INFORMATION FOR STUDENTS ON THE INDIVIDUAL PROCEDURES THAT TAKE PLACE IN THE DOCTORAL STUDIES PROGRAMME AND WHICH EACH STUDENT MUST IMPLEMENT IN ORDER TO COMPLETE THE DOCTORAL STUDIES PROGRAMME AT Level III

- valid for a four-year doctoral studies programme

DOCTORAL STUDIES PROGRAMME of the Level III includes 6 procedures:

- 1. Registration of Examinations
- 2. Registration of Doctoral Dissertation Topic
- 3. Presentation of the Results of the Research work
- 4. Submission of the Doctoral Dissertation
- 5. Evaluation of Doctoral Dissertation
- 6. Defence of the Doctoral Dissertation

(all procedures and forms are published on the Faculty of Mechanical Engineering (FS) website: https://www.fs.uni-lj.si/en/study/3rd-cycle-doctoral-study-programme/doctoral-programme-in-mechanical-engineering/program-information/#tab 9 2

1. REGISTRATION OF EXAMINATIONS

The mentor, in collaboration with the candidate, submits the **Application for Registration of Examinations** to the Committee for Doctoral Studies of the FS, which meets once a month (except July). The Application must also be signed by the head of the laboratory. The Application and other **forms are published on the FS website / Study Activity / Level III / Notices and forms** (https://www.fs.uni-lj.si/en/study/3rd-cycle-doctoral-study-programme/doctoral-programme-in-mechanical-engineering/program-information/#tab 9 2)

The mentor must briefly explain the topic in writing on the Application for Registration of Examinations. The field of activity of the mentor and the members of the Committee must cover the topic.

Lectures from a single course will be held in the doctoral programme if five or more students are enrolled in the course. **Due to the wide range of courses, only consultations with lecturers or course providers are usually held.**

(Level III courses are published on the FS website: https://www.fs.uni-lj.si/studij/studij-3-stopnje/doktorski-studijski-program-strojnistvo/predmetnik/

The candidate must pass **four exams** and one seminar. All courses in the programme are elective courses and are evaluated with 10 ECTS. Candidates may only take one exam with their mentor and with each course holder. From the elective courses offered, the candidate selects two to four courses together with the mentor (missing courses up to the required four courses are realized by the candidate either through mobility (maximum two courses) or by choosing generic content (maximum one course). A list of generic content is published on the University of Ljubljana website. Mentors must check the **number of credits for external courses in advance** and replace them with another external course if the number of credits is too low.

In case a course **outside the Faculty** is chosen, the following must be attached to the Application for Registration of Examinations:

- validated curriculum and
- exam price

The curriculum must include:

the name of the studies programme,

- the course title (both, SLO and ENG titles, are obligatory),
- the content of the course,
- number of ECTS,
- course provider,
- · bibliography.

At the seminar, which is evaluated with 5 ECTS and is obligatory for all doctoral students, the candidate reports on the completed research work. The seminar is an organized form of study, which the student conducts under the guidance of his mentor and whose results are presented in writing and orally publically, in front of an expert committee appointed by the Senate of the University of Ljubljana (UL Senate), FS, after registration of the topic and examinations. The candidate shall notify the date of the defence, agreed with the Committee, at **least 8 days** before the defence by e-mail to the Student Affairs Office for official announcement. The announcement will be published on the notice board of the FS and on the FS website.

When defending the seminar, the student will report the results of his research. The purpose of the seminar in the second (2^{nd}) semester is for the student to gain an overview of the narrower field of his/her research work.

<u>Within the seminar</u> the student is **obliged to participate in presentations of other students** of the same field of study and to take part in discussions. In this way, we ensure the expansion of the studies through the narrower field of his doctoral dissertation, getting to know the research results of other students and the interaction between doctoral students. For this purpose, the candidate must **fill in the attendance table** published on the website under forms: https://www.fs.uni-lj.si/en/study/3rd-cycle-doctoral-study-programme/doctoral-programme-in-mechanical-engineering/program-

<u>information/#tab 9 2</u> (You can find it under: **Table to record seminar, doctoral dissertation topic presentation and defence presence)**

The candidate agrees with the course holder to take the exam. The course holder enters the grade to VIS, under Final grades.

