

Module Details

Short Title:	Enterprise Applications Development 1 CONDITIONAL APPROVAL		
Full Title:	Enterprise Applications Development 1		
Language of Instruction:	English		
Module Code:	OOSW H4001	Duration:	1 Semester
Credits:	5		
NFQ Level:	8		
Field of Study:	Computer Science		
Valid From:	Semester 1 - 2015/16 (September 2015)		
Module Delivered In	8 programme(s)		
Module Coordinator:	FINBARR FEENEY		
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Module Description:	To be able to design and develop enterprise level applications for the Microsoft .Net platform using C#, with particular emphasis on web and cloud applications.		

Learning Outcomes

On successful completion of this module the learner will be able to:

LO1	Evaluate the Microsoft .NET platform as an enterprise software development platform
LO2	Design and develop applications for the .NET platform using C#
LO3	Design and develop web applications for the .NET platform using ASP.Net MVC
LO4	Describe the main features of the Azure cloud platform, and develop cloud services for Azure using web roles

Pre-requisite learning

Co-requisite Modules

No Co-requisite modules listed

Module Content & Assessment

Indicative Content	%
The .NET Platform The .NET platform, CLR, IL, CTS, .NET languages, .NET framework, a comparison of the .NET and Java enterprise software development platforms	10.00%
C# Software development using C#; a comparison with Java, OO programming in C#; new programming language constructs in .Net e.g. looping constructs, entry points, properties, indexers, delegates, lambda expressions, attributes; the .Net Framework APIs, threading, generics, LINQ, an overview of the .Net Entity Framework, design patterns, coding style, code metrics, code analysis, unit testing	40.00%
ASP.Net MVC Design and development of web applications using ASP.Net and ASP.Net MVC. Models, Views and Controllers. Routing, view engines and markup, validation; identity; security	35.00%
Azure The Azure PaaS cloud, the service model, developing cloud services, web and worker roles, service definition and configuration	15.00%

Assessment Breakdown	%
Course Work	100.00%

Course Work				
Assessment Type	Assessment Description	Outcome addressed	% of total	Assessment Date
Practical/Skills Evaluation	CA1 - in-lab, individual: Typical task: Design and implement a console application for the .Net platform using C# which uses many of the OO features of C# e.g. properties, indexers, events & delegates, generics, LINQ etc. Assessed in terms of delivered functionality, code quality and design.	1,2	45.00	Week 6
Practical/Skills Evaluation	CA2 – in-lab, individual: Typical task: Design and implement a web application for the .Net framework. Assessed in terms of delivered functionality, code quality and design.	1,2,3	30.00	Week 10
Practical/Skills Evaluation	CA3 – in-lab, individual: Typical task: Design and implement a cloud service for Azure using a web role. Deploy using multiple instances on the cloud. Assessed in terms of delivered functionality, code quality and design.	1,4	25.00	Sem 1 End

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.

IT Tallaght 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	No Description	2.00	Every Week	2.00
Lab	No Description	1.00	Every Week	1.00
Independent Learning	No Description	3.00	Every Week	3.00
Total Weekly Learner Workload				6.00
Total Weekly Contact Hours				3.00

Workload: Part Time				
<i>WorkLoad Type</i>	<i>WorkLoad Description</i>	<i>Hours</i>	<i>Frequency</i>	<i>Average Weekly Learner Workload</i>
Lecture	No Description	2.00	Every Week	2.00
Lab	No Description	1.00	Every Week	1.00
Independent Learning	No Description	3.00	Every Week	3.00
Total Weekly Learner Workload				6.00
Total Weekly Contact Hours				3.00

Module Resources

Recommended Book Resources

Christian Nagel et al. 2014, *Professional C# 5.0 and .NET 4.5.1*, Wrox [ISBN: 1118833031]

Geoff Webber-Cross 2014, *Learning Windows Azure*, Packt Publishing [ISBN: 1782173374]

This module does not have any article/paper resources

This module does not have any other resources

Module Delivered In

Programme Code	Programme Title
TA_KACOM_B	Bachelor of Science (Honours) in Computing (Conditional Approval)
TA_KCOMP_B (1 year add on)	Bachelor of Science (Honours) in Computing (Conditional Approval)
TA_KACTM_B	Bachelor of Science (Honours) in Computing with Information Technology Management (Reviewed)
TA_KACOI_B	Bachelor of Science (Honours) in Computing with Language (French/ German/ Spanish) (Reviewed)
TA_KACOS_B	Bachelor of Science (Honours) in Computing with Software Development (Reviewed)
TA_KACOD_B	Bachelor of Science (Hons) in Computing with Data Analytics (Reviewed)
TA_KL8MODS_HD	Copy Of Bachelor of Science (Honours) in Computing (International) (Draft)
	Level 8 Modules in Computing available for HDip in Sci In Computing (Draft)