In accordance with the provisions of the Higher Education Act ZViS (the Official Gazette of the Republic of Slovenia 75/2016), the Professional and Academic Titles Act ZSZN-1 (the Official Gazette of the Republic of Slovenia 61-2571/06), the Statute of the University of Ljubljana (the Official Gazette of the Republic of Slovenia 4/2017) and the Academic Regulations of the University of Ljubljana dated 25 September 2018, the Senate of the University of Ljubljana, Faculty of Mechanical Engineering, adopted the following document at its 7th meeting on 21 April 2022 and the amendment at its 13th meeting on 17 November 2022:

GRADUATION RULES at FME

I. INTRODUCTORY PROVISIONS

Article 1

The FME Graduation Rules specify the mentoring and the process of changing the mentor, the approval process, the validity and extension of the topic of the diploma thesis (hereinafter referred to as the "final thesis"), master's thesis (hereinafter referred to as the "final thesis") and final work of studies (hereinafter referred to as the "final thesis"), the scope and format of the final thesis, the procedure for submitting the final thesis, defence of the final thesis and assessment of the final thesis.

These Rules supplement the FME Academic Regulations, the UL Academic Regulations and the UL Statute.

Article 2

The pronouns used in these Rules that refer to persons and are written in the masculine form shall be used as neutral for both feminine and masculine forms.

Article 3

The education provided by the Faculty of Mechanical Engineering in accordance with the accredited study programme and these Rules (hereinafter referred to as "UL FME") encompasses:

- professional higher education as part of the *first-cycle professional study programme "Mechanical Engineering – Project-Oriented Applied Programme"* culminating in a *BASc in Mechanical Engineering (higher education),*
- academic higher education as part of the *first-cycle academic study programme "Mechanical Engineering Research and Development Programme"* culminating in a *BSc in Mechanical Engineering (academic higher education),*

- master's education as part of the second-cycle master's degree programme "MECHANICAL ENGINEERING – Research and Development Programme" culminating in an *MSc in Mechanical* Engineering.

Article 4

In order to obtain a certificate of completion of the study programme and thus an academic title, it is necessary to fulfil all the study requirements prescribed by the programme. All the study programmes referred to in Article 3 specify that the preparation of the final thesis is one of the study requirements.

Article 5

The final thesis is a document written by the student to demonstrate his ability to use the knowledge acquired during his studies to address the chosen topic.

The final thesis must be the result of the student's independent work under the guidance of a mentor and (possibly) co-mentor. The final thesis as part of a university and master's degree is generally a development or research work, while in professional study programmes, the topics of final theses are generally taken from current practical technical challenges.

II. THESIS MENTORSHIP

Article 6

Each student is entitled to a mentor. As a general rule, students have to find a mentor on their own. Upon written request, the relevant Vice-Dean (hereinafter referred to as the "relevant Vice-Dean") may appoint a mentor for the student's chosen study programme.

The thesis mentor, as part of a university or a master's degree programme, can be any teaching faculty member with the academic title of full professor, associate professor or assistant professor who is a **leader** or **co-leader** of at least one course in any UL FME programme at the time the topic of the thesis is submitted.

The thesis mentor, as part of a professional study programme, can also be any teaching faculty member with the academic title of senior lecturer or lecturer who is a **leader** or **co-leader** of at least one course in the study programme at the time the topic of the thesis is submitted. If the lecturermentor is not a full-time employee of UL FME as the leader or co-leader of the course, he must also recommend a co-mentor who is familiar with the topic in terms of area of expertise, and is a full-time employee at UL FME, except in cases where this is not practically feasible.

All teaching faculty members can be co-mentors as well as mentors for final theses. This includes anyone else who holds the academic title of "higher education professor", even though he is not a course leader at UL FME. Anyone holding the academic title of "researcher" can also be a comentor.

