SWRE C8015: Software Testing

Module Details					
Module Code:	SWRE C8015				
Full Title:	Software Testing APPROVED				
Valid From::	Semester 1 - 2019/20 (June 2019)				
Language of Instruction:	English				
Duration:	1 Semester				
Credits::	5				
Module Owner::	Gerry Coleman				
Departments:	Unknown				
Module Description:	Students completing this module will be able to apply and critically evaluate best-practice software testing and associated measurement techniques in the context of both document-driven and agile development processes. Students will learn key business skills such as working both on their own initiative and within groups and, as testers, the ability to communicate testing information to a wide audience, including team members, managers, end-users and sponsors/customers.				

Module Learning Outcome				
On successful completion of this module the learner will be able to:				
#	Module Learning Outcome Description			
MLO1	Critique and evaluate the role of quality assurance, with particular emphasis on software testing, in the Software Lifecycle.			
MLO2	Explain the difference between software testing and debugging			
MLO3	Develop and implement a test plan for a variety of situations.			
MLO4	Apply a variety of testing techniques including dynamic and static testing methods.			
MLO5	Create and deploy context-appropriate test management approaches.			
MLO6	Assess a range of testing tools to support the testing process.			

Pre-requisite learning

Module Recommendations 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 DkIT module(s) it also allows for learning (in another module or modules) which is equivalent to the learning specified in the named module(s).

No recommendations listed

Module Indicative Content					
Testing Fundamentals What is testing?; Why is testing necessary?; Fundamental test process					
Testing throughout the software life cycle Software development models; Test levels; Test types					
Static techniques Static techniques and the test process; Reviews and inspections					
Test design techniques Specification-based/black-box techniques; Structure-based/white-box techniques; Experienced-based techniques					
Test Management Test organisation; Test planning and estimation; Test monitoring and control; Risk-based testing					
Tool support for testing Types of test tools; Effective use of tools; Introducing a test tool into an organisation					
Module Assessment					
Assessment Breakdown	%				
Course Work	40.00%				
Final Examination	60.00%				
Module Special Regulation					

