COURSE UNIT (MODULE) DESCRIPTION

Course unit (module) title	Code
Software Development Process	

Academic staff	Core academic unit(s)
Coordinating: Mykolas Okulič-Kazarinas Other:	VU Šiauliai Academy

Study cycle	Type of the course unit
First cycle studies	Compulsory

Mode of delivery	Semester or period when it is delivered	Language of instruction
Distance, auditorium	5 semester	English

Requisites	
Prerequisites: UML, programming skills	**Co-requisites (if relevant):**

Number of ECTS credits allocated	Student's workload (total)	Contact hours	Individual work
5	134	48	86

Purpose of the course unit		
- BK1 Application of knowledge - BK2 Social skills - BK3 Personal abilities - DK1 Application of knowledge of application systems - DK2 Ability to research programme systems - DK3 PS Special abilities		
Learning outcomes of the course unit	**Teaching and learning methods**	**Assessment methods**
Knowledge of project management methods, their application in creating computer programs, programming methodologies, and life cycle stages of information systems.	Interactive lectures, Information search, Literature reading.	Examination
Will be able to select and use appropriate modern application development process models, methods and tools that ensure mature development and maintenance of application systems.	Interactive lectures, Information search, Literature reading, Independent work, Consultations, Group project.	Presentation and defence of group work results

Content	Contact hours							Individual work: time and assignments	
	Lectures	Tutorials	Seminars	Workshops	Laboratory work	Internship	Contact h total	Individual work	Tasks for individual work
1. Project management, waterfall method	4				4		**8**	**20**	Group work presentation. Exam.
2. Concept of application systems development process	2				2		**4**	**10**	Group work presentation. Exam.
3. Project management, Agile methodology, Scrum, Kanban	8				8		**16**	**24**	Group work presentation. Exam.
4. Programming methodologies	2				2		**4**	**10**	Group work presentation. Exam.
5. Life cycle model of software systems, its stages	8				8		**16**	**24**	Group work presentation. Exam.
Total	**24**				**24**		**48**	**86**	

Assessment strategy	Weight	Deadline	Assessment criteria
Defence of group work results	50 %	Three times during the semester	The assignment is presented in the first week of studies; students independently create working groups and choose the systems to be designed. It is carried out in stages by supplementing the project with chapters discussed in the lectures. The following aspects of work are evaluated: • Documentation consistency. • A description of each stage of the application systems life cycle is evaluated separately. • A critical approach in choosing project management and programming methodologies is valued.
Examination	50 %	During the exam session	The exam test in the Moodle environment consists of closed-type questions.

Author (-s)	Publishing year	Title	Issue of a periodical or volume of a publication	Publishing house or web link
Required reading				
Prudhomme, G.	2020	Systems, Software and Services Process Improvement		Arcler Press
OMG	2011	Business Process Model and Notation (BPMN) V. 2.0		http://www.omg.org/spec/BPMN/2.0/
Recommended reading				
ISO/IEC	2020	ISO/IEC 12207 Information technology – Software life cycle processes		https://standards.ieee.org/standard/12207-2-2020.html
ISO/IEC	2013	ISO/IEC 15504 Information technology – Software process assessment, Parts 1–9		https://www.iso.org/standard/61492.html