In the case of an interdisciplinary topic of the final thesis or a student exchange as part of the ERASMUS or CEEPUS projects, the co-mentors of the final theses can also be teaching faculty members from other universities or faculties as well as associates from other institutions who hold the academic title of "higher education professor" in the subject-matter of the thesis in question.

When choosing mentors and co-mentors, priority is given to UL FME staff.

An external or retired teaching faculty member who was a course leader of at least one subject in the study programmes referred to in Article 3 can be a mentor for three years following the last course leadership or after retirement.

Based on a proposal from the relevant Vice-Dean, the FME Senate can appoint (even outside of the above rules) a teaching faculty member as a mentor for a specific topic for which a mentor cannot be found at UL FME.

Article 7

If, during the preparation of the final thesis, the student or mentor/co-mentor finds that collaboration with the mentor/co-mentor or student is no longer possible, he can make a written request addressed to the relevant Vice-Dean to appoint another mentor or co-mentor.

The mentor/co-mentor may withdraw from mentorship if he finds that the student has not followed his recommendations.

The relevant Vice-Dean decides on the justification for replacing the mentor within 15 days at the latest. The search for another mentor/co-mentor takes place in accordance with the previous Article. As a general rule, the mentor/co-mentor can only be replaced once during the preparation of the final thesis.

III. TOPIC OF THE FINAL THESIS

Article 8

The topic of the thesis may be proposed by:

- students themselves,
- commercial companies, professional associations and other institutions that

cooperate with UL FME,

- teaching faculty members who implement UL FME study programmes,
- faculty associates in cooperation with teaching faculty members from the previous paragraph.

As a general rule, students themselves propose the topic and choose their mentor, who is an expert (pedagogically, technically and scientifically) in the subject-matter of the thesis. After consultation with the mentor, they can choose the topic of their final thesis. The mentor decides on the appropriateness of the topic. If the topic of the final work is interdisciplinary in nature, the mentor, after consulting with the chair of the competent thesis committee for the given study programme, can also recommend a co-mentor to assist with a particular aspect of the topic that fall outside of the mentor's area of expertise.

Article 9

If, during the preparation of the final thesis, a student realizes that he cannot finish it due to extenuating circumstances, he may request a withdrawal from the approved topic of the final thesis.

A substantiated request for the withdrawal of the thesis is reviewed by the mentor together with the chair of the competent thesis committee within 15 days. If the relevant Vice-Dean accepts the withdrawal from the approved topic, the student can apply for a new topic.

As a general rule, a student can only submit a request once for the withdrawal from the approved topic and the approval of a new topic for the final thesis.

Article 10

The chosen thesis topic shall remain valid for six months from the date of approval of the topic.

Article 11

In the event that a student cannot complete the final work within the prescribed period (within six months) for justifiable reasons, he must ask for an extension of the topic before the deadline expires. He must submit a request to extend the topic by 6 months to the office of student affairs (hereinafter referred to as the "Student Office"), and the request is then reviewed by the relevant Vice-Dean. If the student is unable to complete the final work even within this period due to extenuating circumstances, he can submit a request to extend the topic for another six months to the Student Office, which will be reviewed by the FME Senate.

Article 12

When the validity of the topic of the final thesis expires, the student must submit a request for approval of a new topic to the Student Office. As a general rule, a student may only submit a request for the approval of a new thesis topic once.

IV. REGISTERING THE TOPIC OF THE FINAL THESIS Article 13

A student can register the topic of the final thesis after he has successfully completed all the requirements specified in the study programme, except for the final thesis.

Article 14

The student must register the final thesis topic in the UL FME student information system (hereinafter referred to as the "VIS system") at least one month before submitting the final thesis. When registering the topic of the final thesis, he must enter:

- the title of the final thesis in Slovene and English,
- the mentor and co-mentor,
- a thesis outline of between 1000 and 1500 characters (definition of the discussed topic, the purpose and objectives of the final thesis, the outlined work methods),
- the field of the final thesis and
- potential cooperation with a commercial enterprise.

