

SYSTEMIC QUALITY ASSURANCE OF DOCTORAL STUDIES AT THE UNIVERSITY OF MARIBOR

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Abstract The paper gives an overview of the Rules and Regulations on Doctoral Studies at the University of Maribor, and focuses on the topics that the University of Maribor found to be most important in ensuring the quality of the scientific-research-based Doctoral studies.

Keywords:

doctoral studies, rules and regulations, supervision, responsibilities, quality assurance



University of Maribor Press

DOI <https://doi.org/10.18690/978-961-286-409-5.2>
ISBN 978-961-286-409-5

1 Introduction

In 2012, the University of Maribor (UM) decided to transform Doctoral studies in order to increase the quality of the Doctoral Theses on the Doctoral Study Programmes. A Committee was formed with the goal to set the guidelines for the renovation of the Doctoral studies, and to prepare a draft of a new Act on the preparation and defence of the Doctoral Dissertation. The Committee met for the first time in 2013, and, in 2015, they handed a draft of a new Act on the Doctoral studies at the University of Maribor to the Vice-Rector for Education. A long-lasting discussion began at the university level, including the students, employees and leaderships of the 17 Faculties. A step-by-step approach was used. First, the characteristics of high-quality scientific-research-based Doctoral studies were discussed and adopted by the university Senate. Because the consensus on one Doctoral Study Programme that would comprise all the research fields of the university could not be achieved, we agreed on the term UM Doctoral School, to be used for all the Doctoral Study Programmes implemented at the Faculties. However, a Study Programme becomes a member of the UM Doctoral School only after meeting the minimum standards of excellence laid down by the new Rules and Regulations for the Doctoral Study Programmes. Then followed a discussion of parts of the new Rules and Regulations. The major discussion was on the critical mass for the accreditation and implementation of a Doctoral Study Programme, on the structure of the curriculum, on the requirements for the coordinators of the Doctoral Study Courses and supervisors of the Doctoral students, on the structure of the Committees to assess the proposal for the topic of the Doctoral Thesis and the Committees for the assessment and defence of the Doctoral Theses and, surprisingly, also on the rights and obligations of the Doctoral students and their supervisors. After three years of discussions and search for the best solutions, which include the specifics of different research fields, the Rules and Regulations on Doctoral Studies at the University of Maribor [1] (the Rules and Regulations in the following text) were adopted by the Senate of the University of Maribor on 17 April, 2018. So far, only approximately one third of the Faculties have transformed their Doctoral Study Programmes to be fully in line with the new Regulations. According to the Transitional provisions in the Rules and Regulations, in 2022 University of Maribor will open for application only those Doctoral Study Programmes that will meet the minimum standards determined by the Rules and Regulations. Until then, the Study Programmes which fall short on the new provision on the critical mass

and references of course coordinators are still open for application, providing that all the other minimum standards are met.

In what follows we shall run briefly through the Rules and Regulations, focusing on the requirements for the Doctoral Study Programmes, activities prior to enrolment and during the studies to assure the quality of Doctoral studies, requirements to complete the studies, division of responsibilities for Quality Assurance and Quality Assurance cycles.

2 Rules and regulations on doctoral studies at UM

The major sections and subsections of the Rules and Regulations are given in Figure 1. The systemic Quality Assurance of the Doctoral studies is achieved through the requirements for the Study Programmes, division of responsibilities and several Quality Assurance cycles, the major ones being performed through the activities prior to the enrolment, during the Doctoral study and the requirements to complete the studies.

2.1 Requirements for the Doctoral study programmes

The Slovenian Higher Education Act [2] defines the Doctoral Study Programmes to last for either 3 or 4 years. At UM, the proposal to set all the Doctoral Study Programmes to four years was not accepted, so our Rules and Regulations allow for both 3 and 4 year Study Programmes. Because we could not decide on having a smaller number of Doctoral Study Programmes (there are over 30 Study Programmes at the 17 Faculties), we agreed on a common structure of the curriculum, in order to enable students at one Study Programme to choose Courses also at other Study Programmes. All the Study Programmes contain a Course from the field of Scientific-research Methods and a Course on Transferable Knowledge. Because UM is a research based university, the Doctoral Study Programmes have to be based on the scientific research developed within the university. Each Study Programme contains Individual Research Work (IRW) in each semester. In all, 2/3 of total ECTS in a 3-year Study Programme, and 3/4 in a 4-year Study Programme are associated with IRW.

