STUDENT AND ACADEMIC SERVICES

UWE Bristol | University of the West of England

MODULE SPECIFICATION

Part 1: Information			
Module Title	Group Software Development Project		
Module Code	UFCFED-30-M	Level	Level 7
For implementation from	2019-20		
UWE Credit Rating	30	ECTS Credit Rating	15
Faculty	Faculty of Environment & Technology	Field	Computer Science and Creative Technologies
Department	FET Dept of Computer Sci & Creative Tech		
Module type:	Project		
Pre-requisites	None		
Excluded Combinations	None		
Co- requisites	None		
Module Entry requirements	None		

Part 2: Description

Educational Aims: See Learning Outcomes

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.

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.

Part 3: Assessment

The assessment strategy for this module comprises uncontrolled components as part of the group-based software development project. These components are:

A project proposal to be submitted by the fourth week of the term and is 15% of the total coursework assessment. This is group-based with allocation of marks dependent on the individual contribution that will be controlled by the respective resources allocated to the associated tasks set in the assignment specifications. Feedback will be given to students in four weeks time from submission, and hence students will utilise such feedback to inform better attainment in the remaining parts of the coursework with not much of a loss of marks given that only 15% is allocated to the proposal from the coursework total assessment.

Detailed group-based project deliverables including some specific project individual contributions and these comprise in total 60% of the coursework assessment.

Individual report comprising 25% of the coursework assessment and reflecting 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 2500 words.

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

First Sit Components	Final Assessment	Element weighting	Description
Written Assignment - Component A		15 %	Group project proposal
Report - Component A		25 %	Individual reflective report
Portfolio - Component A	✓	60 %	Group-based and individual project deliverables
Resit Components	Final Assessment	Element weighting	Description
Written Assignment - Component A		15 %	Project proposal
Report - Component A		25 %	Individual reflective report
Portfolio - Component A	✓	60 %	Project deliverables

Part 4: Teaching and Learning Methods	
Learning Outcomes	On successful completion of this module students will achieve the following learning outcomes:

Module Learning Outcomes	Reference
Devise and participate in strategies for the effective working of a group towards a common goal	MO1
Demonstrate project management skills and techniques in a group-based setting while engaging in a practical software project to produce a high quality software product	MO2
Critically understand and employ both algorithmic and non-algorithmic software cost estimation techniques, planning/tracking techniques, risk management and other project management techniques for their chosen group software development project	MO3
Employ appropriate software development process models, software development languages, methods, tools and modeling notations for the chosen group software development project	MO4
Demonstrate critical understanding and consideration of legal, social, ethical and professional issues	MO5
Employ appropriate configuration and quality management standards and procedures for both the software process and the developed software product	MO6
Provide critical evaluation of the experience in undertaking a group-based software development project with critical reflections on software engineering lessons learned with regards to software development process, methods, modelling techniques, quality and configuration management aspects, etc.	MO7

Contact Hours

Independent Study Hours:

Independent study/self-guided study	252

	Total Independent Study Hours:	252
		4
	Scheduled Learning and Teaching Hours:	
	Face-to-face learning	48
	Total Scheduled Learning and Teaching Hours:	48
	Hours to be allocated	300
	Allocated Hours	300
Reading List	*The reading list for this module can be accessed via the following link:* https://uwe.rl.talis.com/modules/ufcfed-30-m.html	

Part 5: Contributes Towards
This module contributes towards the following programmes of study: Information Technology [Jan][FT][Villa][1yr] MSc 2019-20   Information Technology [May][FT][Villa][1yr] MSc 2019-20   Information Technology [Sep][FT][Frenchay][1yr] MSc 2019-20   Information Technology [Sep][FT][Villa][1yr] MSc 2019-20   Information Technology [Sep][PT][Frenchay][2yrs] MSc 2019-20   Software Engineering [Sep][PT][Frenchay][2yrs] MSc 2018-19