The proposal of the thesis topic must be grammatically correct and must specify clear definitions for the technical challenge, the scope of tasks to be completed by the candidate in the estimated time and the thesis methodology.

V. APPROVING THE TOPIC OF THE FINAL THESIS Article 15

The mentor uses the VIS system (Completion of Studies/Topic Registration) to review, correct, supplement and approve the proposal of the topic of the final thesis. If the final thesis has been written in cooperation with a business enterprise, the mentor also submits (uploads to the VIS system) a signed Agreement on the Recognition of Intellectual Property Rights in the Making of the Final Thesis in Cooperation with a Business Enterprise.

Following the mentor's approval of the topic of the final thesis, the topic proposal is submitted to the chair of the competent thesis committee for review and approval. He enters his final decision (either approving the proposed topic or rejecting it and specifying the required corrections) into the VIS system (Completion of Studies/Topic Registration). If corrections are required, they must be added to the topic of the final thesis and reconfirmed by the mentor. Once the topic has been corrected and approved by the mentor, it is reviewed again by the chair of the competent thesis committee, who gives his final decision.

Article 16

When the topic of the final thesis has been approved, an entry of the thesis topic is created for the student in the VIS system in the agreed format. The student must obtain the signatures of the mentor/co-mentor and insert the signed thesis topic into his final thesis as the second page.

VI. PREPARING THE FINAL THESIS

Article 17

The final thesis is the result of a candidate's independent work, which deals with the chosen topic by applying the expertise covered by the UL FME study programme.

When preparing the final thesis, students must make independent use of technical literature and other technical resources. While writing the thesis, students are assisted by a mentor/co-mentor, who provides them with theoretical, technical, substantive and methodological guidance.

The final thesis must not be a mere summary of foreign publications, but rather the result of students' own professional, development or research work.

Article 18

As a general rule, the final thesis must be written in Slovene. Upon receiving a written application from a student, the FME Senate may also allow for the final thesis to be written and defended in English, but only in the case of a foreign student, a foreign mentor or co-mentor, a joint study programme in cooperation with a foreign university, or if the final thesis was completed abroad as part of an international exchange. The final thesis written in English must contain an extensive summary in Slovene between six and eight pages long. This comprehensive summary must also include an introduction and conclusion.

Article 19

The diploma thesis (3136) should generally consist of 40 to a maximum of 60 pages, the master's thesis (6245) from 50 to a maximum of 100 pages, and the final work of studies (2057) from 20 to a maximum of 30 typed pages in A4 format

(appendices, if required, do not count).

The diploma thesis (3034-V) should generally consist of 40 to a maximum of 60 pages, the master's thesis (6013-M) from 50 to a maximum of 80 pages, and the final work of studies (2035-U) from 30 to a maximum of 50 typed pages in A4 format (appendices, if required, do not count).

Article 20

When preparing the final thesis, students have to follow the *Instructions for the Writing and Structuring of Final Theses at FME* and the recommendations on how to write final theses, which are an integral part of these Rules. Any deviations from the Rules may only be permitted by the relevant Vice-Dean on the recommendation of the mentor.

Article 21

Each student bears sole responsibility for ensuring that the final thesis is grammatically and stylistically correct. The competent thesis committee may reject a thesis due to these deficiencies.

VII. SUBMITTING THE FINAL THESIS FOR REVIEW TO THE COMMITTEE FOR THE QUALITY OF FINAL THESES

Article 22

After the mentor uses the VIS system (*Final Theses/Review of Final Theses/Progress of Thesis Submission and Content Similarity Detection/The Content of the Thesis is Suitable for Formal Submission*) to grant approval for the submission of the thesis, the student can submit the final thesis by e-mail to the Student Office. Students in the higher education professional study programme (HEP) and students in the master's degree programme (MD) must submit the final thesis within 12 days (two Wednesdays) before the thesis committee meeting, while the students in the academic programme (ACA) have to do it at least 7 working days before the selected oral defence date.

