

<b>Module Title:</b>	Web Development and Databases
<b>Language of Instruction:</b>	English

<b>Credits:</b>	10
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<b>NFQ Level:</b>	7
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<b>Module Delivered In</b>	<a href="#">1 programme(s)</a>
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<b>Teaching &amp; Learning Strategies:</b>	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.
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<b>Module Aim:</b>	To introduce the student to web programming techniques and practice, with an emphasis on web framework and database technologies.
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**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**

<b>Workload: Full Time</b>		
<i>Workload Type</i>	<i>Frequency</i>	<i>Average Weekly Learner Workload</i>
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	<a href="#">Bachelor of Science (Honours) in Computer Games Development</a>	5	Mandatory

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