Module Specification

Digital Systems Project

Version: 2023-24, v2.0, 19 Jul 2023

Contents

Part 1: Information

Module title: Digital Systems Project

Module code: UFCFXK-30-3

Level: Level 6

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

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: Module Entry Requirements: 90 credits at level 2

Educational aims: This is an individual project. It provides the opportunity for the student to learn independently, and to develop and apply the skills necessary for an extended technical project.

Outline syllabus: Students select and investigate a topic beyond the normal level of treatment in the taught modules, resulting in a hardware and/or software artefact. The subject of the project will be agreed between the student and the supervisor, and may stem from a variety of sources; for example, a member of staff, the student, the student's employer or from an outside organisation. It must involve research, followed by the development of a hardware and/or software artefact using appropriate method(s)/tool(s). Whatever the subject, the student will be expected to treat material critically, to demonstrate their understanding of the relevance of material and to reflect upon the tools and methodologies used

Part 3: Teaching and learning methods

Teaching and learning methods: Each student will identify (or be assigned to) a supervisor who will meet regularly with the student to help plan and manage the work. Wherever possible students will be assigned a supervisor with an interest in the project topic, but this cannot be guaranteed. The responsibilities of the supervisor are primarily to provide guidance on the management of the project, the standard of work required, what can realistically be achieved in the available time and to give feedback on work done (including the writing of the report).

At the beginning of the academic year in which the project is undertaken, a short series of lectures will provide the student with the context in which the project is to be undertaken, addressing areas such as choosing a project topic, researching the project idea, making use of your supervisor and writing up the project.

In the initial stages of the project, the student and their tutor will discuss objectives that must be achieved and appropriate scope for the project. Projects develop unpredictably, the initial objectives are only intended as a guide to the level expected and details may change. The student and supervisor will meet regularly throughout the duration of the project; the student is expected to stay in contact with and to make use of their supervisor.

The student will submit a research poster mid-way during the academic year, and

will present this at a poster session. This poster will present the student's background research, recommendations for their product and key development directions. The student may also produce a prototype at this session. This session will provide the opportunity for the student to receive feedback from other students, and from staff.

Scheduled learning therefore includes lectures, project supervision and the poster session. Independent learning includes hours engaged in activities such as essential research, the development of requirements, design, programme code, programme testing and debugging, preparation and completion of the project report.

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

MO1 Independently research a comprehensive body of knowledge in a chosen subject

MO2 Develop a hardware/software artefact by selecting appropriate approaches/methods for its realisation and construction

MO3 Identify and communicate knowledge of the development approaches/methods and their application.

MO4 Demonstrate analytical, critical and reflective skills.

MO5 Demonstrate informed reporting skills via research and critical valuation of appropriate academic, commercial and anecdotal literature

Hours to be allocated: 300

Contact hours:

Independent study/self-guided study = 282.5 hours

Face-to-face learning = 17.5 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/ufcfxk-30-3.html

Part 4: Assessment

Assessment strategy: At both first sit and resit, the assessment for this module has three components, a written report, a viva and a poster.

The written report provides the opportunity for students to communicate the work they have undertaken during the project, including research, the selection and implementation of appropriate approaches/methods, and the construction of the hardware and/or software artefact. Students will be expected to demonstrate a critical and reflective approach throughout. The viva provides the opportunity for the student to discuss their project with the supervisor and the second marker, to respond to questioning, and to demonstrate the developed artefact. The viva also provides the opportunity for the supervisor and second marker to assess the quality of the product.

Students will attend and present a research poster. At first sit, the poster session will be held at the midpoint of the academic year. This aspect of the assessment is included in order to encourage student engagement. The poster will typically include the project objectives, the process the student is undertaking and progress so far. This session will provide the opportunity for students to obtain feedback from their peers, and from staff. It is expected that students will individually discuss this feedback with their supervisor, using it to inform the future direction of the project, and the development of the required artefact. Alongside the poster, students are expected to have completed a literature review and some artefact the begins to demonstrate their project.

At resit, the poster will be submitted during the resit period.

Assessment tasks:

Report (First Sit)
Description: Project report (8000-10000 words)
Weighting: 55 %
Final assessment: No

Group work: No

Learning outcomes tested: MO1, MO2, MO3, MO4, MO5

Presentation (First Sit)

Description: Viva including demonstration

Weighting: 20 %

Final assessment: Yes

Group work: No

Learning outcomes tested: MO1, MO2, MO3, MO4

Poster (First Sit)

Description: Project progress poster

Weighting: 25 %

Final assessment: No

Group work: No

Learning outcomes tested: MO1, MO2, MO3, MO4

Report (Resit)

Description: Project report (8000-10000 words)

Weighting: 55 %

Final assessment: No

Group work: No

Learning outcomes tested: MO1, MO2, MO3, MO4, MO5

Presentation (Resit)

Description: Viva including demonstration

Weighting: 20 %

Final assessment: Yes

Group work: No

Learning outcomes tested: MO1, MO2, MO3, MO4

Poster (Resit)

Description: Project progress poster

Weighting: 25 %

Final assessment: No

Group work: No

Learning outcomes tested: MO1, MO2, MO3, MO4

Part 5: Contributes towards

This module contributes towards the following programmes of study:

Computer Science [Sep][FT][Frenchay][3yrs] BSc (Hons) 2021-22

Computer Science [Sep][FT][Villa][3yrs] BSc (Hons) 2021-22

Computer Science [Jan][FT][Villa][3yrs] BSc (Hons) 2021-22

Computer Science [May][FT][Villa][3yrs] BSc (Hons) 2021-22

Computer Science [Sep][FT][Villa][3yrs] - Not Running BSc (Hons) 2021-22

Computer Science [May][FT][Villa][3yrs] - Not Running BSc (Hons) 2021-22

Computer Science [Jan][FT][Villa][3yrs] - Not Running BSc (Hons) 2021-22

Computer Science {Foundation}[Sep][FT][Frenchay][4yrs] BSc (Hons) 2020-21

Computer Science [Sep][SW][Frenchay][4yrs] BSc (Hons) 2020-21

Computer Science {Foundation} [Sep][FT][Frenchay][4yrs] - Not Running BSc (Hons) 2020-21

Computer Science [Sep][SW][Frenchay][4yrs] - Not Running BSc (Hons) 2020-21

Computer Science {Foundation} [Sep][SW][Frenchay][5yrs] BSc (Hons) 2019-20

Cyber Security and Digital Forensics [Sep][FT][Frenchay][3yrs] BSc (Hons) 2021-22

Cyber Security and Digital Forensics [Jan][FT][NepalBrit][3yrs] BSc (Hons) 2021-22

Forensic Computing and Security {Dual} [Mar][FT][Taylors][3yrs] - Not Running BSc (Hons) 2021-22

Forensic Computing and Security {Dual} [Aug][FT][Taylors][3yrs] - Not Running BSc (Hons) 2021-22

Forensic Computing and Security {Foundation} [Sep][FT][Frenchay][4yrs] - Not Running BSc (Hons) 2020-21

Forensic Computing and Security [Sep][SW][Frenchay][4yrs] - Not Running BSc (Hons) 2020-21

Cyber Security and Digital Forensics [Sep][SW][Frenchay][4yrs] BSc (Hons) 2020-21

Cyber Security and Digital Forensics {Foundation} [Sep][FT][Frenchay][4yrs] BSc (Hons) 2020-21

Forensic Computing and Security {Foundation} [Sep][SW][Frenchay][5yrs] BSc (Hons) 2019-20