Article 23

The final thesis of the academic programme is reviewed by the Student Office, which informs the student about any potential comments and instructions on correcting the final thesis.

The Committee for the Quality of HEP and MD Final Theses (hereinafter: CQFT) has at least four members representing the basic courses of study (Construction, Mechanics, Energy Engineering, Process Engineering, Production Engineering and Mechatronics). The CQFT meets within two (2) working days from the final deadline for submission of the final thesis.

The CQFT, composed of three members, prepares the minutes, which the Student Office forwards to the mentor and the student, informing them about any comments and instructions on correcting the final thesis.

The CQFT evaluates text formatting, spelling/punctuation and linguistic style (item 7) using the Assessment Sheet for the HEP and MD Final Theses.

If the CQFT finds any major substantive deficiencies, it can reject the student's final thesis while still allowing the possibility of amending the thesis.

VIII. SUBMITTING THE FINAL THESIS

Article 24

HEP and MD students submit their final version of the thesis by entering it into the VIS system (*Completion of Studies/Submission of Thesis*) during the topic validity period. The thesis is then corrected in accordance with the CQFT minutes.

ACA students may submit the final version of the thesis by entering it into the VIS system (*Completion of Studies/Submission of Thesis*) during the topic validity period, following the approval of the Student Office.

Article 25

When submitting the final thesis into the VIS system, students also have to submit a declaration of authorship. After successfully submitting the written thesis and the declaration of authorship by entering it into the VIS system in electronic form, the final thesis is checked for plagiarism using the content similarity detection software integrated into the VIS system.

Article 26

After analysing the content similarity check, the mentor decides on whether or not the final thesis is suitable for defence within (10) ten working days at the latest.

If the mentor assesses that the student has improperly cited parts of the text of the final thesis and that there is too much content similarity, he requests corrections in the content, which must be made by the student within (10) ten working days at the latest.

The share of content similarity in final theses is provided for in the FME Senate decision.

Article 27

The student produces one (1) copy of the final thesis in book (printed) form containing the originally signed topic of the final thesis, which is submitted to the Student Office on the day of defending the final thesis. In addition to the final thesis, the student also submits a filled out and signed *Completion of Studies Form*.

Article 28

The mandatory hard copy of the final thesis is publicly available in the UL FME library, and the electronic version is available through the UL repository (RUL). In the event of any protected or confidential data contained in the thesis, the Dean, having obtained the consent of the mentor and the student, may, at the written request of the data owner, grant inaccessibility of the thesis for the shortest possible time or up to one year from the date of completion of studies. If, at the end of the stated period, there are still valid reasons for the continued inaccessibility of the content of the final thesis, the period of inaccessibility of the final thesis may be further extended by up to one year if requested by the mentor or the student. If the inaccessibility of the final work is approved, a written decision is then issued.

Article 29

For this purpose, the following Policy on the Detection of Similarities of the Digital Format Content of the Written Thesis and the Conditions for the Temporary Inaccessibility of the Content of the Final Thesis and the Instructions on Submitting the Final Thesis in Electronic Form and Content Similarity Detection at UL shall apply mutatis mutandis.

Article 30

The mentor fills in the *Assessment Sheet for the HEP and MD Final Theses* (from points 2 to 6) in front of the competent thesis committee and forwards it to the Student Office.

IX. THE THESIS DEFENCE COMMITTEE

Article 31

The committee for the defence of the final thesis (hereinafter referred to as the "Thesis Defence Committee") is appointed at the meeting of the competent thesis committee. As a general rule, the meeting of the competent committee is held once a month every month except in July. The meetings are specified in the academic calendar. The meetings are convened and chaired by the chair of the competent thesis committee or his deputy, who are both appointed by the FME Senate. The administrative matters for convening the meeting are regulated by the Student Office.

