

RTU Course "Master thesis"**33000 Faculty of Computer Science, Information Technology and Energy****General data**

Code	DSP720
Course title	Master thesis
Course status in the programme	Graduation Test
Responsible instructor	Agris Nikitenko
Academic staff	Jānis Grundspenķis
Volume of the course: parts and credits points	1 part, 30.0 credits
Language of instruction	LV, EN
Annotation	Master thesis is original research made by the author, where analytically, experimentally and practically existing scientific and applied methods, methodologies, development tools, computers systems and languages are assessed and integrated to solve tasks in information and communication technologies.
Goals and objectives of the course in terms of competences and skills	The aim of the master's thesis is to enable the student, based on his / her knowledge, to solve a research task, make informed decisions, logically and argumentatively present and present the results, demonstrating the ability to conduct research and discussion at a high professional level. Tasks of the master's thesis: - to provide knowledge and skills for independent selection and analysis of scientific sources; - to provide knowledge and skills to apply the methods and techniques described in the scientific or technical iteration at the master's level; - to provide knowledge and skills for defining a research problem at the master's level; - to provide knowledge and skills for argumentation of the adopted solution decisions at the master's level; - to provide skills for reasoned discussion about the chosen solutions and decisions made at the master's level.
Recommended literature	Obligātā/Obligatory: RTU noslēgumu darbu noformēšanas noteikumi. Rīga: RTU, 2001.-14 lpp. DITF noslēguma darbu izstrādes metodiskie norādījumi, DITF 2021. Papildu/Additional: Atbilstoši maģistra darba tematikai./According to the topic of the master's thesis.

Learning outcomes and assessment

Learning outcomes	Assessment methods
Is able to analyse, classify, compare scientific and technical ideas represented by appropriate papers according to the thesis goals.	Compliance with thesis assignment, positive assessments of the reviewer and scientific supervisor about literature scientific analysis and review.
Is able to apply methods, methodologies, technologies, robotic systems, development tools and control software for solving different tasks.	Positive assessments of the reviewer and scientific supervisor about the used methods, methodologies etc. for solving assigned tasks.
Is able to formulate problems existing in research area, is able to assume and justify the investigated problems and their solutions.	Clearly outlined and justified the investigated problems
Is able to integrate acquired knowledge and experience to solve the identified problems.	Positive assessments of the reviewer and scientific supervisor about the proposed solutions.
Is able to ground the proposed solutions with sound arguments.	Positive assessments of the reviewer and scientific supervisor about the analysed, proposed and possibly elaborated solutions for one or more identified problems.
Is able to present and discuss using sound arguments about the aspects of the thesis in front of public auditorium.	Thesis complies with formatting rules. Has presentation that describes the essence of the thesis and results. Accomplished public defence with sound arguments and answers on the given questions.

Evaluation criteria of study results

Criterion	%
Evaluation of the thesis, presentation and student's answers by the thesis defence committee	100
Total:	100

Study subject structure

Part	CP	Hours			Tests		
		Lectures	Practical	Lab.	Test	Exam	Work
1.	30.0	0.0	0.0	0.0			*