



COURSE UNIT (MODULE) DESCRIPTION

Course unit (module) title	Code
Software Testing	

Academic staff	Core academic unit(s)
Coordinating: dr. Vaidas Giedrimas Other:	VU Siauliai Academy

Study cycle	Type of the course unit
First	Mandatory

Mode of delivery	Semester or period when it is delivered	Language of instruction
Auditorium	7th semester	Lithuanian/ English

Requisites	
Prerequisites:	Co-requisites (if relevant):

Number of ECTS credits allocated	Student's workload (total)	Contact hours	Individual work
5	134	56	78

Purpose of the course unit		
<p>To provide knowledge of the theory of software testing and its application; to get acquainted with the methods and tools used in software testing, to understand the place of software testing in overall process of software development.</p> <p>Cultivated competences:</p> <ul style="list-style-type: none"> • BK1 Application of knowledge • BK2 Social skills • DK2 Abilities to conduct program system research • DK3 PS Special Abilities 		
Learning outcomes of the course unit	Teaching and learning methods	Assessment methods
Will be able to explain the place of application system testing in the life cycle of application system development, will understand testing as a process	Interactive lecture, laboratory work, case analysis, self-study of literature	Exam, defense of laboratory work.
Will learn the principles, methods and tools of application system testing.	Interactive lecture, laboratory work, case analysis, self-study of literature	
Will be able to create test plans, test cases, defect descriptions and other testing documentation for application systems.	Lecture, case study, self-study of literature	

Content	Contact hours							Individual work: time and assignments	
	Lectures	Tutorials	Seminars	Workshops	Laboratory work	Internship	Contact hours, total	Individual work	Tasks for individual work
1. Main principles of software testing. Testing in the context of software lifecycle.	2						2	8	Defense of laboratory work, Presentation of group work results, Exam
2. Scope of testing. Testing levels, testing object, testing objectives.	2				4		6	8	
3. Testing methods.	4				4		8	8	
4. Test cases, their content and strategies. Test sets.	4				4		8	10	
5. Defect management.	2				4		6	9	
6. Automated Testing execution, CD/CI	2				4		6	8	
7. Measurements. metrics,	2				4		6	8	
8. Code review	4				4		8	10	
9. Testing staff and their management	2				4		6	8	
Total	24				32		56	77	

Assessment strategy	Weight %	Deadline	Assessment criteria
Defense of laboratory work	20%	Every second week	Laboratory works and their defense are evaluated.
Presentation of group work results	30%	3 times per semester	It is given in the first week of studies and is carried out in stages.
Exam	50%	During the exam session	The exam test in the Moodle environment consists of 20 open and closed type questions, each evaluated by half a point. The exam evaluation is equal to the sum of the collected points.

Author (-s)	Publishing year	Title	Issue of a periodical or volume of a publication	Publishing house or web link
Required reading				
Hambling B. et al.	2010	Software Testing An ISTQB–ISEB Foundation Guide, Second Edition		British Informatics Society
Burnstein I	2003	Modern Software Engineering		Springer
Recommended reading				
Craig RD, Jaskiel SP	2002	Systematic Software Testing		Artech House