SUBJECT DESCRIPTION

Course unit title	Course unit code
Web development	

Lecturer(s)	Department where the course unit is delivered
Coordinator: Raivydas Šimėnas **Other:**	Institute of Mathematics Faculty of Mathematics and Informatics Naugarduko 24, LT-03225 Vilnius

Cycle	Level of course unit	Type of course unit
1st (Bachelor)		Optional

Mode of delivery	Semester or period when the course unit is delivered	Language of instruction
Face-to-face	5th semester	English

Prerequisites and corequisites	
Prerequisites: -	**Corequisites (if any):** -

Number of ECTS credits allocated	Student's workload	Number of contact work hours	Number of stand-alone working hours
5	130	48	82

Purpose of the course unit: program competences to be developed
In this course the students will be taught to program internet applications. During the first half of the semester we will study static page creation using the HTML5/CSS3 technologies. Later we will move on to creating dynamic pages using JavaScript. In addition, the students will learn to deploy their applications on different platforms, such as smartphones and tablets.

Learning outcomes of the course unit: students will be able to	Teaching and learning methods	Assessment methods
Will learn to create static pages using HTML5/CSS3 technolgies	Lectures, practice classes, individual program writing.	Tests Programming assignments Project
Will get experience in creating dynamic pages using JavaScript		
Will learnt create internet applications on various platforms.		

Course content: breakdown of the topics	Contact hours						Individual work: time and assignments	
	Lectures	Tutorials	Seminars	Practice	Laboratoriniai darbai	Contact hours	Individual work	Assignments
Introduction to HTML5	4			7		**11**	20	Programming assignments, project, tests
Introduction to CSS3	4			7		**11**	20	
Programming with JavaScript	4			7		**11**	20	
Web development for different platforms	4			7		**11**	22	
Exam						**4**		Exam
Total	**16**			**28**		**48**	**82**	

Assessment strategy	Weight (%)	Assessment time	Assessment criteria
Weekly tests	20	Course of semester	At the beginning of each class the students will have to briefly answer a question from the previous lecture. The instructor will assess how well the students have learned the previous class material.
Programming assignments	20	Course of semester	During each class the students will have to write mini programs from the class material. The instructor will assess how well the programs function.
Project	20	End of semester	The students will have to prepare a mid-sized web application. The instructor will assess the user interface and the effectiveness of the application.
Exam	40	End of semester	The students will have to take an exam which will consist of theoretical questions and practical programming problems.

Author	Year	Title	Publisher or URL
Required reading			
M. Mendez	2014	The Missing Link: An Introduction to Web Development and Programming	CreateSpace Independent Publishing Platform
Recommended reading			
J. Duckett	2014	Web Design with HTML, CSS, JavaScript and jQuery	Wiley