



MODULE SPECIFICATION

Part 1: Information			
Module Title	Creating with Data		
Module Code	UFCF9L-30-2	Level	Level 5
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:	Standard		
Pre-requisites	None		
Excluded Combinations	None		
Co- requisites	None		
Module Entry requirements	None		

Part 2: Description
<p>Overview: The explosive growth of social media on the web, and other large data sets, combined with the digitisation of cultural artefacts by libraries and museums opens up exciting new possibilities for creating with data. This module examines the emerging area of work concerned with the collection, preparation, analysis, visualisation, management, and preservation of large collections of information. As designers and researchers it is now possible to easily access huge bodies of cultural and scientific data from both the past and the present.</p> <p>Pre-requisites: Students must take one of Information Technology (UFCFR3-30-1) or Introduction to Web Platform (UFCFS5-30-1).</p> <p>Educational Aims: This module explores the possibilities, methods, and tools for working with large data sets, with a particular focus on data analysis and creative transformation and visualisation of data. During this module students will contextualise their practice through a consideration of relevant work from digital art and design, media theory and HCI.</p> <p>Outline Syllabus: Within the module students will explore cultural, social and technical developments that place "information" and "data" in the centre of contemporary social and economic life (the concepts of information society, network society, software society). The module will enable the critical examination of the fundamental paradigms developed by</p>

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modern societies to analyse patterns in data - statistics, visualisation and data mining. As such, the ethics of big data analysis are also addressed.

Teaching and Learning Methods: The reflexive use of computational tools will be encouraged with students using these tools to better understand how they are used in society at large - the modes of thinking they enable, their strengths and weaknesses, and the often unexamined assumptions behind their use.

Part 3: Assessment

Students will develop analytical and creative data-based projects that are informed by the range of topics that are explored throughout the course. This will be divided into two coursework projects (B1, B2), and an oral presentation about one of the projects (A). Through these assessments students will develop an understanding of the concept of data, as well as of a related set of conceptual and theoretical issues.

Coursework project (B1/B2): Assesses concept, quality, originality, and conceptual grounding of code or other visualisation tools. Both coursework projects require the student to gather and process data, using a variety of visualisation tools and databases. Information is gathered ethically and the creative output is based on good design practice.

Presentation (A): Held in examination period of semester 2.

Feedback: Feedback will be given through discussions in class, group tutorials, written feedback for assignments and comments on student's research journals by lecturers, their peers and guest speakers. The marking criteria and assessment format will be clearly indicated on the assignment brief and will be introduced in the first teaching session.

Research Journals: Students will be supported to create research journals and will be asked periodically to share and comment on each other's journals throughout both semesters.

Formative Assessment

A mix of individual, peer-to-peer and group tutorials will be provided.

First Sit Components	Final Assessment	Element weighting	Description
Project - Component B		30 %	Coursework (project) 1
Project - Component B		45 %	Coursework (project 2)
Presentation - Component A	✓	25 %	Practical examination (oral presentation - 15 minutes presentation - exam period)
Resit Components	Final Assessment	Element weighting	Description
Project - Component B		75 %	Coursework (project)
Presentation - Component A	✓	25 %	Practical exam (oral presentation - 15 minute presentation)

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Part 4: Teaching and Learning Methods																	
Learning Outcomes	<p>On successful completion of this module students will achieve the following learning outcomes:</p> <table border="1"> <thead> <tr> <th style="text-align: left;">Module Learning Outcomes</th> <th style="text-align: left;">Reference</th> </tr> </thead> <tbody> <tr> <td>Derive well-structured and workable schemas from unstructured and qualitative data, capturing domain entities, their attributes and constraints and the relationships between them</td> <td>MO1</td> </tr> <tr> <td>Understand the value of data in an organizational and wider societal context. Appreciate the “context of use” and when and how this data needs to be authenticated, authorised, validated, mined, shared, secured and maintained</td> <td>MO2</td> </tr> <tr> <td>Effectively use web standards for the retrieval and representation of data to derive meaningful and useful structure (form) and information (content) from a variety of web services</td> <td>MO3</td> </tr> <tr> <td>Using databases, understand the emergence and uses made of very-large-scale data sets. Analyse through specific examples how these databases are queried, updated, replicated and maintained</td> <td>MO4</td> </tr> <tr> <td>Gather, organize, and express information clearly and accurately using both digital and non-digital media tools and modes of production</td> <td>MO5</td> </tr> </tbody> </table>	Module Learning Outcomes	Reference	Derive well-structured and workable schemas from unstructured and qualitative data, capturing domain entities, their attributes and constraints and the relationships between them	MO1	Understand the value of data in an organizational and wider societal context. Appreciate the “context of use” and when and how this data needs to be authenticated, authorised, validated, mined, shared, secured and maintained	MO2	Effectively use web standards for the retrieval and representation of data to derive meaningful and useful structure (form) and information (content) from a variety of web services	MO3	Using databases, understand the emergence and uses made of very-large-scale data sets. Analyse through specific examples how these databases are queried, updated, replicated and maintained	MO4	Gather, organize, and express information clearly and accurately using both digital and non-digital media tools and modes of production	MO5				
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Reading List	<p><i>The reading list for this module can be accessed via the following link:</i></p> <p>https://uwe.rl.talis.com/modules/ufcf9l-30-2.html</p>																

Part 5: Contributes Towards	
<p>This module contributes towards the following programmes of study:</p> <p>Digital Media [Sep][FT][Frenchay][3yrs] BSc (Hons) 2018-19</p> <p>Digital Media [Sep][SW][Frenchay][4yrs] BSc (Hons) 2018-19</p> <p>Digital Media [Sep][FT][SHAPE][3yrs] BSc (Hons) 2018-19</p>	