In order to participate in the seminar, the candidate fills in the "Notice of Exam", published on the FS website. The candidate's performance will be indicated on the notice with numerical grades from 6 to 10 (exam + practical work). The application form is signed by all members of the Committee. After the defence, the application form must be submitted to the Student Affairs Office in order to be included in the student's e-index.

The application form or the certificate of passing the **examination at another faculty** must include the **original signature and stamp of that faculty.** The candidate can use their or our application form.

The Student Affairs Office may only accept application forms for the completed examination or the completed doctoral student seminar **after confirmation of the registration** by the Doctoral Study Committee and the UL Senate of the FS. The candidate, mentor/comentor and course holders will be informed in writing of the confirmation of the candidate's study obligations.

The conditions for promotion to a higher academic year are listed on the FS website: https://www.fs.uni-

<u>lj.si/en/educational process/third degree/doctoral programme in mechanical engineeri ng/program information/</u>

2. REGISTRATION OF DOCTORAL DISSERTATION TOPIC

Candidates wishing to obtain a doctorate of science at the FS must submit an application for a doctoral dissertation to the Student Affairs Office in the 2nd year, 4th semester at the latest (preferably at the beginning of the semester due to a longer procedure). The authorized staff member of the Student Affairs Office will determine whether the application is complete and confirm receipt. If the application is incomplete, the candidate will be asked to remedy the deficiencies found within a certain period of time, which may not exceed one year.

When applying for a topic, the candidate must enclose:

- 1. Form Registration of doctoral dissertation topic at the FS, in which the candidate:
 - gives the exact personal data (address, DOB) and the last acquired undergraduate and/or postgraduate scientific title;
 - suggests a mentor or co-mentor
 - gives the name of the studies programme and the field in which the candidate wishes to write a doctoral dissertation
 - gives the title of the proposed doctoral dissertation in Slovene and English
 - gives a possible suggestion to write in another language

and attachments:

- 2. **the doctoral dissertation proposal (3 to 7 pages of text** and a list of the main references and sources **numbered**), comprising:
 - the title of the dissertation in Slovenian and English, or in another foreign language in the case of the study of a foreign language and literature;
 - the research field of the doctoral dissertation;
 - a research description, including:
 - a brief overview of the specific research field and a presentation of the research done to date in the field of the dissertation, and the purpose of the research;
 - clearly presented hypotheses or research questions or objectives with a brief explanation;
 - the research concept and a description of the research methods;
 - the definition of expected results and the original contribution to science;
 - a list of relevant references from the field of the dissertation;
 - a draft of the research data management plan in accordance with Article 50 of the Rules and Regulations for Doctoral Studies at the University of Ljubljana (applicable to the generation of doctoral students enrolled from the academic year 2021/2022 onwards)
- 3. the proposal for supervision and potential co-supervision, the consent of the supervisor and potential co-supervisor and an indication of their 3 to 5 scientific references in the broader field of the doctoral dissertation;
- 4. **the CV** of the doctoral candidate and bibliography (list of main scientific, professional, project and other publications and works);
- 5. **the approval of the Medical Ethics Committee** of the Republic of Slovenia or another ethics committee or the permission of the Office of the Republic of Slovenia for Safe Food, Veterinary Medicine and Plant Protection to conduct tests on animals, where the nature of the proposed doctoral dissertation proposal requires it;
- **6.** a possible request for approval of writing the doctoral dissertation in English, or in another language in the case of studying foreign languages in accordance with Article 44 of the Rules and Regulations for Doctoral Studies at the University of Ljubljana.

The UL Senate may exceptionally authorize the preparation of a dissertation in English if the candidate, mentors or co-mentors of the candidate, or a member of the Committee is a foreigner. In the context of doctoral studies in foreign languages and literature, the UL Senate may exceptionally authorize the writing of a dissertation in another foreign language. In case of writing a doctoral dissertation in English or another foreign language, the introduction, conclusions and a comprehensive summary must also be written in Slovene. All necessary documents submitted for the acceptance of the dissertation topic must also be written in Slovene.

