

### Regulations for the preparation of a Master's thesis

A Master's thesis is an analytical work based on independent scientific or applied research. The thesis must demonstrate the student's ability to analyze the chosen topic, to evaluate the related works on that topic, to successfully carry out research in the chosen field, to describe the achieved research results, as well as to clearly and reasonably formulate conclusions of the completed research, according to the requirements approved by the University.

#### Semester I – Research Work (part I)

1. MIF Studies office publishes (using available MIF information channels) a list of the proposed Master's thesis topics by September 20th.
2. The **Master's students in Informatics** (further - Students) choose the topic they are interested in from the published list and contact the lecturer that proposed that topic to enquire whether he or she would agree to be the supervisor of a student Master's thesis. After such approval is received, the chosen Master's thesis topics must be registered (according to the established MIF Studies Office procedure) by the study administrator by October 15th.
3. Students may choose the topic of the Master's thesis not necessarily from the published list. Such requests are considered separately, and, in addition to the person who proposed the chosen topic (a MIF lecturer or an employee of another organization), it may be appointed a second supervisor from lecturers of the Institute of Computer Science.
4. Master's thesis topics and supervisors are assigned (by a student request) for Students who did not choose a thesis topic, did not get the supervisor's approval, and consequently did not register the topic by the deadline specified in Article 2. The assigned Master's thesis topic can be adjusted after discussion with the appointed supervisor.
5. Supervisors of the Master's theses are approved by October 20th, while the thesis reviewers are appointed during the first week of January.
6. During Semester I, Students (with the help of their supervisors) are required to **concretize the topic of their Master's thesis, justify its relevance and novelty, and formulate the aim, objectives and expected results of their work.**
7. The thesis topic can be changed by making it more specific (with supervisor approval) during later thesis preparation stages. However, if a student wants to significantly change the thesis topic and/or the supervisor, he/she must prepare and defend again all (previously defended) thesis parts. In such a case, the work reviewer might be changed as well.
8. Students must prepare a 3–5 pages long document, called Research Work (part I), that includes the **content specified in Article 6**. This document, approved by the supervisor (or both supervisors, see Article 3), is delivered to the MIF Studies office on the second week of January. The exact deadline is announced by the study administrator before the exam session.
9. Students who have not submitted their Research Work (part I) to the MIF Studies office by the given deadline, have an additional opportunity to submit and defend the work during the reexamination period at the beginning of the next semester. Otherwise, they get a failing grade for Research Work.

10. Reviewers inspect and evaluate the delivered Research Work (part I) before their defense. The reviewers are given at least 5 working days for their review and should submit this review no later than 24 hours before the defense time, at the same time forwarding their reviews to the Students.
11. Once approved by their supervisors and evaluated by the reviewers, Students defend their Research Work (part I) in front of the appointed Defense Committee of Institute of Computer Science. Student presentations should not exceed 10 minutes.
12. Students who (according to a Defense Committee decision) did not successfully defend their Research Work (part I) get a failing grade for Research Work.
13. The study administrator enters the final assessment (Pass or Fail) to the VU student system after the defense of Research Work (part I).
14. Students, who have failed the Research Work (part I), can improve on their grade at some later date, in accordance with the procedure and terms established by the Faculty of Mathematics and Informatics. Students have to deliver a new or improved Research Work (part I), approved by their supervisors and evaluated by their reviewers, and defend it in front of the Defense Committee of Institute of Computer Science.

