Directive of the Dean No. 1/2020					
Name:	on the organisation of doctoral study programmes at the Faculty of Mechatronics, Informatics and Interdisciplinary Studies				
	Name:	Position:	Date:	Signature:	
Guarantor:	doc. Ing. Josef Černohorský, Ph.D.	Dean	18. 4. 2024		
Legal control:	Mgr. Jana Lánská	Lawyer	10. 5. 2024		
Expert employee:	doc. Ing. Petr Šidlof, Ph.D.	Vice-Dean	16. 4. 2024		
Approved by:	doc. Ing. Josef Černohorský, Ph.D.	Dean	13. 5. 2024		
Revision:	02	Valid from:	on the date of approval		
File code:	A I 2 2	Shredding code:	A 5		
JID:	TUL1001304870	Reference No.:	TUL24/7817/026809		

The following terms and abbreviations are used throughout this document:

- AS Academic Senate
- DTH Doctoral Thesis
- Doctoral student a student enrolled in the doctoral study programme
- DSP Doctoral Study Programme
- FM Faculty of Mechatronics, Informatics and Interdisciplinary Studies
- ISP Individual Study Plan
- DB Departmental Board of the Doctoral Study Programme
- SD Study Department for Doctoral Studies at FM
- SDE State Doctoral Examination
- SER Study and Examination Regulations of TUL
- TUL Technical University of Liberec
- SB Scientific Board of FM
- HEA Act 111/1998 Coll., on Higher Education Institutions and on Amendment to Other Acts

Contents

Part I. Joir	nt provisions	3
Article 1	Introductory provisions	3
Part II. Dep	partmental Board	3
Article 2	Status of the Departmental Board	3
Article 3	Members of the DB	3
Article 4	Chairperson of the DB	3
Article 5	Administration of the DB	4
Article 6	Activities of the DB	4
Article 7	Meetings of the DB	5
Part III. Sup	pervisor, academic workplace, DSP consultant	6
Article 8	Academic workplace	6
Article 9	Supervisor	6
Article 10	Consultant	8
Part IV. Stu	dies in the DSP	8
Article 11	Characteristics of the studies	8
Article 12	DSP scholarship	8
Article 13	Study applications	8
Article 14	Admission procedure	9
Article 15	Commencement of studies1	0
Article 16	Interruption, termination of studies1	0
Article 17	Individual study plan1	.1
Article 18	Course of studies, students' duties and control of studies1	.2
Article 19	Examination of a professional subject 1	.3
Article 20	State Doctoral Examination1	.3
Part V. Do	ctoral thesis1	.5
Article 21	Requirements for the doctoral thesis1	.5
Article 22	Application for the defence of the doctoral thesis1	.5
Article 23	Commencement of the defence of the doctoral thesis1	.6
Article 24	Report of the Expert Evaluator1	.7
Article 25	Defence of the doctoral thesis1	
Article 26	Online meetings of committees1	8
Part VI. Fina	al and transitional provisions1	9

Part I. Joint provisions

Article 1 Introductory provisions

- (1) This Directive of the Dean of the Faculty of Mechatronics, Informatics and Interdisciplinary Studies (hereinafter referred to as "FM") of the Technical University of Liberec (hereinafter referred to as "TUL") is issued in accordance with Article 47 and the related provisions of Act 111/1998 Coll., amending and supplementing other acts (the Higher Education Act, hereinafter referred to as the "HEA") and in accordance with Article 1(4) and Part Four of the "Doctoral Study Programmes" of the Study and Examination Regulations of the Technical University of Liberec (hereinafter referred to as the "SER").
- (2) This Directive shall apply to all doctoral study programmes at FM and is binding for all employees and students of doctoral study programmes at FM.
- (3) This Directive regulates the details of the organisation of studies in all doctoral study programmes at FM.