On the basis of the candidate's Registration of the doctoral dissertation topic, the Committee of the Doctoral Studies and the FS Senate appoint, within 30 days of the application for the topic, the Committee for Supervision of the Doctoral Student (KSDŠ), which supervises the doctoral student from the Registration of the doctoral dissertation topic to the evaluation and its defence.

<u>Schedule of meetings of FS bodies</u> - is published on the website https://www.fs.uni-lj.si/o-fakulteti/ostalo/letni-koledar-in-logotip/</u>

(Committee of the Doctoral Studies = KDŠ)

A candidate to whom a higher education teacher from abroad has been appointed in the KSDŠ, must prepare for this teacher the same documents in English that the student submitted in Slovene.

A mentor who proposes a higher education teacher from another domestic or foreign university for the selection of examinations for the candidate or for the Doctoral Evaluation Committee must first familiarise himself with this teacher's bibliography and title and submit these documents to the KDŠ.

A higher education teacher from other domestic and foreign universities who is appointed a member of the Committee must have three publications in a specific field in internationally peer-reviewed journals within the last five years.

When the KSDŠ is also confirmed by the FS Senate, the Student Affairs Office will send the candidate's Registration of the doctoral dissertation topic, together with the Decision on appointment to the Committee for examination and evaluation to the appointed members.

The student presents to the KSDŠ the disposition on the topic of the doctoral dissertation within one month after the appointment of the Committee. The candidate shall adequately justify the disposition of the topic with elements of appropriateness (ability to write a dissertation) and shall establish a scientific hypothesis on it. The candidate agrees the date and time of the presentation with the Committee. The data (first and last name of the candidate, date, time, place) are sent to the Student Affairs Office in order to publish the presentation of the topic on the FS notice board and on the FS website.

The KSDŠ will record and sign the minutes of the presentation, which may include comments and a deadline for completion of the proposal. The candidate must also submit the corrected version of the disposition to the Student Affairs Office.

The entire procedure ends with a written evaluation by the KSDŠ on the appropriateness of the topic of the doctoral dissertation, which the KSDŠ must submit no later than one month after the presentation or after the submission of the corrected disposition.

IMPORTANT: If the research in the doctoral study involves children, patients, disabled persons or in the case of animal experiments, etc., the <u>approval of the ethical groups</u> must be submitted **together with the evaluation of the suitability of the doctoral topic**.

lj.si/raziskovalno in razvojno delo/etika in integriteta v raziskovanju/

The evaluation of the appropriateness of the topic of the doctoral dissertation is reviewed by the competent body of the Member (in FS it is the KDŠ) within two months at the latest and proposes to the Senate of the Member the following:

- confirms the positive evaluation of the KSDS on the appropriateness of the topic or
- sets the doctoral student a deadline within which the proposed topic must be modified, supplemented or otherwise the comments of the KSDŠ must be taken into account, or
- in case of a negative evaluation, rejects the proposed topic.

After the expiry of the deadline set by the Senate of the Member for the doctoral candidate to change or supplement the topic of the doctoral dissertation, the KSDŠ examines the amended topic proposal and submits a new written evaluation of the appropriateness of the topic at the first following Senate session. If the doctoral candidate does not submit an amended proposal for a topic within the deadline, the KSDŠ must nevertheless give an evaluation of the proposed topic of the doctoral dissertation.

If the Senate of the Member accepts the KSDŠ's negative evaluation, it rejects the proposed topic and the procedure is concluded. A doctoral candidate may not propose the same topic again.

When the Senate of the Member accepts a positive evaluation of the suitability of the doctoral dissertation topic, the Member sends the application for the topic (doctoral candidate's application, curriculum vitae, bibliography, disposition with main sources, KSDŠ evaluation, decision of the Senate of the Member and, if necessary, additional appendices) to the UL Senate for approval.

After the decision of Doctoral Study Committee of the University of Ljubljana, which has given its approval on the proposed topic, the Faculty of Mechanical Engineering will issue the candidate with a decision on the approved topic. The original of the decision is given to the candidate and a copy is given to the mentor (and co-mentor, if appointed). The candidate binds a copy of the decision in the prepared doctoral dissertation, but retains the original or binds it in his copy of the dissertation at the final hardcover binding.

