



## MODULE SPECIFICATION

Part 1: Information			
Module Title	Digital Design and Development		
Module Code	UFCFQJ-15-M	Level	Level 7
For implementation from	2018-19		
UWE Credit Rating	15	ECTS Credit Rating	7.5
Faculty	Faculty of Environment & Technology	Field	Computer Science and Creative Technologies
Department	FET Dept of Computer Sci & Creative Tech		
Contributes towards	Information Technology [Sep][PT][Frenchay][2yrs] MSc 2018-19 Information Technology [Sep][FT][Frenchay][1yr] MSc 2018-19 Information Technology [Sep][FT][Villa][1yr] MSc 2018-19 Information Technology [Jan][FT][Villa][1yr] MSc 2018-19 Information Technology [May][FT][Villa][1yr] MSc 2018-19		
Module type:	Standard		
Pre-requisites	None		
Excluded Combinations	None		
Co- requisites	None		
Module Entry requirements	None		

## Part 2: Description

**Educational Aims:** See Learning Outcomes.

**Outline Syllabus:** The syllabus includes:

User and context research tools and practices  
 Information architecture fundamentals: definitions, heuristics, approaches  
 Cross channel service design and user experience mapping  
 Prototyping: creating wireframes, templates and other visual design aids

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Gathering user feedback: Formal and guerrilla usability testing  
Design critique  
Scripting language fundamentals: Javascript, PHP and others  
Good coding practice: Use of code repositories, documentation, testing, reusability  
Good design practice in relation to typography, layout, information design and visualisation  
Issues in digital design: user experience, accessibility, responsive design, browser/device/OS compatibility, graceful degradation  
Emerging platforms and interactions: VR, 3D Projection, Haptics, Internet of Everything

**Teaching and Learning Methods:** Scheduled learning includes a mixture of short talks, seminars and supervised practical classes and workshops;  
Independent learning includes hours engaged with essential reading, assignment preparation and completion etc. These sessions constitute an average total time of 130 hours.

A total of 24 contact hours will be timetabled for the module. This will consist of flexible teaching and learning time.

Additional tutor and peer support will be available remotely for some design and coding activities.

### Part 3: Assessment

The assessment strategy has been developed to provide a rounded view of the student's performance as a digital designer and developer. In addition to carrying out research, conception and design work to a high standard, the student will be expected to exemplify reflective and professional practice through giving and receiving feedback, explaining design decisions and walking through code functionality.

The module will be therefore assessed through a combined portfolio and an individual presentation:

**Combined portfolio:** The portfolio will document the progress of the student through the design and development process and provide evidence of their ability to plan, conduct, critique and iteratively improve research, design and coding artifacts. The contents will be assessed according to the quality of each output, adherence to design principles and the learning evident from the process. Tasks will vary but will include design artifacts from the various stages of the process, such as:

- A summary of evidence from academic, user and contextual research;
- Initial design prototypes and accompanying critique;
- A summary of peer comments and a plan for changes;
- Results and analysis of stakeholder evaluation;
- Technical specifications for features to be implemented;
- Code libraries/demonstrators;
- High-fidelity interactive prototypes.

Tasks will typically be started during contact time when there will also be tutor feedback and peer review opportunities. Task completion, reflective commentary and submission may be completed online during independent study time. Individual tasks will be submitted on an on-going basis, with the full portfolio completed toward the end of the module contact period.

**Individual presentation:** Students will present a final functional prototype and describe and justify their process. A code walk-through will be included. This will be demonstrated to tutors in an assessed presentation together with a Q and A that will interrogate design decisions and implementation approaches. This component will be carried out in the exam period. It will be assessed according to: evidence of design process, coding standards, quality of visual design, quality of information design.

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First Sit Components	Final Assessment	Element weighting	Description
Portfolio - Component B		75 %	Practical portfolio
Presentation - Component A	✓	25 %	Individual output and presentation (10 minutes)
Resit Components	Final Assessment	Element weighting	Description
Portfolio - Component B		75 %	Practical portfolio
Presentation - Component A	✓	25 %	Individual output and presentation (10 minutes)

Part 4: Teaching and Learning Methods															
Learning Outcomes	On successful completion of this module students will be able to:														
	<table border="1"> <thead> <tr> <th colspan="2">Module Learning Outcomes</th> </tr> </thead> <tbody> <tr> <td>MO1</td> <td>Conduct professional quality stakeholder, context and competitor research using industry-standard methodologies</td> </tr> <tr> <td>MO2</td> <td>Identify and develop creative solutions to a design problem and iterate and select among them for prototyping</td> </tr> <tr> <td>MO3</td> <td>Pursue and respond to other's critique on their designs and, in turn, provide constructive critique on others' work</td> </tr> <tr> <td>MO4</td> <td>Evaluate prototypes with stakeholders and identify necessary changes and improvements</td> </tr> <tr> <td>MO5</td> <td>Identify good practice in a particular programming language and use this to implement key features for mobile, web or other digital interface</td> </tr> <tr> <td>MO6</td> <td>Disseminate their work together with research evidence and communicate and justify design decisions</td> </tr> </tbody> </table>	Module Learning Outcomes		MO1	Conduct professional quality stakeholder, context and competitor research using industry-standard methodologies	MO2	Identify and develop creative solutions to a design problem and iterate and select among them for prototyping	MO3	Pursue and respond to other's critique on their designs and, in turn, provide constructive critique on others' work	MO4	Evaluate prototypes with stakeholders and identify necessary changes and improvements	MO5	Identify good practice in a particular programming language and use this to implement key features for mobile, web or other digital interface	MO6	Disseminate their work together with research evidence and communicate and justify design decisions
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<b>Contact Hours</b>															
<b>Independent Study Hours:</b>															
Independent study/self-guided study	126														
<b>Total Independent Study Hours:</b>	126														
<b>Scheduled Learning and Teaching Hours:</b>															
Face-to-face learning	24														
<b>Total Scheduled Learning and Teaching Hours:</b>	24														

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	<b>Hours to be allocated</b>	150
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Reading List	<i>The reading list for this module can be accessed via the following link:</i> <a href="https://uwe.rl.talis.com/modules/ufcfqj-15-m.html">https://uwe.rl.talis.com/modules/ufcfqj-15-m.html</a>	