

SACS Assessment - Fogelman College of Business & Economics

Degree: BIT Software Testing Graduate Certificate (ST)

Program Description	Software testing is a critical discipline as organizations increasingly rely on information systems that are becoming increasingly more complex. This certificate prepares students to both manage and participate in testing at all stages of the software development process. The topics and techniques are applicable to testing all types of software.
Why Created, Who Served	The Greater Memphis Tennessee area has several large corporations and non-profit organizations that are at the leading edge of their fields. As such, they tend to develop much of their own software. Testing this software to assure its quality and that it meets performance and security specifications is essential. So, we created this Software Testing Graduate Certificate program to make our graduates more attractive to local (as well as national) industry, while at the same time supporting our local corporate and non-profit entities.
Faculty Leaders	Mark Gillenson, Sandra Richardson

		Fair	Good	Exemplary	Measures	
		Did Not Meet Expectations, Limited Accomplishments	Met Expectations, Some Problems, Needs Improvement	Met Expectations, Considerable Expertise Shown With Project	Direct or Indirect Measurements and/or Measurement Links	
	Score:	1	2	3		
Learning Outcome #1	A graduate of the Software Testing Graduate Certificate program will be able to create test cases, using a variety of methods, that can test any level of code.	Created test case sets having faults that render them subpar.	Able to create a useable set of test cases with some methods.	Able to create a useable set of test cases with all methods.	Exams, projects, homeworks, hands-on assignments	MIS-6681, MIS-6682
Learning Outcome #2	A graduate of the Software Testing Graduate Certificate program will be able to conduct reviews of all software development artifacts, from requirements through code, in inspections, reviews, and walkthroughs	Unable to successfully conduct reviews and take on roles in reviews.	Able to conduct reviews at some levels and take on some roles in all review functions.	Able to conduct reviews at all levels and take on all roles in all review functions.	Exams, projects, homeworks	MIS-6681, MIS-6682

		Did Not Meet Expectations, Limited Accomplishments	Met Expectations, Some Problems, Needs Improvement	Met Expectations, Considerable Expertise Shown With Project	Direct or Indirect Measurements and/or Measurement Links	
	Score:	1	2	3		
Learning Outcome #3	A graduate of the Software Testing Graduate Certificate program will be able to define the functions of a software tester in either the traditional software development lifecycle (SDLC) environment or in the agile software development environment.	Unable to correctly explain the functions, advantages, and disadvantages of a software testing working in each environment.	Define some of the functions of a software tester in both the SDLC and agile development environments and correctly explain some of the advantages and disadvantages of working in each environment.	Define all of the functions of a software tester in both the SDLC and agile development environments and correctly explain the advantages and disadvantages of working in each environment.	Exams, projects, homeworks	MIS-6681, MIS-6682
Learning Outcome #4	A graduate of the Software Testing Graduate Certificate program will be able to employ automation techniques to test software.	Neither able to choose appropriate automation tools nor develop test scripts to successfully test software in an automated fashion.	Either choose appropriate automation tools or develop test scripts to successfully test software in an automated fashion, but not both.	Choose appropriate automation tools and develop test scripts to successfully test software in an automated fashion.	Exams, projects, homeworks	MIS-6681, MIS-6682
Learning Outcome #5	A graduate of the Software Testing Graduate Certificate program will be able to create regression test suites and to update them as necessary over time.	Unable to create and update regression test suites adequately.	Create and update regression test suites that do a fair job of testing software.	Create and update regression test suites to successfully test software.	Exams, projects, homeworks	MIS-6681, MIS-6682