With the approval of the Senate of the University of Ljubljana on the topic of the dissertation, the candidate will receive 5 ECTS in the e-index with the completed compulsory course "Doctoral dissertation topic".

The conditions for promotion to a higher academic year are listed in the Presentation Proceedings of Doctoral Studies Programme, which is published on the website for each individual academic year: https://www.fs.uni-lj.si/en/study/3rd-cycle-doctoral-study-programme/doctoral-programme-in-mechanical-engineering/program-information/

A candidate who is not able to submit a doctoral dissertation within the validity period of the doctoral dissertation topic can apply for an extension of the deadline in agreement with the mentor. This is decided by the Senate of the Member, which may extend the deadline for the submission of the doctoral dissertation by one year.

If the candidate does not submit the doctoral dissertation within the period of validity of the doctoral topic and does not request an extension before the deadline expires, it is assumed that he or she has withdrawn from the submitted topic and that the topic is free to be used by another candidate.

Until the submission of the doctoral dissertation, the doctoral candidate may submit the topic of the doctoral dissertation for evaluation no more than twice in the same field of study of the doctoral studies programme. The doctoral candidate may resubmit a new topic or an updated topic that the candidate submitted for the first time.

3. PRESENTATION OF THE RESULTS OF THE RESEARCH WORK

When the research work is in its final phase and when it is possible to draw conclusions in accordance with the hypotheses or research questions posed, the doctoral candidate submits a draft of the doctoral dissertation to the KSDŠ members, the mentor and the comentor (i.e. the final version of the doctoral dissertation which is published on the website and presents the results of the research work, focusing on the main findings and the contribution to the science.

At the same time, the student also submits the **Data management plan (DMP)** - at the presentation of the results of the research on form NRRP_2 (published on the FS website) - applicable to the generation of doctoral students enrolled from the academic year 2021/2022 onwards.

In case of necessary corrections to the draft of the doctoral dissertation, the KSDŠ sets a deadline for the doctoral student to submit the draft, which may not be longer than one year (note: pay attention to the validity of the topic of the doctoral dissertation).

The presentation is usually public. If the presentation was unsuccessful, it can be repeated only once (1x).

4. SUBMISSION AND EVALUATION OF THE DOCTORAL DISSERTATION

A doctoral candidate enrolled in a four-year doctoral studies programme shall submit a doctoral dissertation in printed form to the Member no later than two years after enrolment in the last year of the studies programme or in the additional year, together with the consent of the mentor and co-mentor. In case of justified reasons (e.g. maternity, paternity, longer, documented sick leave of at least six months) that occurred in the period between the last enrolment in the studies programme and the deadline for submission of the dissertation, the member may exceptionally extend the deadline for submission of the dissertation by one year.

The dissertation may also consist of at least three or more papers (published, accepted for publication, unpublished) and other publications (e.g., conference papers, book chapters) that comprehensively address all topics of the approved dissertation, provide answers to all hypotheses and represent all scientific contributions (the terms stated in Rules on Doctoral Studies at UL FS).

Doctoral dissertation in spiral binding, can be submitted by a student only under the condition that the candidate has fulfilled all obligations under the studies programme (all examinations, seminars, all research papers, submitted table of attendance at seminars or presentations of other students and with two original scientific papers from the content of the dissertation published or accepted for publication, - in accordance with the <u>Rules on Doctoral Studies at UL FS</u>, except for the defence of the doctoral dissertation.

The dissertation must be completed in accordance with the Instructions for the preparation of doctoral dissertations published on the <u>FS website</u>. The candidate may

submit a doctoral dissertation to the Student Affairs Office with the consent of the mentor/co-mentor: STATEMENT ON SUBMISSION OF DOCTORAL DISSERTATION

After the confirmation of the submitted doctoral dissertation at the FS Senate, the candidate submits as many copies (spiral bound) as there are members of the KSDŠ Committee.

