

# **Module Specification**

# Group Software Development Project

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## **Part 1: Information**

Module title: Group Software Development Project

Module code: UFCFED-30-M

Level: Level 7

For implementation from: 2022-23

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:** Frenchay Campus, School for Higher and Professional

Education, Villa College

Field: Computer Science and Creative Technologies

Module type: Project

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: See Learning Outcomes

Page 2 of 8 12 August 2022 Outline syllabus: Software engineering as a coherent process.

The role and benefits of the SEI Capability Maturity Model.

Selection, evaluation and use of CASE tools.

Software cost estimation both algorithmic and non-algorithmic methods.

Critical reflection on current software engineering practices.

Organisation and management of a software development team.

The Software Requirements Specifications Document.

Documentation issues and change management using traceability techniques.

Quality and configuration management issues.

Risk management.

Project monitoring and control.

Task allocation and resourcing.

Computer supported collaborative work.

Application of system/software modelling, design and construction techniques to a group project.

Legal, Social, Ethical and Professional issues.

Usability issues.

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# Part 3: Teaching and learning methods

**Teaching and learning methods:** 2 hrs per week delivered over 24 weeks or 4 hrs per week delivered over 12 weeks including lectures and tutorials.

Scheduled learning:

This module gives the students the opportunity to extend, consolidate and apply the knowledge they have gained in the prerequisite modules. The focus of the module is on the completion of a group project. Teaching and learning is largely driven by the requirements of the project.

This module will be taught by a combination of lectures and tutorials in every weekly session. Students will receive learning material in advance of the weekly classes and will be expected to use the material to prepare for class. The class based sessions will therefore allow for increased interaction during lecture/tutorials in addition to raising potential knowledge exchange between students with industrial background and tutors.

## Independent learning:

Group work will be used to enable the students to gain practice of real software construction. The group will be student led, with the tutor acting in the role of client and user. A member of staff will act as a customer/client and will supply a minimal specification. The students will then be expected to progress this minimal specification into working a software product with interim deliverables appropriate to accepted practice. Both management and development practices will need to be utilised. Appropriate communication and coordination will take place among students and tutors, using the facilities offered by Blackboard. In addition, the students will be expected to research, evaluate and then select new technology for use in the group development environment.

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

**MO1** Demonstrate project management skills and techniques in the planning and implementation of a practical software project.

Page 4 of 8 12 August 2022 **MO2** Employ appropriate software development process models, software development languages, methods and tools.

**MO3** Demonstrate critical understanding and consideration of legal, social, ethical and professional issues

**MO4** Employ appropriate configuration and quality management standards and procedures for both the software process and the developed software product

**MO5** Provide critical evaluation and reflection of the experience in undertaking a group-based software development project.

Hours to be allocated: 300

### **Contact hours:**

Independent study/self-guided study = 252 hours

Face-to-face learning = 48 hours

Total = 300

**Reading list:** The reading list for this module can be accessed at readinglists.uwe.ac.uk via the following link <u>https://uwe.rl.talis.com/modules/ufcfed-</u><u>30-m.html</u>

## Part 4: Assessment

**Assessment strategy:** The assessment strategy for this module consists of the following tasks:

A project proposal to be submitted early in the module delivery and will be assessed on a pass-fail basis. The emphasis will be providing feedback on the detail of the proposal. This is a group submission. Each group will be required to keep a record of meetings and activities so that active members of group can be identified.

The implementation of software development project will result in a portfolio comprising of various documents that describe, test and evaluate the stages of project implementation and deliverables. Within each group, members will take

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Individual report to reflect on problems observed or faced, software engineering lessons learned, and suggestions to enhance the run of the project itself and also suggested functional and non-functional enhancements of the respective software application specified, designed and developed. The report should not exceed 1500 words. (25%)

For the resit assignment, this is not group-based and it will relate to the individual element(s) that the student failed in the original submission.

### Assessment components:

## Written Assignment - Component A (First Sit)

Description: Group project proposal Weighting: Final assessment: No Group work: Yes Learning outcomes tested: MO1

## Portfolio - Component A (First Sit)

Description: A set of documents defining, testing and evaluating the process and deliverables of the software development project. Weighting: 75 % Final assessment: Yes Group work: Yes Learning outcomes tested: MO1, MO2, MO3, MO4

# Report - Component A (First Sit) Description: Individual reflective report Weighting: 25 % Final assessment: No

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Group work: No Learning outcomes tested: MO3, MO5

#### Written Assignment - Component A (Resit)

Description: Project proposal Weighting: Final assessment: No Group work: No Learning outcomes tested: MO1

#### Portfolio - Component A (Resit)

Description: A set of documents defining, testing and evaluating the process and deliverables of the software development project. Weighting: 75 % Final assessment: Yes Group work: No Learning outcomes tested: MO1, MO2, MO3, MO4

### Report - Component A (Resit)

Description: Individual reflective report Weighting: 25 % Final assessment: No Group work: No Learning outcomes tested: MO3, MO5

## Part 5: Contributes towards

This module contributes towards the following programmes of study:

Information Technology [May][FT][Villa][1yr] MSc 2022-23

Information Technology [Frenchay] MSc 2022-23

Information Technology [Sep][FT][Villa][1yr] MSc 2022-23

Page 7 of 8 12 August 2022 Information Technology [Sep][FT][Frenchay][1yr] MSc 2022-23

Information Technology [Jan][FT][Villa][1yr] MSc 2022-23

Information Technology [Sep][PT][Frenchay][2yrs] MSc 2022-23

Information Technology {Professional Placement}[Sep][FT][Frenchay][2yrs] - Not Running MSc 2022-23

Software Engineering [Sep][FT][Frenchay][1yr] - Not Running MSc 2022-23

Information Technology [Frenchay] MSc 2022-23

Information Technology [Villa] MSc 2022-23

Software Engineering [Sep][PT][Frenchay][2yrs] - Not Running MSc 2021-22