MODULE SPECIFICATION

Part 1: Information			
Module Title	Advanced Technologies		
Module Code	UFCFW3-30-3	Level	Level 6
For implementation from	2018-19		
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		
Contributes towards			
Module type:	Project		
Pre-requisites	C++ Development 2018-19		
Excluded Combinations	None		
Co- requisites	None		
Module Entry requirements	None		

Part 2: Description

Educational Aims: See Learning Outcomes

Outline Syllabus: Hardware and software technologies used in industry are constantly changing to meet new demands; Upon graduating, students will be expected to be able to respond to these trends to use suitable advanced and emerging technologies to provide suitable solutions to development problems. This module provides a platform for students to not only investigate a range of advanced technologies in their field, but to do so in a setting which mimic one typical of industry, with output which will form a valuable component of their portfolio upon graduating.

A set of disciplines specific real-life problems will be provided at the start of the module. Students will be expected to select which to address and, over the course of the module, research and develop small prototype programs, using appropriate advanced technologies from their field of study, that provide potential solutions to these problems. These prototypes will form their portfolio for the module.

The culmination of the module will be each student presenting their prototype to a panel, followed

by a brief Q and A session where students will be expected to discuss their implementation choices and their rationale behind it, as well as potential alternatives.

Teaching and Learning Methods: Taught material specific to given topics will be presented through industry style master classes, delivered by expert staff or industry professions, and will be clustered at the start of the module.

It is expected that learning outside of the master classes will be largely self-directed. Students will be expected to follow links provided to suggested research to further investigate topics outside of taught sessions, before planning and implementing the prototype programs which address their chosen problems.

Support will be provided throughout the module through practical studio sessions, with teaching staff overseeing the development of the student portfolios and giving advice on how to address potential implementation issues.

Activity (hrs)
Contact time (72)
Assimilation and development of knowledge (148)
Viva preparation (20)
Portfolio preparation (60)
Total study time (300)

Part 3: Assessment

Formative assessment:

Formative feedback is offered throughout the module, in the studio sessions, and students will encouraged to discuss both approaches and implementation details with teaching staff throughout.

Summative assessment is two-pronged:

The portfolio of prototype programs will be assessed in terms of the suitability of the chosen approaches, the quality and suitability of the implementation, as well as the student's reflection on their own research, methodology and implementation.

The presentation/Q and A session will offer students an opportunity to demonstrate their prototypes to a panel to highlight key aspects of their functionality, and will assess how well they communicate and explain their development choices, and their awareness of alternative approaches.

First Sit Components	**Final Assessment**	**Element weighting**	**Description**
Portfolio - Component A		75 %	Portfolio of prototype programs
Presentation - Component A	✓	25 %	Presentation/viva (20 minutes)
Resit Components	**Final Assessment**	**Element weighting**	**Description**
Portfolio - Component A		75 %	Portfolio of prototype programs
Presentation - Component A	✓	25 %	Presentation/viva (20 minutes)

Part 4: Teaching and Learning Methods

Learning Outcomes

On successful completion of this module students will be able to:

	Module Learning Outcomes
MO1	Assimilate and synthesise information from a range of resources, including expert staff and academic and industry research, to identify viable approaches to solve real-life problems faced in their discipline.
MO2	Employ a range of advanced technologies from their field of study to develop a portfolio of prototype programs demonstrating potential solutions that correspond to given specifications.
MO3	Critically evaluate the suitability of their prototypes in terms of research, methodology and implementation.
MO4	Present their prototypes to a panel, and address technical questions regarding the implementation strategies chosen.

Contact Hours

Contact Hours	
Independent Study Hours:	
Independent study/self-guided study	228
Total Independent Study Hours:	228
Scheduled Learning and Teaching Hours:	
Face-to-face learning	72
Total Scheduled Learning and Teaching Hours:	72
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/ufcfw3-30-3.html