Two original scientific papers (classified in Cobiss under 1.01) relevant for the completion of studies:

- During the studies and before submitting the dissertation for review, the candidate must have published
 - as first author at least two original scientific papers on the topic of the dissertation in internationally recognised journals with a Journal Citation Report (JCR) impact factor in the SCI (Science Citation Index) system.
 - o Of these two papers, at least one must be in the journal QI.
 - The second paper may be ranked as Q3 the lowest.
 - o Additional publications in the magazine Strojniški vestnik are desirable.
 - o Alternatively, the candidate may publish two papers in Q2 journals.
- Papers that the candidate claims in his dissertation must have been published or accepted for publication before the submission of the dissertation.completed and published or accepted for publication during the candidate's studies in the doctoral studies programme at the UL, FS (from enrolment to submission of the dissertation).

Before submitting the doctoral dissertation to the Student Affairs Office, the candidate must submit a copy of at least two papers from the journals in which the papers were published, as well as written proof of the ranking of the journals on the scale in the SCI system. In the case of accepted papers that have not yet been published, the candidate must prove this by submitting a written confirmation from the editorial staff of the journal. The proof will only be considered if both papers are accepted for publication.

5. EVALUATION OF THE DOCTORAL DISSERTATION

After confirmation of the submitted doctoral dissertation at the FS Senate and acceptance of the minutes on presentation of the results of the research work, the candidate submits as many copies (spiral bound) as there are members of the KSDŠ Committee. The Student Affairs Office prepares a decision for the KSDŠ for review and evaluation of the doctoral dissertation. The original is given to the candidate, and a copy is forwarded together with the doctoral dissertation to the appointed members for review and evaluation.

The candidate and the mentor agree on how to approach the members of the Evaluation Committee to determine whether the candidate should supplement or correct any part of the candidate's doctoral dissertation.

The members of the doctoral dissertation Evaluation Committee must each submit their own report within the specified deadline.

The members of the KSDŠ submit their separate evaluations of the doctoral dissertation to the KDŠ and to the FS Senate, which, on the basis of these evaluations, *accepts or rejects* the dissertation or requests the doctoral student to complete the dissertation within a specified period of time or to *correct it* in accordance with any comments.

At the same meeting, after the reviewers' reports have been accepted, a Defence Committee is appointed. This is the KSDŠ already assembled, with the addition of the president, the Dean or the Vice-Dean, if the Dean is already a member of the KSDŠ.

In case of opposing opinions of KSDŠ members, the Senate may appoint another KSDŠ member(s) to prepare an additional evaluation(s).

If the candidate submits a revised dissertation and it is re-evaluated by KSDŠ members, the FS Senate re-evaluates it and decides on it. The Senate *accepts or rejects* the doctoral dissertation.

If the doctoral candidate does not correct the dissertation within the set deadline, the Senate rejects the doctoral dissertation. The rejected doctoral dissertation cannot be resubmitted by the doctoral candidate and the procedure is completed.

When all the evaluators or rapporteurs give a positive evaluation or report, the candidate submits a clean copy of the doctoral dissertation (i.e. taking into account any comments or additions imposed on him by the evaluators), so that the dissertation (still spiral bound) + all the reviews of the evaluators are submitted to the meeting room for public display for 14 days.

During the public display, but also later, the candidate must complete the final version of doctoral dissertation and submit it to the VIS student information system VIS, where the process of **checking the similarity of the contents** is carried out. Based on the analysis of the content similarity check, the mentor will decide within (10) ten working days whether the doctoral dissertation is suitable for defence.

If the mentor considers that the candidate has inappropriately marked similar parts of the text and that the proportion of similar content is too high, the mentor will request content corrections, which the candidate must correct within (10) ten working days at the latest. The Rules on content similarity detection of the electronic form of the written final work of studies and on provisions regarding temporary inaccessibility of the content of the written final work of studies and the *Instructions for submitting electronic forms of the written final work of study and content similarity detection at the UL* shall apply mutatis mutandis.

The percentage of content similarity of the final works of study is determined by a decision of the FS Senate.

If no comments are received during the public display, the decision of the FS Senate will be implemented, otherwise the procedure will be discontinued and the matter returned to KDŠ for consideration of the submitted comments.

