

Module Title:	Cloud Development
Language of Instruction:	English
Credits:	5
NFQ Level:	7
Module Delivered In	3 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 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.
Learning Outcomes	
<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.
Pre-requisite learning	
Module Recommendations	
<i>This is prior learning (or a practical skill) that is recommended before enrolment in this module.</i>	
No recommendations listed	
Incompatible Modules	
<i>These are modules which have learning outcomes that are too similar to the learning outcomes of this module.</i>	
No incompatible modules listed	
Co-requisite Modules	
No Co-requisite modules listed	
Requirements	
<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

Assessment Type	Assessment Description	Outcome addressed	% of total	Assessment Date
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

Workload: Full Time		
<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	Bachelor of Science (Honours) in Creative Computing and Digital Innovation	5	Mandatory
CW_KCSOF_B	Bachelor of Science (Honours) in Software Development	5	Mandatory
CW_KCSOF_D	Bachelor of Science in Software Development	5	Mandatory