Part II. Departmental Board

Article 2 Status of the Departmental Board

- (1) The Departmental Board of the doctoral study programme (hereinafter referred to as the "DB") is the basic expert, conceptual, control and evaluation advisory body of the Dean for the relevant doctoral study programme (hereinafter referred to as the "DSP") carried out by FM.
- (2) The DB is established in accordance with Article 47(6) of the HEA and the SER.

Article 3 Members of the DB

- (1) Professors, associate professors, and other distinguished experts may be members of the DB. The members of the DB are appointed and withdrawn by the Dean after review hearing by the Scientific Board of FM (hereinafter referred to as the "SB") on the basis of a proposal by the educational institutes or the guarantor of the DSP.
- (2) The Dean also determines the number of members in each DB, with the DB having at least five members and at least two members thereof not being TUL employees.

Article 4 Chairperson of the DB

- (1) In accordance with Article 47(6) of the HEA, the Chairperson of the DB is the guarantor of the relevant DSP. The guarantor of the DSP is appointed in accordance with the Accreditation Regulation at TUL.
- (2) In accordance with Article 20(9) of the HEA, the Chairperson of the DB represents the DB between its meetings and is authorised to decide on the following matters:
 - a. approving changes to the time schedule of the ISP,
 - b. commenting on the application for recognition of compulsory internship/study stay abroad (not recognition within the meaning of Article 29 of the SER) and changes to the internship plan,
 - c. proposing the possible addition of members of committees for the state doctoral examination (SDE) and the defence of the doctoral thesis (DTH) originally discussed by the DB,

- d. proposing to the Dean his/her representative in justified cases (long-term absence, etc.),
- e. proposing new members of the DB to the Dean,
- f. commenting on a student's request for interruption of studies,
- g. commenting on proposals for the approval of supervisors DB examiners for the SDE,
- h. suggesting changes in the form of study.
- (3) The Chairperson shall inform the DB of any decision, see Article 4(2), in an appropriate manner (by email, etc.) without undue delay.

Article 5 Administration of the DB

- (4) Administrative matters relating to the activities of the DB shall be provided by the Study Department for Doctoral Studies at FM (hereinafter referred to as the "SD")
- (5) This department, in cooperation with the Vice-Dean for the DSP and individual DRs, or with their authorisation, is responsible in particular for:
 - a. preparation of written correspondence, documents for the activities of the DB and their distribution,
 - b. handling of written correspondence,
 - c. administrative assistance in the preparation and distribution of minutes,
 - d. Registration of suggestions arising from the initiatives of the DB, their members, supervisors, examiners, and submission of such suggestions to the DB, or the Vice-Dean for the DSP,
 - e. Timely publication of documents, deadlines, agendas, and minutes of meetings, etc.

Article 6 Activities of the DB

- (1) The activities of the individual DBs of the DSPs within the framework of FM are coordinated by the Vice-Dean, who is responsible for the area of doctoral studies (Vice-Dean for Science and Research and Doctoral Studies, hereinafter referred to as the "Vice-Dean for the DSP"). in the sense of the SER.
- (2) The activities of the DB are defined by Part Four of the SER.
- $(3)\,$ The DB closely cooperates with the relevant workplace of the SD.
- (4) In accordance with the SER, the DB performs in particular the following activities:
 - a. proposes that the Dean and the AS approve the conditions for admission to the DSP,
 - b. discusses proposals of the announced themes of doctoral theses within the framework of the DSP, or possible changes to the themes, and their supervisors,
 - c. discusses and approves individual study plans (hereinafter referred to as the "ISP") of the DSP of the students (hereinafter referred to as "doctoral students") and any changes in already approved ISP,
 - d. discusses changes in the structure of study subjects that are part of the relevant study programme and the time schedule of teaching of the DSP in the academic year,
 - e. proposes the composition of the admissions committees for the DSP,
 - f. comments on the proposals for approval of the supervisor and examiners of the SDE
 - g. comments on the maximum number of doctoral students a supervisor may lead,
 - h. proposes the framework requirements necessary for the SDE and their changes,
 - i. in accordance with the rules of ethics of scientific work, proposes the chairperson, vice-chairperson, members of the examination board for the SDE, expert evaluators of the theses and submits these proposals to the Dean,