In the case of a comment, during the public display, this is considered by the KDŠ and the FS Senate, which decides whether the comments are justified or not. If the comments are justified, the candidate will be given a deadline within which to remedy the irregularities. When the candidate corrects the doctoral dissertation, the author of the comment must submit a statement to the KDŠ that the work has been corrected in accordance with the comment and that the procedure should continue.

If the comment is not substantiated according to the KDŠ and the FS Senate, the procedure continues. The Defence Committee is confirmed.

Once the evaluations are confirmed, the appointed Defence Committee and the successful completion of the public display, the doctoral candidate can begin the procedure for the defence of the doctoral dissertation.

6. DEFENSE OF THE DOCTORAL DISSERTATION

When the decision of the FS Senate on the appointment of the Defence Committee can be realized, the candidate can bind the doctoral dissertation in hardcover. The candidate shall check again whether the dissertation has been completed in accordance with the Instructions for the preparation of doctoral dissertations published on the FS website.

The candidate submits to the Student Affairs Office as many copies as there are members of the Defence Committee for the defence with the decision of the FS Senate + 2 for NUK.

Once all the procedures have been completed (i.e. after confirmation of the reports of the evaluators and the Defence Committee at the FS Senate, after successful public display and successful completion of the procedure of content similarity detection), the candidate submits the required number of hardcover copies to the Student Affairs Office, **at least 8 days before the date of the defence**, in order to officially announce the date of the defence in due time.

The date of the defence must be agreed with all members of the Defence Committee and the chairman of the Defence Committee (Dean or Vice-Dean). The date is coordinated by the mentor or candidate or the secretariat of the mentor. This is left to their working methods. A coordinated date with the agreed reservation of the Leskovar's Room and the Dean's Room must be communicated to the Student Affairs Office **at least 8 days before the defence** so that the defence can be officially announced.

The defence is published on the FS and UL websites (calendar of events), FS bulletin board.

Based on the decision of the FS Senate, the Student Affairs Office prepares a decision on the appointment of a Defence Committee. The members of the Committee receive the copy together with the doctoral dissertation, the original is given to the candidate, and 1 copy goes to the archives of the Student Affairs Office.

On the day before the defence, a »black file« is prepared for the Dean with all the documents necessary for the defence of doctoral dissertation. In case the Dean is not able to lead the defence due to extraordinary obligations, he can authorize one of the Vice-Deans (usually a Vice-Dean of level III) to lead the defence. In this case, the Dean's Secretariat (Dean's Office) issues a formal authorization to the Vice-Dean. A copy of the authorisation is also sent to Student Affairs Office, which is an integral part of the documentation for the defence of doctoral dissertation.

On the day of the defence, the candidate goes to the Student Affairs Office before the defence (about half an hour before the defence) to obtain the latest information on the defence and certain forms to fill in.

The defence is conducted in accordance with the Protocol for the defence of works, published on the FS website: https://www.fs.uni-lj.si/en/study/3rd-cycle-doctoral-study-programme/doctoral-programme-in-mechanical-engineering/program-information/#tab 10 2

Before or after the defence, the candidate must return the completed forms to the Student Affairs Office.

Upon successful completion of the defence, the Student Affairs Office fills out the UL form »Application for the Promotion of Doctors of Science«, which is sent with the necessary attachments to the Doctoral Service of UL to include the candidate on the list for the promotion of doctors of science.

Obligations that a student must fulfil in order to complete his/her studies:

- all exams passed
- all seminars completed
- topic confirmed by UL
- two papers published or accepted for publication (in accordance with the Rules on Papers)
- completed table of attendances at presentations or defences of other students
- a draft of the research data management plan (when submitting doctoral dissertation and at the presentation of the results of the research) - applicable to the generation of doctoral students enrolled from the academic year 2021/2022 onwards)
- successfully completed presentation of research results
- positively evaluated submitted doctoral dissertation
- no comments on the doctoral dissertation or with remedied comments on a 14-day public display in the meeting room
- successfully completed content similarity verification process
- successful defence of the doctoral dissertation

Additional information:

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