Assessments

Full Time On Campus									
Course Work									
Assessment Type	Multiple Choice Questions	% of Total Mark	20						
Marks Out Of	0	Pass Mark	0						
Timing	S1 Week 8	Learning Outcome	1,2,4						
Duration in minutes	60								
Assessment Description A class test using MCQs in equivalent format and standard to the ISTQB examination.									
Project									
Assessment Type	Group Project	% of Total Mark	20						
Marks Out Of	0	Pass Mark	0						
Timing	n/a	Learning Outcome	3,5,6						
Duration in minutes	0								
Assessment Description Each student will undertake a collaborative te	am-based project that involves creating a test pla	an, writing tests, executing tests and reporting. Ar	appropriate testing tool will be used.						
No Practical									
Final Examination									
Assessment Type	Formal Exam	% of Total Mark	60						
Marks Out Of	0	Pass Mark	0						
Timing	End-of-Semester	Learning Outcome	1,2,4,6						
Duration in minutes	120								
Assessment Description End-of-Semester Final Examination (Closed	book)								
Part Time On Campus									
Part Time On Campus									
Part Time On Campus Course Work Assessment Type	Multiple Choice Questions	% of Total Mark	20						
Part Time On Campus Course Work Assessment Type Marks Out Of	Multiple Choice Questions	% of Total Mark Pass Mark	20 0						
Part Time On Campus Course Work Assessment Type Marks Out Of Timing	Multiple Choice Questions 0 S1 Week 8	% of Total Mark Pass Mark Learning Outcome	20 0 1,2,4						
Part Time On Campus Course Work Assessment Type Marks Out Of Timing Duration in minutes	Multiple Choice Questions 0 S1 Week 8 60	% of Total Mark Pass Mark Learning Outcome	20 0 1,2,4						
Part Time On Campus Course Work Assessment Type Marks Out Of Timing Duration in minutes Assessment Description	Multiple Choice Questions 0 S1 Week 8 60	% of Total Mark Pass Mark Learning Outcome	20 0 1,2,4						
Part Time On Campus Course Work Assessment Type Marks Out Of Timing Duration in minutes Assessment Description Assessment Description Assessment format	Multiple Choice Questions 0 S1 Week 8 60 and standard to the ISTQB examination.	% of Total Mark Pass Mark Learning Outcome	20 0 1,2,4						
Part Time On Campus Course Work Assessment Type Marks Out Of Timing Duration in minutes Assessment Description A class test using MCQs in equivalent format Project	Multiple Choice Questions 0 S1 Week 8 60 and standard to the ISTQB examination.	% of Total Mark Pass Mark Learning Outcome	20 0 1,2,4						
Part Time On Campus Course Work Assessment Type Marks Out Of Timing Duration in minutes Assessment Description A class test using MCQs in equivalent format Project Assessment Type United Statement	Multiple Choice Questions 0 S1 Week 8 60 and standard to the ISTQB examination.	% of Total Mark Pass Mark Learning Outcome	20 0 1,2,4 20						
Part Time On Campus Course Work Assessment Type Marks Out Of Timing Duration in minutes Assessment Description A class test using MCQs in equivalent format Project Assessment Type Marks Out Of Timing	Multiple Choice Questions 0 S1 Week 8 60 and standard to the ISTQB examination. Group Project 0 04 March 40	% of Total Mark Pass Mark Learning Outcome % of Total Mark Pass Mark	20 0 1,2,4 20 0 25 0						
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Part Time On Campus Course Work Assessment Type Marks Out Of Timing Duration in minutes Assessment Description A class test using MCQs in equivalent format Project Assessment Type Marks Out Of Timing Duration in minutes Assessment Description Each student will undertake a collaborative te No Practical Final Examination Assessment Type Marks Out Of Timing Duration in minutes Assessment Type Marks Out Of Timing Duration in minutes Assessment Description End-of-Semester Final Examination (Closed Reassessment Requirement	Multiple Choice Questions 0 S1 Week 8 60 and standard to the ISTQB examination. Group Project 0 S1 Week 10 0 sam-based project that involves creating a test pla mem-based pro	% of Total Mark Pass Mark Learning Outcome % of Total Mark Pass Mark Learning Outcome an, writing tests, executing tests and reporting. Ar % of Total Mark Pass Mark Learning Outcome	20 0 1,2,4 20 0 3,5,6 appropriate testing tool will be used. 60 0 1,2,4,6						

Module Workload									
Workload: Full Time On Campus									
Workload Type	Contact Type	Workload Description	Frequency	Average Weekly Learner Workload	Hours				
Lecture	Contact		Every Week	2.00	2				
Practical	Contact		Every Week	2.00	2				
Directed Reading	Non Contact		Every Week	2.00	2				
Independent Study	Non Contact	No Description	Every Week	2.00	2				
				Total Weekly Learner Workload	8.00				
_	4.00								
Workload: Part Time On	n Campus								
Workload Type	Contact Type	Workload Description	Frequency	Average Weekly Learner Workload	Hours				
Lecture	Contact	No Description	Every Week	2.00	2				
Practical	Contact	No Description	Every Week	2.00	2				
Directed Reading	Non Contact	No Description	Every Week	2.00	2				
Independent Study	Non Contact	No Description	Every Week	2.00	2				
				Total Weekly Learner Workload	8.00				
				Total Weekly Contact Hours	4.00				

Module Resources

Recommended Book Resources

Brian Hambling, Angelina Samaroo and Geoff Thompson. (2015), Software Testing: An ISTQB-BCS Certified Tester Foundation Guide, 3rd. BCS, [ISBN: 1780172990].

Supplementary Book Resources

Rex Black, Gerry Coleman, Marie Walsh et al.. (2017), Agile Testing Foundations: An ISTQB Foundation Level Agile Tester guide, 1. BCS, [ISBN: 1780173369].

This module does not have any article/paper resources

Other Resources

Website, Sticky Minds, http://www.stickyminds.com/

Website, Software QA Test, http://www.softwareqatest.com/