

<b>Module Title:</b>	Web and Cloud Development
<b>Language of Instruction:</b>	English
<b>Credits:</b>	10
<b>NFQ Level:</b>	7
<b>Module Delivered In</b>	No Programmes
<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 a theoretical grounding and practical experience of developing applications for a managed networked environment, with a particular emphasis on web development technologies.

Learning Outcomes	
<i>On successful completion of this module the learner should be able to:</i>	
LO1	Deploy client-side web applications.
LO2	Design and build web-based server-side application programs.
LO3	Integrate client-side web technologies with server-side web technologies.
LO4	Integrate web applications with server-side database systems.
LO5	Deploy and manage web applications in the cloud.

Pre-requisite learning	
<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

	%
Continuous Assessment	50.00%
End of Module Formal Examination	50.00%

### Continuous Assessment

Assessment Type	Assessment Description	Outcome addressed	% of total	Assessment Date
Other	Build a static web-site using HTML templating technologies. [LO1] Integrate JavaScript into a client-side web application. [LO1] Build a custom web framework-based server to host server-side applications. [LO2] Extend the custom web server to integrate with database technologies. [LO4] Deploy a web application to the cloud. [LO3, LO4, LO5]	1,2,3,4,5	50.00	n/a

No Project

No Practical

### End of Module Formal Examination

Assessment Type	Assessment Description	Outcome addressed	% of total	Assessment Date
Formal Exam	No Description	1,2,3,4,5	50.00	End-of-Semester

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	20 Weeks per Stage	4.00
Estimated Learner Hours	20 Weeks per Stage	4.00
Total Hours		160.00

