

<b>Module Title:</b>	Cloud Development
<b>Language of Instruction:</b>	English
<b>Credits:</b>	5
<b>NFQ Level:</b>	7
<b>Module Delivered In</b>	<a href="#">3 programme(s)</a>
<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.
<b>Module Aim:</b>	To provide students with practical experience of developing applications for a managed networked environment, with a particular emphasis on cloud development technologies targeted towards the software engineer.
<b>Learning Outcomes</b>	
<i>On successful completion of this module the learner should be able to:</i>	
LO1	Design, build, and deploy cloud-based server-side application programs.
LO2	Integrate client-side web technologies with server-side cloud technologies.
LO3	Integrate applications with server-side, cloud-hosted database systems.
<b>Pre-requisite learning</b>	
<b>Module Recommendations</b>	
<i>This is prior learning (or a practical skill) that is recommended before enrolment in this module.</i>	
No recommendations listed	
<b>Incompatible Modules</b>	
<i>These are modules which have learning outcomes that are too similar to the learning outcomes of this module.</i>	
No incompatible modules listed	
<b>Co-requisite Modules</b>	
No Co-requisite modules listed	
<b>Requirements</b>	
<i>This is prior learning (or a practical skill) that is mandatory before enrolment in this module is allowed.</i>	
No requirements listed	

**Module Content & Assessment**

**Indicative Content**

**Content**

• The Model-View-Controller Pattern. • The Web Development Infrastructure – client, server, content, protocol, client-side programming, server-side programming and database systems. • Static web sites with HTML. • Server-side programming technologies. • Client-side programming technologies. • Web Frameworks, Templating Systems, and Databases. • Dynamic web applications with server-side technologies. • Dynamic web applications with database integration. • Cloud development and deployment technologies

**Assessment Breakdown**

**%**

Project

100.00%

No Continuous Assessment

**Project**

<i>Assessment Type</i>	<i>Assessment Description</i>	<i>Outcome addressed</i>	<i>% of total</i>	<i>Assessment Date</i>
Project	Build a locally-hosted webapp.	1	20.00	n/a
Project	Port and deploy locally-hosted webapp to a cloud development environment.	1	20.00	n/a
Project	Extend the locally-hosted webapp to exploit database technology.	1,3	20.00	n/a
Project	Deploy locally-hosted database-enabled webapp to a cloud development environment.	1,3	20.00	n/a
Project	Built a full-stack cloud-hosted application, integrating client-side features with database-driven back-end technology.	1,2,3	20.00	n/a

No Practical

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	12 Weeks per Stage	4.00
Estimated Learner Hours	15 Weeks per Stage	5.13
Total Hours		125.00

**Module Delivered In**

Programme Code	Programme	Semester	Delivery
CW_KWCCD_B	<a href="#">Bachelor of Science (Honours) in Creative Computing and Digital Innovation</a>	5	Mandatory
CW_KCSOF_B	<a href="#">Bachelor of Science (Honours) in Software Development</a>	5	Mandatory
CW_KCSOF_D	<a href="#">Bachelor of Science in Software Development</a>	5	Mandatory