The critical mass for accreditation and implementation of a Doctoral Study Programme is at least six scientifically active Course Coordinators and Supervisors (at least four have to be employed at UM). Scientific activity is shown through relevant references, such as scientific articles published in journals with an impact factor (JCR) in the upper three quarters, scientific monographs or chapters in scientific monographs or patents with complete testing. Specific criteria were set for Social Sciences and Humanities where the SNIP impact factor and Scopus databases (d) and (h) are also considered as relevant. The minimum criteria for each Course Coordinator and Supervisor is at least three relevant publications in the past 5 years, where he or she has to be either the first or the leading author. As a rule, an individual Higher Education teacher is a Coordinator of only one Doctoral Study Course. The number of simultaneous supervisions of Doctoral students is limited to 5.

RULES AND REGULATIONS ON DOCTORAL STUDIES AT THE UNIVERSITY OF MARIBOR	
I. GENERAL PROVISIONS	
II. DOCTORAL STUDY PROGRAMMES	<i>fundamental principles, types of doctoral study programmes, UM Doctoral School, duration and structure of the curriculum of doctoral study programmes, coordinators of doctoral study courses, supervisors of doctoral students, heads of doctoral study programmes</i>
III. ENROLMENT AND IMPLEMENTATION OF DOCTORAL STUDIES	<i>Enrolment, rights and obligations of doctoral students, rights and obligations of supervisors, obligations of institutions, monitoring study progress of doctoral students</i>
IV. DOCTORAL DISSERTATION TOPIC APPLICATION AND APPROVAL PROCEDURE	<i>beginning of the doctoral dissertation topic approval procedure, doctoral dissertation topic application, verifying the fulfilment of requirements for the doctoral dissertation topic application, processing the doctoral dissertation topic application by the competent chair/committee, expert opinion on the doctoral dissertation topic, processing the doctoral dissertation topic application by the competent committee of the member's senate, processing the doctoral dissertation topic application by the member's senate, processing the doctoral dissertation topic application by the competent committee of the UM Senate, deciding on the proposed doctoral dissertation topic and supervisor/co-supervisor at the UM Senate, subsequent change of the doctoral dissertation topic title</i>
V. PREPARATION AND SUBMISSION OF A DOCTORAL DISSERTATION	<i>doctoral dissertation content and form, language use in writing and defending the doctoral dissertation, checking the similarity between the doctoral dissertation content and other works, submission requirements and the submission of the doctoral dissertation</i>
VI. PRELIMINARY EXAMINATION OF THE DOCTORAL DISSERTATION	<i>purpose of the preliminary examination of the doctoral dissertation, committee for the preliminary examination of the doctoral dissertation, duties of doctoral dissertation examiners, deciding on the doctoral dissertation and defence</i>
VII. DEFENCE OF THE DOCTORAL DISSERTATION	<i>appointing the committee for the defence of the doctoral dissertation, time and place of a doctoral dissertation defence, public announcement of the doctoral dissertation and defence, doctoral dissertation defence procedure, doctoral student's withdrawal from the defence, unplanned absence or distance of a defence committee member, doctoral dissertation submission procedure, industrial property rights and other intellectual creations, intellectual creations of the student</i>
VIII. DOCTORAL PROMOTION CEREMONY	<i>fulfilling the promotion requirements and submitting the proposal to the Rector, promotion procedure, keeping a public record of awarded doctorates</i>
IX. MONITORING AND QUALITY ASSURANCE OF DOCTORAL STUDIES	<i>responsibility and accountability</i>
X. TRANSITIONAL AND FINAL PROVISIONS	

Figure 1: The structure of the Rules and Regulations on Doctoral Studies at the University of Maribor [1].

