

## MODULE SPECIFICATION

Part 1: Information							
Module Title	Information Systems Development						
Module Code	UFCFGC-15-3		Level	Level 6			
For implementation from	2019-20						
UWE Credit Rating	15		ECTS Credit Rating	7.5			
Faculty	Faculty of Environment & Technology		Field	Computer Science and Creative Technologies			
Department	FET [	ET Dept of Computer Sci & Creative Tech					
Module type:	Stand	Standard					
Pre-requisites		None					
Excluded Combinations		None					
Co- requisites		None					
Module Entry requirements		None					

#### Part 2: Description

Educational Aims: See Learning Outcomes

**Outline Syllabus:** A review of contemporary approaches to systems development and its methods, tools and practices. Frameworks for evaluating methodologies and choosing between them.

The architecture of dynamic web-based (Model-View-Controller) applications and their underlying standards tools and technologies e.g.: RDBMS, SQL, PHP, XHTML, XML, XSLT, XMLSchema.

The components, tools and architectures of complex web-based and workflow systems; business process modelling and enactment; business process management.

Critical evaluation of the forces which shape the development process: organisational structure, technological possibilities, designer knowledge and presumptions, development under constraints.

The architecture of web based applications. Formulating problem specifications. Modelling and description of systems and applications. Methodologies, tools and techniques for the

development of web based systems. The application of frames and patterns to systems development.

### Teaching and Learning Methods: Contact time: 36 hours

Assimilation and development of knowledge: 69 hours

Exam preparation: 30 hours

Coursework preparation: 15 hours

Total study time: 150 hours

A mixture of readings, lectures and case studies will be used. There will be a significant practical element to the module and students will be expected to analyse, design and implement examples of web-based information systems using a variety of technologies.

#### Part 3: Assessment

The module is assessed by a 3 hour examination at the end of the teaching and also by coursework. The exam assesses the students' understanding of the theoretical aspects of the module. The coursework allows the student to demonstrate practical application of methodology, tools and techniques.

First Sit Components	Final Assessment	Element weighting	Description
Practical Skills Assessment - Component B		25 %	Individual assignment developing a web based application
Examination - Component A	~	75 %	Exam
Resit Components	Final Assessment	Element weighting	Description
Practical Skills Assessment - Component B		25 %	Individual assignment developing a web based application

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			
	Explain and evaluate the architecture of web based applications	MO1			
	Evaluate designs in terms of form, context, ensemble, multiple form-context boundaries and fitness	MO2			
	Analyse and model information systems and applications effectively using patterns, frameworks and constraints	MO3			
	Analyse requirements and specify and design software to meet user needs with consideration of usability issues	MO4			
	Develop web based applications for a given architecture using appropriate methodologies, tools and techniques	MO5			

Contact Hours	Independent Study Hours:					
	Independent study/self-guided study	114				
	Total Independent Study Hours:	114				
	Scheduled Learning and Teaching Hours:					
	Face-to-face learning	36				
	Total Scheduled Learning and Teaching Hours:	36				
	Hours to be allocated	150				
	Allocated Hours	150				
Reading List	The reading list for this module can be accessed via the following link:					
	https://uwe.rl.talis.com/index.html					

# Part 5: Contributes Towards

This module contributes towards the following programmes of study: