



## RTU Course "Computer System Design scientific seminar"

12307 Sistēmu teorijas un projektēšanas katedra

### General data

Code	DSP412
Course title	Computer System Design scientific seminar
Course status in the programme	Compulsory/Courses of Limited Choice
Course level	Post-graduate Studies
Course type	Academic
Field of study	Computer Science
Responsible instructor	Grundspenķis Jānis
Volume of the course: parts and credits points	1 part, 2.0 Credit Points, 3.0 ECTS credits
Language of instruction	LV, EN
Possibility of distance learning	Not planned
Abstract	Mastering elements of scientific work is one of the integral aspects of master studies. During the scientific seminar students acquire understanding about the essence of master thesis, potential topics of their research and basic principles of presentation of results. In the course students acquire basic principles of analysis and overview of scientific publications which are necessary for the development of master thesis. Students acquire also basics of master thesis structure. Seminars contain questions about scientific writing with the purpose to improve student skills to set forth content and results of their work and to make well-grounded conclusions. Students acquire knowledge about the structure and design of presentations and practically improve their presentation skills.
Goals and objectives of the course in terms of competences and skills	The goal of the course is to introduce students to scientific work which is necessary part of master thesis, and to help them choosing their research topic, as well as to improve their presentation skills.
Structure and tasks of independent studies	Students, after they have chosen topic of their master thesis, must independently search for literature, analyse related works and formulate the goal and tasks of their thesis. The above mentioned must be presented at the seminar. The work done during the semester must be represented in a written report.
Recommended literature	Maģistra darba vadītāja ieteiktās un patstāvīgi atrastās zinātniskās publikācijas par izvēlēto pētījumu tēmu
Course prerequisites	none

### Course outline

Theme	Hours
Planning of the content and development stages of master thesis, analysis of literature, usage of references	2
Basic principles of document writing and overview of scientific publications	2
The Structure and design of presentation	2
Kinds of scientific work and scientific writing	2
Conducted research on databases at the department	2
Conducted research on information system development at the department	2
Conducted research on introduction in practice and usage of information systems at the department	2
Conducted research on intelligent agents and knowledge management at the department	2
Conducted research on multiagent systems at the department	2
Conducted research on intelligent tutoring system development at the department	2
Conducted research on autonomous robotic system development at the department	2
Second study year student reports on their experience during master thesis development and already achieved results	6
First study year student presentations about chosen topics of their Master thesis	4

### Learning outcomes and assessment

Learning outcomes	Assessment methods
Students know how to plan the content and development stages of Master thesis	The planned content and development stages of master thesis must be represented in the written report
Students know how to summarize information found in literature sources, how to analyse them, and how to design bibliography	Bibliography on which references are given must be included in the written report
Students know directions of research carried out at the department and achieved results	Topic of master thesis must be approved by the supervisor and confirmed in the signed application
Students can develop the structure and design of their presentation	The essence of the chosen topic of master thesis, planned content and development stages must be presented at the seminar

**Study subject structure**

Part	CP	ECTS	Hours per Week			Tests		
			Lectures	Practical	Lab.	Test	Exam	Work
1.	2.0	3.0	0.0	1.0	1.0	*		