2.2 Enrolment and implementation of Doctoral studies

According to the Slovenian Higher Education Act anybody who achieved 300 ECTS for Higher Education studies can enrol to Doctoral studies. If the number of applicants exceeds the number of spaces advertised in the call for application, we have the possibility to set the selection rules. In general, this is not the case. In order to avoid the enrolment of candidates who are not aware of what Doctoral studies are (primarily, a scientific research and not passing the exams), we encourage the candidates to visit Faculties, find a tentative supervisor, narrow a research field and prepare a conceptual design of the research work prior to the enrolment. If a candidate has no tentative supervisor and the Faculty cannot find one (in agreement between the supervisor and the candidate), the candidate is notified in writing and advised against enrolment.

Upon enrolment, an Agreement on studies and supervision within a third-cycle Study Programme at the University of Maribor is signed by the candidate and the Faculty. The Agreement also contains the individual student's Study Programme with the area of research, a framework programme of the Doctoral student's research work, the intended Doctoral Study Programme Courses, the research programmes, projects, teams etc, in which the Doctoral student will be involved (as a part of Doctoral studies), and any other obligations, if relevant, in addition to those from the curriculum, which the Doctoral student is obliged to fulfil prior to the defence of the Doctoral Dissertation. The Agreement also contains the rights and obligations of the Doctoral student, and the obligations of the Doctoral study provider (these rights and obligations are defined in the Rules and Obligations).

A regular follow up of the Doctoral student's progress is achieved through a written Annual Report on the fulfilled study obligations and the progress of the scientific research work. The Report is handed in by both the Doctoral student and supervisor (it can be a joint report). The Report is assessed by the Head of the Study Programme. Based on the Reports and further discussions (if necessary) with the Doctoral student or/and supervisor, actions can be taken, like a change of supervisor, no progress to the next year of studies etc.

2.3 Requirements to complete the Doctoral studies

In the second or third year of studies (depending on the requirements of the Doctoral Study Programme) each Doctoral student submits a Doctoral Dissertation topic application. In the application he/she defines the research problem, goals of the research, hypotheses, assumptions and potential limitations, as well as intended research methods. The expected scientific contribution has to be explained, together with an analysis of the topic's originality. The application is evaluated by the supervisor, at least one external expert not related to the Doctoral student (no common publications or projects with the student within the past 5 years), the Department or Faculty providing the Study Programme, the Faculty Senate and, at the university level, the Doctoral Study Council and the competent Committee of the UM Senate. The Doctoral Dissertation topic is finally approved by the UM Senate. The UM Senate also appoints an official supervisor for the Doctoral students (until this appointment the supervisor is only tentative).

Based on the approved Doctoral Dissertation topic, the Doctoral student continues the research work that is eventually presented in the Doctoral Dissertation. The Doctoral Dissertation can be submitted only after the research work has been published. The published work is regarded as relevant if it is published as a research article, a monograph or a part of a monograph, the same way as required for the relevant references for supervisors and Course Coordinators. The Doctoral student has to be the first author. After the similarity with other works is checked (a test of plagiarism) and the approval of the supervisor, the Thesis can be submitted for evaluation. Prior to the defence of the Thesis, it is preliminarily examined by a Committee consisting of at least 3 members (evaluators). At least 1/3 of the members are required to be independent external evaluators (not related to the student, as described before). The Faculties are encouraged not to include the supervisor into this Committee. Each evaluator checks the formal and scientific criteria of the Thesis, and conducts an interview with the student. The evaluator can then decide to write an Interim Report and require a revision of the Thesis. In this case, the Head of the Study Programme sets a deadline for the student to respond to the Interim Report, revise and resubmit the Thesis. Based on the resubmitted version of the Thesis, the evaluator writes a Final Report. Each evaluator writes a separate and independent Final Report, while the Interim Report can be a joint Report of all the evaluators. The Final Reports are examined by the Faculty Senate, which decides on the approval of the defence of the Thesis and appoints the

Committee for the Defence. At least one member of the Committee is an external member (not employed at UM) and independent of the Doctoral student. If the supervisor (and co-supervisor) is (are) members of the Committee, they should represent less than half of the Committee members.