### **Semester II – Research Work (part II)**

15. During Semester II, Students are required **to prepare a literature review (called Research Works (part II)) directly related to their Master's thesis topic. Based on the overviewed literature, Students must present an analysis of the problem to be solved.** The work length must be at least 20 pages and the number of analyzed literature sources must be at least 15.
16. The Research Works (part II) are graded based on the assessments of the student supervisors and the work reviewers.
17. Students deliver their Research Works (part II), **approved by supervisors and reviewers**, to the MIF Studies office by June 25th. Students who have not submitted their works to the MIF Studies office by the given deadline, have an additional opportunity to submit and pass their work during the reexamination period at the beginning of the next semester. Otherwise, they get a failing grade for Research Work.
18. The study administrator enters an assessment (Pass or Fail) into the VU student system after the Research Work (part II) is delivered to the MIF Studies office.
19. Students, who have failed the Research Work (part II), can improve on their grade at some later date, in accordance with the procedure and terms established by Faculty of Mathematics and Informatics. They have to deliver an improved Research Work (part II) approved by their supervisors and evaluated by their reviewers.

### **Semester III – Research Work (part III)**

20. During Semester III, Students are required **to prepare a detailed plan and obtain principal solutions for their Master's thesis.** The document must be at least 20 pages long. This research work is called Research Work (part II).
21. Students must submit their Research Work (part III) approved by their supervisors to the MIF Studies office during the second week of January. The exact deadline is announced by the study administrator before the exam session. Students who have not delivered their Research Work (part III) to the MIF Studies office by the deadline, have an additional opportunity to submit and pass their work during the reexamination period at the beginning of the next semester. Otherwise, they get a failing grade.

22. Reviewers inspect and evaluate the delivered Research Work (part III) before their defense. The reviewers are given at least 5 working days for their review and should submit this review no later than 24 hours before the defense time, at the same time forwarding their reviews to Students.
23. Students defend their Research Work (part III) approved by their supervisors and evaluated by their reviewers in front of the Defense Committee of Institute of Computer Science. Student's presentation should not exceed 10 minutes. The date of the defense is scheduled no later than January 26th.
24. The Defense Committee of Institute of Computer Science evaluates both, the Research Work (part III) and the student presentation, with a grade (in the range 1–10). The grade is entered into the VU student system by the study administrator.
25. If a student gets a failing grade between 1 and 4, he or she can improve on their grade at some later date, in accordance with the established procedure and terms by Faculty of Mathematics and Informatics. They have to deliver an improved version of Research Work (part III), approved by their supervisors and evaluated by their reviewers.

#### **Semester IV – the final Master's thesis**

26. During the last semester, Students **complete and format their final Master's theses (according to the provided templates)**.
27. The final Master's thesis must be at least 40 pages long, without thesis appendices. The research plan (part I), literature review (part II), and principal solutions (part III) are included as integral parts of the final Master's thesis. The thesis should also include the analytical part containing overall scientific analysis and/or evaluation of the obtained results and solutions.
28. Students must submit their Master's theses to the MIF Studies office by the end of May. The exact deadline (submission date) is announced by the study administrator before the exam session. If the Master's thesis is not delivered on time, Students will be allowed to defend their final thesis only the next academic year.
29. The work supervisor confirms that the final Master's thesis satisfies minimal requirements by giving a permission for it to be defended. If such a permission is not given, a student may write a request to the final Master's Theses Defense Committee, which decides whether the thesis can be accepted for defense. If neither approval is given, the thesis can be defended only after study renewal in the next academic year.
30. Reviewers inspect and evaluate submitted Master's theses before their defense. The reviewers are given at least 5 working days for their final review and should submit this review no later than 24 hours before the defense time, at the same time forwarding their reviews to Students.
31. The final Master's Theses Defense Committee is formed by the order of the VU Rector. The final defense date must be set no later than 14 days after the thesis submission date.
32. Students defend their approved and reviewed Masters theses in front of the final Master's Theses Defense Committee. Student's presentation should not exceed 12 minutes. After the presentation, Students should defend their work by answering to questions and/or remarks from the reviewer and Committee members.
33. The Master's Theses Defense Committee evaluates both the presented thesis and student's performance during the defense, also taking into account the received thesis review, with a grade (in the range 1–10).
34. If a student gets a failing grade between 1 and 4, he or she is allowed to redefend their corrected final thesis only after study renewal in the next academic year.