University of Brighton

MODULE DETAILS													
Module title	Introduction to web development												
Module code	CI435												
Credit value	20												
Level Mark the box to the right of the appropriate level with an 'X'	Level 4	X	Level 5		Level 6		Level 7		Level 8				
	Level 0 (for modules at foundation level)												
Entry criteria for registration on this module													
Pre-requisites Specify in terms of module codes or equivalent													
Co-requisite modules Specify in terms of module codes or equivalent													
Module delivery													
Mode of delivery	Taught	X	Distance		Placement		Online						
	Other												
Pattern of delivery	Weekly	X	Block		Other								
When module is delivered	Semester 1		Semester 2		Throughout year	X							
	Other												
Brief description of module content and/ or aims Overview (max 80 words)	The module will introduce a range of current web technologies, equipping students to build basic standards-compliant static and interactive web pages.												
Module team/ author/ coordinator(s)	Dr Marcus Winter												
School	School of Computing, Engineering and Mathematics												
Site/ campus where delivered	Moulsecoomb												

Course(s) for which module is appropriate and status on that course	
Course	**Status (mandatory/ compulsory/ optional)**
BSc (Hons) Business Computing	Compulsory
BSc (Hons) Business Computing with Cyber Security	Compulsory
BSc (Hons) Computer Science	Compulsory
BSc (Hons) Computer Science with Artificial Intelligence	Compulsory
BSc (Hons) Computer Science for Games	Compulsory
BSc (Hons) Digital Games Development	Compulsory
BSc (Hons) Computing for Web and Mobile	Compulsory
BSc (Hons) Software Engineering	Compulsory
BSc (Hons) Computer Science with Cyber Security	Compulsory

MODULE AIMS, ASSESSMENT AND SUPPORT	
Aims	This module aims to provide students with – • A foundation in technologies for the development of static and interactive web pages • Practical experience of specifying, designing, making, and maintaining standards-compliant web sites
Learning outcomes	On successful completion of the module the student will be able to: 1. Understand and apply web technologies 2. Understand and apply fundamental web design principles guided by the adoption of appropriate professional, ethical and legal practices. 3. Specify, design, create and maintain responsive, accessible and standards-compliant web sites 4. Apply client-side scripting to the Document Object Model
Content	**Introduction to web standards** • Current web standards and the organisations responsible • Browsers and user agents • Accessibility • Design ethics • Economic context of the development, use, and maintenance of web sites **HTML5/CSS web development** • HTML markup – syntax and semantics to structure content • Creating content – text, image, media, forms • Website navigation – lists and anchors • Cascading stylesheets (CSS) – presentation, media queries • Fluid and responsive web page layouts • Testing and validation **Website production** • Responsive web design workflow • Web development tools • File organisation and management **Client-side scripting** • Introduction to JavaScript • Events and Event Listeners • Document Object Model (DOM) – Accessing and manipulating elements – Dynamically generating elements – Dynamically styling elements • Accessing and validating form values
Learning support	**Indicative reading** Latest editions of the following - • Haverbeke, M. *Eloquent JavaScript: A Modern Introduction to Programming.* Available http://eloquentjavascript.net/ • Flanagan, D. *JavaScript: the definitive guide.* O'Reilly • Petersen, C. *Learning Responsive Web Design: A Beginner's Guide.* O'Reilly. Published texts will be supplemented by up to date web-based resources and tutorials, such as –

	• Mozilla Developer Network MDN web docs - https://developer.mozilla.org/en-US/ • W3C standards https://www.w3.org/ • Lynda.com video tutorials The module is supported by resources on studentcentral and Aspire (http://readinglists.brighton.ac.uk/modules/ci135.html) **Software and online developer tools** • Free web development and authoring software and tools will be used where possible, such as Notepad++, Brackets, Chrome DevTools, FireFox Developer tools, W3C markup and CSS validation services • Image editing software such as Adobe CC Photoshop • Students are provided with their own space on the itsuite web server on which to host and test web pages online
Teaching and learning activities	
Details of teaching and learning activities	The module is taught through a combination of lectures (24 hours), to introduce the subject and direct learning; and weekly lab classes (24 hours), to learn through practice. Guided independent study is mainly practice-based, including some independent investigation of online resources for making web pages. • Semester 1 (HTML and CSS): the coursework assignment – making a small website - is supported through weekly online lab tutorials • Semester 2 (JavaScript): learning is through weekly scripting exercises, which are written up in a digital workbook that can be brought into the exam. Students will be given feedback on the JavaScript exercises as they complete them in class and helped to prepare for the exam in a taught revision session. **Formative assessment:** • In semester 1 students submit work in progress mid-semester, through studentcentral. Oral feedback is provided in class through self and peer assessment, and from the lab tutor.

Allocation of study hours (indicative)		**Study hours**
SCHEDULED	This is an indication of the number of hours students can expect to spend in scheduled teaching activities including lectures, seminars, tutorials, project supervision, demonstrations, practical classes and workshops, supervised time in workshops/ studios, fieldwork, external visits, and work-based learning.	**48**
GUIDED INDEPENDENT STUDY	All students are expected to undertake guided independent study which includes wider reading/ practice, follow-up work, the completion of assessment tasks, and revisions.	**152**
PLACEMENT	The placement is a specific type of learning away from the University that is not work-based learning or a year abroad.	
	TOTAL STUDY HOURS	**200**

Assessment tasks

Details of assessment for this module	**Task 1: Coursework 50%** (L.O.s 1, 2 and 3) Students make a 2-3 page website including a blog-style learning journal with weekly posts, contact form and an independently produced page on a given topic. This work is undertaken during weekly taught lab classes and guided independent study time. The task requires the submission of a URL and the source files for the validated web pages - 17.5 hours of effort to prepare and complete. **Task 2: 1.5 hour written examination 50%** (L.O.s 1, 2, 3 and 4) The unseen examination assesses the knowledge and skill mainly gained through practical exercises undertaken in semester 2 lab classes. The examination is open book: students are permitted to bring in a hard copy workbook of material relating to the practical exercises done in class.

Types of assessment task[1] Indicative list of summative assessment tasks which lead to the award of credit or which are required for progression.		**% weighting** (or indicate if component is pass/fail)
WRITTEN	Written exam	50
COURSEWORK	Written assignment/ essay, report, dissertation, portfolio, project output, *set exercise*	50
PRACTICAL	Oral assessment and presentation, practical skills assessment, *set exercise*	

EXAMINATION INFORMATION	
Area examination board	Computing

External examiners			
Name	**Position and institution**	**Date appointed**	**Date tenure ends**
Silvester Czanner	Liverpool John Moores University	1 October 2019	30 September 2023

QUALITY ASSURANCE	
Date of first approval Only complete where this is not the first version	CDR April 2018
Date of last revision Only complete where this is not the first version	Editorial change Oct 2018, Editorial change Jun 2019, January 2020
Date of approval for this version	Editorial June 20
Version number	2.1
Modules replaced	CI135

[1] Set exercises, which assess the application of knowledge or analytical, problem-solving or evaluative skills, are included under the type of assessment most appropriate to the particular task.

Specify codes of modules for which this is a replacement				
Available as free-standing module?	Yes		No	X