Module Title:	Web Development and Databases
Language of Instruction:	English

Credits:	10

NFQ Level:	7

Module Delivered In	1 programme(s)

Teaching & Learning Strategies:	This module is delivered entirely within a laboratory setting. Learners are seated at their computers throughout the course delivery and are activity participating in class work throughout each scheduled session.

Module Aim:	To introduce the student to web programming techniques and practice, with an emphasis on web framework and database technologies.

Learning Outcomes	
On successful completion of this module the learner should be able to:	
LO1	Deploy HTML-based client-side web sites.
LO2	Design and build web-based server-side application programs.
LO3	Inspect, query, create, and change data stored within a modern database management system.
LO4	Design a database schema in support of application requirements.
LO5	Integrate client-side web technologies with server-side web technologies.
LO6	Integrate web applications with server-side database systems.

Pre-requisite learning	
Module Recommendations *This is prior learning (or a practical skill) that is recommended before enrolment in this module.*	
No recommendations listed	
Incompatible Modules *These are modules which have learning outcomes that are too similar to the learning outcomes of this module.*	
No incompatible modules listed	
Co-requisite Modules	
No Co-requisite modules listed	
Requirements *This is prior learning (or a practical skill) that is mandatory before enrolment in this module is allowed.*	
Successful completion of Year 2 (or equivalent).	

Module Content & Assessment

Indicative Content
The Model-View-Controller Pattern n/a
The Web Development Infrastructure Client, server, content, protocol, client-side programming, server-side programming and database systems.
Static web sites with HTML. n/a
Server-side programming technologies. n/a
Dynamic web applications with server-side technologies n/a
Database Theory and SQL Database Theory (including schema design and an introduction to First Normal Form) and SQL (DML and DDL)
Dynamic web applications with database integration n/a
Introduction to web-based client-side programming technologies n/a

Assessment Breakdown	%
Continuous Assessment	40.00%
Practical	60.00%

Continuous Assessment				
Assessment Type	Assessment Description	Outcome addressed	% of total	Assessment Date
Project	Build a locally-hosted website using HTML/CSS.	1	20.00	n/a
Project	Automate the dynamic creation of web content using server-side development technologies.	2	20.00	n/a

No Project

Practical				
Assessment Type	Assessment Description	Outcome addressed	% of total	Assessment Date
Practical/Skills Evaluation	Design, build, and integrate a database-backend into a locally-developed webapp.	3,4	20.00	n/a
Practical/Skills Evaluation	Deploy a database-backed webapp to a hosted environment (on the web/cloud).	4,6	20.00	n/a
Practical/Skills Evaluation	Built a full-stack web-hosted application, integrating client-side features with database-driven back-end technology.	5	20.00	n/a

No End of Module Formal Examination

SETU Carlow Campus reserves the right to alter the nature and timings of assessment

Module Workload

Workload: Full Time		
Workload Type	*Frequency*	*Average Weekly Learner Workload*
Laboratory	15 Weeks per Stage	7.00
Estimated Learner Hours	15 Weeks per Stage	9.67
	Total Hours	250.00

Module Delivered In

Programme Code	Programme	Semester	Delivery
CW_KCCGD_B	[Bachelor of Science (Honours) in Computer Games Development](#)	5	Mandatory

Discussion Note:	No change to workload per NW's email of 21 April.