



## COURSE UNIT DESCRIPTION

Course unit title	Course unit code
Research Work	<b>PMTD7124</b>

Lecturer(s)	Department where the course unit is delivered
<b>Coordinator:</b> prof. dr. Romas Baronas <b>Other lecturers:</b> Master thesis' supervisors	Department of Software Engineering Faculty of Mathematics and Informatics Vilnius University

Cycle	Level of course unit	Type of the course unit
Second	1 of 3	Compulsory

Mode of delivery	Semester or period when the course unit is delivered	Language of instruction
Face-to-face	Autumn semester, first year of study	Lithuanian, English

Prerequisites and corequisites	
<b>Prerequisites:</b>	<b>Corequisites (if any): -</b>

Number of ECTS credits allocated	Student's workload	Contact hours	Individual work
6	160	16	144

Purpose of the course unit: programme competences to be developed		
To use the scientific literature, to formulate research goals and tasks, predict research results; consistently, providing the rationale, using correct language, neatly arrange research plan both in writing and orally, within the set requirements and in the accordance with the academic ethics.		
Learning outcomes of the course unit: students will be able to	Teaching and learning methods	Assessment methods
Develop specific research plan, choose research methods, techniques and literature sources.	Lectures, problem-oriented teaching, information retrieval, study of literature, tutorials, preparation and presentation of research plan	Research plan, its presentation and defence, answers to the questions verbally.
Raise and defend original ideas.		
Deliver a research plan consistently, providing the rationale underpinning these, using correct language, in written and verbal forms within the requirements and in accordance with the academic ethics.		

Course content: breakdown of the topics	Contact hours							Individual work: time and assignments	
	Lectures	Tutorials	Seminars	Practice	Laboratory work	Practical training	Contact hours	Individual work	Assignments
Research work in Software Engineering and justification of the research plan.	6	8					14	134	Prepare a preliminary research plan for the Master's thesis: specify the topic of the Master's thesis, provide its motivation and innovation, define goals, tasks and expected results.
Defence of the research plan							2	10	Preparation of the presentation and defence of the research plan for the Master's thesis.
<b>Total</b>	<b>6</b>	<b>8</b>					<b>16</b>	<b>144</b>	

Assessment strategy	Weight %	Deadline	Assessment criteria
The research plan and its defence.	100	The 16th week of the semester.	Defence is allowed when work is delivered on time and with a supervisor's permission. The research plan must meet the <i>Provisions for the Preparation of Software Engineering Master's Thesis</i> defined by Department of Software Engineering. The work is defended against the Commission of the Department of Software Engineering. Students and scientific-pedagogical staff participate in a defence. All participants are eligible to submit questions. The following aspects are assessed: the performed job, description, presentation, answers to the questions during the defence. The duration of the oral presentation is limited to 10 minutes. Department's Commission makes a decision by taking into account the opinions of the supervisor and reviewer. Defence can pass or fail. Failed work is not credited.

Author	Publishing year	Title	Number or volume	Publisher or URL
<b>Required reading</b>				
VU MIF Department of Software Engineering	2011	Provisions for the Preparation of Software Engineering Master's Thesis	.	<a href="http://www.mif.vu.lt/katedros/se/Studentams/Studentams.htm">http://www.mif.vu.lt/katedros/se/Studentams/Studentams.htm</a>
VU MIF Department of Software Engineering	2009	A Structure of the Software Engineering Master's Thesis		<a href="http://www.mif.vu.lt/katedros/se/Studentams/Studentams.htm">http://www.mif.vu.lt/katedros/se/Studentams/Studentams.htm</a>
Vilnius University	2005	Procedures for Preparation, Defence and Safekeeping of Graduation Theses		VU Information Bulletin, 2005-06-23, No. 11(340)
<b>Recommended reading</b>				
M. Berndtsson, J. Hansson, B. Olsson, B. Lundell	2008	Thesis Projects: A Guide for Students in Computer Science and Information Systems	2nd ed.	Cambridge [N.Y.] : Cambridge University Press,
Yvonne N. Bui	2013	How to Write a Master's Thesis	2nd ed.	SAGE Publications, London
Peter Stray Jorgensen, Lotte Rienecker	2003	How to write research work (in Lithuanian)		Aidai, Vilnius