Article 32

Mentors and co-mentors of candidates who have submitted their final thesis by the thesis submission deadline must be invited to the meeting. If the mentor/co-mentor cannot attend the meeting for justifiable reasons, he must substantiate each completed item (from items 2 to 6) on the Assessment Sheet for the HEP and MD Final Theses (even if there are 2, 3 or 4 completed items).

If the student has submitted the final thesis within the prescribed period but is not able to participate in the oral defence due to valid reasons (e.g. medical, etc.), the mentor is nevertheless invited to the 1st subsequent meeting to give his report on the final thesis and provide an assessment. The candidate must submit a written application for the postponement of the oral defence including relevant supporting documents. The oral defence postponement of up to (1) one month is decided by the chair of the competent thesis committee, a postponement of up to (3) three months is decided by the relevant Vice-Dean, and a postponement of over three months is decided by the FME Senate.

Article 33

The Student Office prepares the required documents for the meeting and hands them over to the chair of the competent thesis committee or his deputy on the day of the meeting.

Based on the opinion of the mentor/co-mentor, the Assessment Sheet for the HEP and MD Final Theses and the submitted final thesis, the competent thesis committee decides on the final grade of the final thesis, determines whether the candidates meet the conditions for the oral defence, specifies the defence committee and the chair, as well as the dates and times of the oral defence (they can take place starting from the second working day after the graduation committee meeting).

The chair of the competent thesis committee or his deputy also fills out the information under item 1 on the Assessment Sheet for the HEP and MD Final Theses, regarding the clarity of the definition of the research or technical challenge and the formulation of the thesis hypotheses, purpose or objectives.

Article 34

The HEP and MD students defend the final thesis before the Thesis Defence Committee, consisting of the mentor/co-mentor and at least two teaching faculty members from different professional fields.

The ACA students defend the final thesis before the Thesis Defence Committee, comprising the mentor and two teaching faculty members. At least one committee member must be from another laboratory.

Article 35

The **competent thesis committee** evaluates/grades the **final thesis** in accordance with the UL Statute. The following criteria are taken into account in the evaluation:

- the breadth and depth of the theoretical groundwork,
- familiarity with domestic and foreign literature,
- thoroughness of analysis,
- independence, astuteness, originality and creativity of research and (or) development or technical contributions,
- proficiency in text creation and proper linguistic style.

Article 36

If the competent diploma committee gives the final thesis a failing grade, the candidate cannot take his oral defence.

Within three (3) working days, the chair of the relevant thesis committee consults with the relevant Vice-Dean, who decides whether the candidate may prepare a new final thesis under the same title or choose a different topic.

Article 37

The chair of the competent thesis committee submits the conclusions of the committee meeting to the Student Office, which publishes the oral defence on the Faculty website and ensures that the oral defence runs smoothly.

Article 38

The defence of the final thesis as part of the academic programme is organized by the mentor. He forwards all the necessary information (date and time, location of the oral defence and the composition of the Thesis Defence Committee) to the Student Office, which then publishes this information on the FME website.

X. DEFENDING THE FINAL THESIS

Article 39

A student can defend his final thesis once he has successfully completed all other study

requirements as part of the study programme in which he is enrolled and has received a passing grade for his final thesis from the competent thesis committee.

Article 40

Students should be dressed as specified in the *Instructions for the Thesis Defence at UL FME*.

Article 41

The oral defence is a public event. The oral defence is led by the appointed chair of the Thesis Defence Committee. The defence is conducted in the Slovenian language or, exceptionally, in another language if approved by the FME Senate. The chair of the Thesis Defence Committee keeps the minutes during the defence.

Article 42

The oral defence for each individual student lasts up to 45 minutes. The event begins with the chair of the Thesis Defence Committee presenting the candidate. Next, the chair explains the defence procedure to the candidate and announces the topic of the final thesis.

