



Module Specification

Introduction to Creative Coding

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Part 1: Information

Module title: Introduction to Creative Coding

Module code: UFCF8L-30-1

Level: Level 4

For implementation from: 2023-24

UWE credit rating: 30

ECTS credit rating: 15

Faculty: Faculty of Environment & Technology

Department: FET Dept of Computer Sci & Creative Tech

Partner institutions: None

Delivery locations: Not in use for Modules

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: Not applicable

Features: Not applicable

Educational aims: This module will enable students to develop key creative and technical programming skills.

Outline syllabus: Indicative areas of study will include:

Introduction to creative computer programming

Basic drawing functions

Introduction to animation

Basic programming concepts (e.g. loops, conditionals, functions)

Introduction to object-oriented programming

Audio fundamentals

Basic game mechanics

Algorithmic particle generation and control

Part 3: Teaching and learning methods

Teaching and learning methods: Developing software using open source and freely available frameworks, students will develop creative practices such as visual design, animation and basic interactivity. This will be balanced with the technical practices that enable them to produce these creative outputs. These skills lie at the core of the industries that graduates will work within.

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

MO1 Research contemporary digital artworks and online resources to aid creative and technical development

MO2 Develop small-scale reactive audio-visual programs that apply understanding of the foundations of both technical and creative approaches

MO3 Understand and use basic programming constructs and isolate and fix common errors in custom programs

MO4 Apply more advanced programming concepts such as object-oriented approaches to creative software problems

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](https://uwe.rl.talis.com/modules/ufcf8l-30-1.html) via the following link <https://uwe.rl.talis.com/modules/ufcf8l-30-1.html>

Part 4: Assessment

Assessment strategy: The assessment strategy in this module is based upon the module information covered in lectures, seminars, tutorial sessions and student's self-directed research.

Summative Assessment: Projects are evaluated on subject specific criteria clearly stated on each project brief at the outset of each project. Students will submit:

A 2D generative drawing program that creates graphics based on code-driven drawing techniques.

A functional, reactive algorithmic audio-visual application working in 2D or 3D and linking with sound generation along with short video presentation demonstrating, explaining and contextualising their work.

Formative Assessment: A mix of individual, peer-to-peer and group tutorials will be provided.

Feedback: Oral feedback will be given through discussions in class and tutorials. Written feedback will be provided on assignments and comments on students' research blogs.

Plagiarism: All submissions will be checked using the university plagiarism software.

Assessment components:

Project (First Sit)

Description: Generative drawing project

Weighting: 40 %

Final assessment: No

Group work: No

Learning outcomes tested: MO1, MO2, MO3

Project (First Sit)

Description: Creative audio-visual application project

Weighting: 60 %

Final assessment: Yes

Group work: No

Learning outcomes tested: MO1, MO2, MO3, MO4

Project (Resit)

Description: Generative drawing project

Weighting: 40 %

Final assessment: No

Group work: No

Learning outcomes tested: MO1, MO2, MO3

Project (Resit)

Description: Creative audio-visual application project

Weighting: 60 %

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:

Digital Media [Frenchay] BSc (Hons) 2023-24

Digital Media {Foundation} [Frenchay] BSc (Hons) 2022-23

Digital Media [Frenchay] BSc (Hons) 2023-24

Digital Media {Foundation} [Frenchay] BSc (Hons) 2022-23