

MODULE DESCRIPTOR

Module Title

Enterprise Web Systems

Reference	CM4025	Version	8
Created	May 2023	SCQF Level	SCQF 10
Approved	September 2012	SCQF Points	15
Amended	June 2023	ECTS Points	7.5

Aims of Module

To provide the student with an understanding of the main principles involved in the development of web-based enterprise systems and with an appreciation of the key issues involved. To develop the student's skill in the practical development of web systems with a focus on modelling and interacting with data.

Learning Outcomes for Module

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

- 1 Appraise the advantages and disadvantages of available web architectures and describe the key considerations for developing enterprise applications.
- 2 Demonstrate an understanding of key security issues on the web and how they affect enterprise systems.
- 3 Appraise alternative approaches to modelling and interacting with data, and demonstrate their use in web systems.
- 4 Develop client-server systems and present these as client applications or web services.

Indicative Module Content

Multi-tier client/server architectures, application performance and scalability, data integrity and security, legacy systems.

Module Delivery

The course is lecture and laboratory based. The lectures introduce key concepts to give students an awareness of the relevant issues in the development of enterprise-scale web systems. The laboratories will allow the student to progress through a sequence of exercises to develop practical skills in enterprise web development. The understanding of the student is further enhanced through directed reading.

Indicative Student Workload

	Full Time	Part Time
Contact Hours	30	N/A
Non-Contact Hours	120	N/A
Placement/Work-Based Learning Experience [Notional] Hours	N/A	N/A
TOTAL	150	N/A
<i>Actual Placement hours for professional, statutory or regulatory body</i>		

ASSESSMENT PLAN

If a major/minor model is used and box is ticked, % weightings below are indicative only.

Component 1

Type: Examination Weighting: 50% Outcomes Assessed: 1, 2, 3
 Description: A closed book examination.

Component 2

Type: Coursework Weighting: 50% Outcomes Assessed: 4
 Description: A practical coursework involving the implementation of a complete web system (front and back-end).

MODULE PERFORMANCE DESCRIPTOR**Explanatory Text**

The calculation of the overall grade for this module is based on equal weighting of C1 and C2. An overall minimum grade D is required to pass the module.

		Coursework:						
		A	B	C	D	E	F	NS
Examination:	A	A	A	B	B	C	E	
	B	A	B	B	C	C	E	
	C	B	B	C	C	D	E	
	D	B	C	C	D	D	E	
	E	C	C	D	D	E	E	
	F	E	E	E	E	E	F	
	NS	Non-submission of work by published deadline or non-attendance for examination						

Module Requirements

Prerequisites for Module	CM2104 Dynamic Web Development or equivalent.
Corequisites for module	None.
Precluded Modules	None.

INDICATIVE BIBLIOGRAPHY

- 1 NIXON, R., 2018. Learning PHP, MySQL & JavaScript: with jQuery, CSS & HTML5. O'Reilly (WILEY UK); 5th ed. edition ISBN : 978-1491978917
- 2 bin Uzayr, S., Cloud, N. and Ambler, T., 2019. JavaScript Frameworks for Modern Web Development. Apress.
- 3 Zammetti, F., 2020. Modern Full-Stack Development: Using TypeScript, React, Node. js, Webpack, and Docker. Apress.
- 4 TAYLOR, A, ALEXANDER, D., FINCH, A., & SUTTON, D., 2020. Information Security Management Principles. 3rd Ed. BCS ISBN: 978-1780175188