



Title:	Advanced Web Publishing Apps APPROVED
Long Title:	Advanced Web Publishing Apps
Module Code:	COMP8003
Duration:	1 Semester
Credits:	5
NFQ Level:	Advanced
Field of Study:	Computer Science
Valid From:	Semester 1 - 2017/18 (September 2017)
Module Delivered in	2 programme(s)
Module Coordinator:	Sean McSweeney
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Module Description:	A Content Management Systems (CMS) is an application that supports the creation, storage, presentation and modification of digital content. In this module the student will learn how to customise and configure a Content Management System (CMS). Using the CMS the student will develop functionality as part of a bespoke web publishing application and develop an appropriate theme for displaying the content associated with that application.
Learning Outcomes	
<i>On successful completion of this module the learner will be able to:</i>	
LO1	Identify the features of a CMS that would fulfill the requirements of an advanced web publishing application.
LO2	Create a theme for a popular open source or commercial web publishing application.
LO3	Develop a plug-in to incorporate new functionality into a popular open source or commercial web publishing application.
LO4	Integrate data feeds from several sources into a web publishing application.
LO5	Assess the suitability of a web publishing application's presentation of data to application users.
Pre-requisite learning	
Module Recommendations	
<i>This is prior learning (or a practical skill) that is strongly recommended before enrolment in this module. You may enrol in this module if you have not acquired the recommended learning but you will have considerable difficulty in passing (i.e. achieving the learning outcomes of) the module. While the prior learning is expressed as named CIT module(s) it also allows for learning (in another module or modules) which is equivalent to the learning specified in the named module(s).</i>	
Student should have good knowledge of web scripting languages such as JavaScript and PHP. They should also be familiar with HTML/XHTML and CSS. (Modules: Web Development Fundamentals, Interactive Web Development, Sever-side Web Development)	
Incompatible Modules	
<i>These are modules which have learning outcomes that are too similar to the learning outcomes of this module. You may not earn additional credit for the same learning and therefore you may not enrol in this module if you have successfully completed any modules in the incompatible list.</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. You may not enrol on this module if you have not acquired the learning specified in this section.</i>	
No requirements listed	



Module Content & Assessment

Indicative Content

Content Management Systems

Application Architectures, Application APIs, Coding Standards, Database Abstraction Layers, configuration, callback mapping, dispatching, hooks, content types, views. Features of CMS - user role, content types, logs, etc.

Theming

Creating template pages (single pages, index, headers, footers, sidebars, etc), layouts, integrating CSS, creating links, filters, Theme administration, Theme engines, Twig (PHP-based compiled templating language).

Modular Functionality

Plugins, Filters, Events, hooks (action hooks, filter hooks), database integration, installation and activation, widgets, custom blocks.

Data feeds

RSS. ATOM, Syndication, Parsing feeds, mashups.

Case Study

Developing a theme/module from scratch.

Assessment Breakdown

	%
Course Work	100.00%

Course Work

Assessment Type	Assessment Description	Outcome addressed	% of total	Assessment Date
Short Answer Questions	This SAQ will assess the theoretical content of the module.	1,2,5	20.0	Week 4
Project	An example assessment would be design and develop a reusable theme based on front end requirements for a specified web publishing application, that suitably presents data for users of that application.	1,2,4,5	40.0	Week 7
Project	An example assessment would be to design and develop a piece of modular functionality (module, plug-in, package) for a CMS that integrates data from multiple sources.	1,3,4,5	40.0	Week 13

No End of Module Formal Examination

Reassessment Requirement

Coursework Only

This module is reassessed solely on the basis of re-submitted coursework. There is no repeat written examination.

The institute reserves the right to alter the nature and timings of assessment

Module Workload

Workload: Full Time				
<i>Workload Type</i>	<i>Workload Description</i>	<i>Hours</i>	<i>Frequency</i>	<i>Average Weekly Learner Workload</i>
Lecture	Lecture underpinning learning outcomes.	2.0	Every Week	2.00
Lecturer-Supervised Learning (Contact)	Lab supporting content delivered.	2.0	Every Week	2.00
Independent & Directed Learning (Non-contact)	Independent & directed learning.	3.0	Every Week	3.00
Total Hours				7.00
Total Weekly Learner Workload				7.00
Total Weekly Contact Hours				4.00

Workload: Part Time				
<i>Workload Type</i>	<i>Workload Description</i>	<i>Hours</i>	<i>Frequency</i>	<i>Average Weekly Learner Workload</i>
Lecture	Lecture underpinning learning outcomes.	2.0	Every Week	2.00
Lab	Lab supporting content delivered.	2.0	Every Week	2.00
Independent & Directed Learning (Non-contact)	Independent & directed learning.	3.0	Every Week	3.00
Total Hours				7.00
Total Weekly Learner Workload				7.00
Total Weekly Contact Hours				4.00

Module Resources

Recommended Book Resources

- Neeraj Kumar et al. 2016, *Drupal 8 Development: Beginner's Guide*, 2 Ed., Packt Publishing [ISBN: 9781785284885]
- Chaz Chumley 2016, *Drupal 8 Theming with Twig*, Packt Publishing [ISBN: 9781782168737]

Supplementary Book Resources

- John K VanDyk 2008, *Pro Drupal Development*, 2 Ed., Apress [ISBN: 9781430209898]
- Thord Hedengren 2014, *Smashing Wordpress: Beyond the Blog*, 4 Ed., John Wiley & Sons [ISBN: 9781118600757]
- Hal Stern, David Damstra, Brad Williams 2010, *Professional WordPress: Design and Development*, 1 Ed., Wrox [ISBN: 9780470560549]

This module does not have any article/paper resources

Other Resources

- Web Site: *Wordpress*
<http://www.wordpress.org>
- Web Site: *Drupal*
<http://www.drupal.org>

Module Delivered in

Programme Code	Programme	Semester	Delivery
CR_KSDEV_8	<u>Bachelor of Science (Honours) in Software Development</u>	8	Elective
CR_KDNET_8	<u>Bachelor of Science (Honours) in Computer Systems</u>	8	Elective