Study programme: Informatics (IM)
Level: Master
ECTS: 30
Requirements: A minimum of 90 credits accumulated, and all obligatory subjects in the program passed.
Learning objectives Introducing students to the principles, methods and processes of individual research work in the field of computer science and theoretical informatics, and teaching them how to successfully present their work in oral and written form.
Learning outcomes *Minimal:* Students should be able to demonstrate: a) minimal usage of principles and theoretical knowledge acquired during their studies; b) minimal improvement in knowledge; c) minimal knowledge of the current research trends regarding the master thesis subject matter. *Optimal:* Students should be able to demonstrate: a) adequate usage of principles and theoretical knowledge acquired during their studies; b) significant improvement in knowledge; c) deep understanding of the current research trends regarding the master thesis subject matter.
Syllabus Independent work of a candidate on a topic, which he/she chooses from the list of topics available. Master thesis is described through the final paper (project) on which the student works during some period which is defined in advance. During his/her work, the following should be taken into consideration: a) master thesis must contain a description of the final project development, achieved results as well as a description of the methods applied. b) paper must follow the scientific writing style. Literature must contain the reviewed papers and books and it cannot be based solely on the Internet references which are not reviewed. c) besides the main results regarding the subject matter of the thesis, the thesis must contain an overview of the basic results from the field to which master thesis belongs. This should enable students to show that they posses some knowledge of the current research trends in the field of the master thesis. Good overview usually contains analysis of scientific papers in English as well as explanation about the similarities/differences between those results and results presented in candidate's master thesis.
Teaching methodology a) Time frame for the completion of the project is defined in advance, but can be extended under some circumstances and followed by appropriate elaboration (by the defined procedure). b) With the approval of the advisor, the candidate can fill in the application form for the topic of the thesis and submit it to the Board of the Department of Mathematics and Informatics right after the activity plan is signed (see 2e and 2f). c) The progress on the project has to be officially conducted by the mentor. The mentor gives a critical note of the process, concerns, reasons for a potential delay, and provides advice. d) Mentor is available to the candidate for all other consultation and advice, which he/she gives without the previous insight into candidate's project or paper. e) The mentor is obliged to read the final project and the written thesis at least once and, based on this, to provide the candidate with opinion about it. f) The candidate is fully responsible for the final project and master thesis and it can be submitted without a prior approval of the mentor. g) No later than the expiration of deadline, a candidate submits the master thesis to the

appropriate Faculty/ University body (in accordance with the rules of the Faculty), after which it be will distributed to the commission members, at least 10 days prior to scheduling the defence.

h) Members of the Evaluation Board meet before scheduling a defence and they approve a master thesis, which is a prerequisite for scheduling the defence. The thesis can be defended in front of the audience. If the Evaluation Board finds that the thesis does not meet the minimum criteria for a passing grade, a candidate is informed before the defence that he/she failed final exam.

i) Student presents the main results of his/her work in front of the audience and the Evaluation Board, and provides answers to the questions which asked by the members of the Evaluation Board.

Grade (maximum number of points is 100)

Quality of the graduation thesis: 70 points.
Quality of written and oral presentation: 30 points.