The candidate presents his final thesis (for about 10 to 15 minutes), focusing mainly on the reasons for choosing the topic, the work methods and the most important findings that are the result of his own work. The candidate should prepare the presentation according to the FME template.

After presenting the thesis, the candidate answers regular and any additional questions from the examiners. The order of the examiners' questioning is determined by the chair of the Thesis Defence Committee, typically in the following sequence: mentor and co-mentor, members of the Committee, chair of the Committee and the audience.

Article 43

Once all the candidates scheduled for that date have finished their thesis defence, the Thesis Defence Committee decides on the grade of the defence and the final grade of studies for each candidate.

The **Thesis Defence Committee** grades each **thesis defence** in accordance with the UL Statute and the curriculum. The following criteria are taken into account in their evaluation:

- the quality of the presentation of the final thesis,
- the candidate's ability to present the achievements of his work within the prescribed time,

- the quality of the answers to the questions posed.

Article 44

If the Thesis Defence Committee gives the defence a failing grade, the final grade of studies cannot be a pass.

The candidate can defend the same final thesis again on the next scheduled date before a committee in a different composition. The student's mentor remains a member of that committee.

Article 45

After the evaluation procedure is completed, the chair of the Thesis Defence Committee writes down the grades in the minutes. The minutes are signed by all the members of the Thesis Defence Committee and the chair of the competent thesis committee.

The chair of the Thesis Defence Committee informs the student of the successful completion of his studies with included explanatory notes, announces the obtained academic title and closes the meeting by addressing those assembled.

After the announcement, the chair of the Thesis Defence Committee hands over the minutes to the Student Office. Following the oral defence, a hard copy of the final thesis is handed over to the UL FME Library.

Article 46

If the candidate does not agree with the grades of the final thesis and the defence, he must lodge a written appeal with the UL FME Dean's Office within three (3) working days after the oral defence. Appeals are reviewed by the relevant Vice-Dean and the chair of the competent thesis committee in accordance with the UL FME Academic Regulations and with these Rules. The second-level appeal body is the FME Senate.

XI. DIPLOMA CEREMONY

Article 47

Diploma ceremonies are typically held three times a year. Graduates receive a written invitation to the diploma ceremony at their email address. The attendees of the diploma ceremony must be dressed in accordance with the *Instructions for the Thesis Defence at UL FME*.

XII. RECORDS ON COMPLETION OF STUDIES AND THE FINAL THESIS

Article 48

The Student Office keeps a record of each graduate in their **Graduate Register** containing:

- the full name of the graduate,
- the registration number,
- the date and place of birth,
- secondary school qualifications,
- the year of secondary school graduation,
- the year of first enrolment,
- the course of study,
- the start of the graduate period,
- the title of the final thesis,
- the full name of the mentor and co-mentor,
- the number of the final thesis,
- the grade point average for exams and tutorials,
- the final thesis grade,
- the final grade of studies and
- the date of completion of studies.

XIII. FINAL PROVISIONS

Article 49

Forms, samples and other documents related to the final thesis are attached to these Rules.

Student (graduate) forms:

- Instructions for the Writing and Structuring of Final Theses at FME including templates for writing diploma/master theses and final work of studies.
- Completion of Studies form.
- Instructions for the Thesis Defence.
- Application for the Extension of the Deadline for Submitting the Final Thesis.
- Deferment of Publication of the Final Thesis form.
- Form for Extending the Deferment of Publication of the Final Thesis.

Forms for members of the thesis committee:

- Assessment Sheet for Diploma and Master's Thesis at UL FME.
- Minutes of the Thesis Defence for ACA, HEP and MA Studies.

Article 50

The FME Graduation Rules shall enter into force on the eighth day following its publication on the UL FME website.

Article 51

The Graduation Rules are published on the FME intranet and website.

Ljubljana, 17 November 2022

Prof. Dr. Mihael Sekavčnik, Dean