After the approval of the defence, the Doctoral Dissertation is available for public inspection through one copy available at the Faculty. The defence, although being a working meeting between a Doctoral student and the Committee, is open to the public.

After the defence, the Thesis is made publically available through the UM digital library and in the ProQuest Dissertation & Theses Database. Temporary unavailability is possible up to 3 years if the Thesis is associated with a particular client, in order to ensure competitive advantage, protection of business secrets, safety of persons and nature, protection of industrial property, or confidentiality of the information of a client.

After a successful defence of the Thesis, the Doctoral student becomes a Doctoral candidate. He or she is promoted to the title of “Doctor/-ica znanosti” at a Doctoral promotion ceremony, which is a public and solemn event performed by the UM Rector.

2.4 Responsibilities and Quality Assurance cycles

The systemic quality of the Doctoral studies is achieved by all the procedures and requirements described above. The Faculty is responsible for the implementation of the Study Programme, it has to ensure the infrastructure and the administrative support. The responsibility to monitor an individual Doctoral student rests primarily with the supervisor, co-supervisor and the Head of the Study Programme, who follows the progress primarily through the Annual Reports handed in by the Doctoral student and the supervisor. The Head of the Doctoral Programme is also responsible for the annual self-evaluation of the Study Programme and the development of the Study Programme. The required measures, steps and responsibilities to implement the measures are defined in the annual Self-Evaluation Report. The results are evaluated of the measures performed in the previous year(s). The scientific references are checked of the Course Coordinators. Based on the findings of the self-evaluation procedure, an application can be prepared for changes

of the Study Programme. The application for changes and self-evaluation reports are considered by the Faculty Senate. Changes to the Study Programme are then adopted by the UM Senate and reported to the Slovenian Quality Assurance Agency for Higher Education (SQAA).

A call for application to the Doctoral Study Programmes is prepared at the university level. Prior to issuing the call, changes to the Study Programme are considered, and their compliance with the university and national Acts is checked. The compliance of the actual Study Programme with the university Acts is checked as well, and the Study Programmes not meeting the Rules and Regulations are not included in the call.

Every 5 years, each Study Programme at UM undergoes an internal evaluation. This is based on the annual self-evaluations of the Study Programme and the current version of the Study Programme. External evaluators, appointed by UM, are included in the procedure.

Every 5 years UM undergoes a re-accreditation procedure that is performed by SQAA. During this procedure, separate Study Programmes can be evaluated as well. In addition, as a rule, SQAA performs annually evaluation of at least 2 % of the Study Programmes in Slovenia.

3 Conclusions

In this contribution we presented the newly adopted Rules and Regulations on Doctoral Studies at the University of Maribor, focusing on the requirements and procedures that UM found most important for the Quality Assurance of Doctoral studies. The adoption of the new Rules and Regulations was a long-lasting process (over 5 years long) that included the teaching staff, students, administration and Faculty and university leaderships. The Rules and Regulations were adopted by the UM Senate in 2018, and it will take until 2022 until they are enforced fully.

References

- [1] Pravilnik o doktorskem študiju na Univerzi v Mariboru¹, available at <https://www.um.si/univerza/dokumentni-center/akti/GlavniDokumenti2013/Pravilnik%20o%20doktorskem%20%C5%A1tudiju%20na%20Univerzi%20v%20Mariboru%20012-2018-1.pdf>
- [2] Zakon o visokem šolstvu (neuradno prečiščeno besedilo št. 26)², available at <http://pisrs.si/Pis.web/pregledPredpisa?d=49688-s=3&id=ZAKO172&d=49688-o=2&d=49688-p=1#>

¹ The English version of the Rules and Regulation on Doctoral studies at the University of Maribor is being prepared and will be available at the UM website. Until then, the draft version can be obtained on demand.

² The English version of the Higher Education Act is not available.

