: MO1, MO2, MO3, MO4

Portfolio (Resit)

Description: Development portfolio of research and development tasks depending on current industry trends. These will collate throughout the year, based upon the concepts developed in workshop sessions in an individual portfolio of work and in a final small scale group project.

Weighting: 100 %

Final assessment: Yes

Group work: No

Learning outcomes tested: MO1, MO2, MO3, MO4

Part 5: Contributes towards

This module contributes towards the following programmes of study:

Games Technology [Frenchay] BSc (Hons) 2024-25

Games Technology {Foundation} [Frenchay] BSc (Hons) 2023-24