

Module Title Web Application Development	Reference CM3028 SCQF Level SCQF 9 SCQF Points 15 ECTS Points 7.5 Created March 2006 Approved May 2006 Amended April 2016 Version No. 5
Keywords Model 2 web applications, 3-tier client-server systems, databases, security	

This Version is No Longer Current

The latest version of this module is available [here](#)

Prerequisites for Module

Successful completion of CM2003 Dynamic Web Programming

Corequisite Modules

None.

Precluded Modules

None.

Aims of Module

To provide students with experience in developing web applications utilizing serverside and cloud based technologies.

Learning Outcomes for Module

Mode of Delivery

Key concepts are introduced and illustrated through the medium of lectures. However the main emphasis of the course is focused on laboratory sessions where students will collaborate in groups to develop a non-trivial web application. The groups will generate their own objectives and work plans in accordance with general web development principles communicated in lectures.

Assessment Plan

	Learning Outcomes Assessed
Component 1	1,2
Component 2	3,4

On completion of this module, students are expected to be able to:

1. Discuss and evaluate web application server technologies, architecture and deployment strategies.
2. Understand the programming techniques used in the development of serverside web applications.
3. Combine clientside and serverside technologies to assemble a non-trivial web application .
4. Implement appropriate security policies in a web application.

Indicative Module Content

Serverside web application design, multi tier client?server systems, databases for web applications, session?handling, user?authentication and data security.

Indicative Student Workload

<i>Contact Hours</i>	Full Time
Laboratories	36
Lectures	12

Directed Study

Directed Reading	24
------------------	----

Component 2 - This is a Coursework worth 50% of the total module assessment.

Component 1 - This is a closed book examination worth 50% of the total module assessment.

Indicative Bibliography

1. AZAT, M. 2014 Practical Node.js : building real-world scalable web apps. Apress
2. POWERS, D, 2014. PHP solutions : dynamic web design made easy Third edition. Apress
3. SEVILLEJA, C, Lloyd, H. 2015, Mean Machine: The beginners guide to the Javascript stack. Leanpub
4. Scotch.io Modern web development tutorials. <https://scotch.io/tutorials>