- j. in accordance with the rules of ethics of scientific work, proposes the Chairperson, Vice-Chairperson, expert evaluators, and members of the defence committee of the doctoral theses (hereinafter referred to as the "defence committee") and submits these proposals to the Dean,
- k. evaluates compliance with the requirements for the defence of the DTH see Article 21,
- I. assesses the course of study, discusses the evaluation of the ISP in the form of annual evaluations of doctoral students, and submits the conclusions to the Dean,
- m. recommends to the Dean the termination of doctoral studies due to failure to fulfil study obligations; the doctoral student is usually invited to discuss with their supervisor,
- n. evaluates the work of the supervisors and submits the conclusions to the Dean,
- monitors the development of the DSP and initiates proposals for changes, initiates proposals to modify the study programme in relation to the conditions of accreditation,
- p. assess the level of implementation of the DSP, its updating and development, and presents their conclusions to the Dean,
- q. performs other activities aimed at ensuring a high level of doctoral studies.

Article 7 Meetings of the DB

- (1) Meetings of the DB are convened through the SD by its Chairperson, when necessary, but at least once per academic year.
- (2) The Chairperson of the DB shall also convene a meeting of the DB at the request of the Dean, or if at least one third of the members of the DB request it in writing.
- (3) Invitations to the meeting of the DB shall state the agenda and the necessary supporting materials shall be made available on the FM website for the relevant DB.
- (4) Meetings of the DB shall be chaired by its Chairperson, or a member of the DB authorised by the Chairperson.
- (5) Any member of the DB may submit comments and suggestions to the agenda of the DB at the latest at the beginning of the meeting.
- (6) The DB shall have a quorum if an absolute majority of all members of the DB are present at its meetings.
- (7) Adoption of a resolution of the DB requires the consent of an absolute majority of the members of the DB present.
- (8) At the request of the Chairperson of the DB, a resolution may also be adopted by means of electronic voting (by e-mail, voting application, etc.), which is considered to be a meeting of the DB. In the case of electronic voting:
 - a. the consent of an absolute majority of all members of the DB is necessary for its adoption,
 - b. if a member of the DB fails to respond within the set deadline, he/she is deemed to have abstained;
 - c. The SD shall notify the members of the DB of the result of the vote.
- (9) It shall also be possible to attend a meeting of the DB in the form of a video conference. In such a case, the participants shall be deemed to be present both for the meeting itself and for the adoption of the resolution. If a secret ballot is part of the meeting, this member shall be entitled to vote only if the anonymity of such a vote is ensured, and the manner of voting must

be uniform for all members of the DB. If the anonymity of the vote is not assured, it shall be considered to be abstained.

- (10) The SD shall keep minutes of meetings of the DB, stating the course and conclusions of the meetings. The attendance list shall be attached to the minutes.
- (11) The minutes of the meetings of the DB, including the attendance list, shall be archived within the SD. Electronic copies shall be sent by e-mail to all members of the DB, to the relevant Vice-Dean for the DSP and shall be published on the website of the respective DB.
- (12) In the event that the DB fails to act in a matter pursuant to the SER (Article 20(7a) to 20(7f)) for a period of more than 60 days, the Dean may decide without discussing with the DB. The Dean shall notify the SB of this fact at its next meeting.

Part III. Supervisor, academic workplace, DSP consultant

Article 8 Academic workplace

- (1) The academic workplace is usually understood as the workplace of the supervisor, i.e., the workplace to which the supervisor was designated by the employer to perform work within the framework of his/her employment. If the workplace of the supervisor is not clearly defined, the academic workplace shall be determined by the Dean on the basis of the proposal of the DB.
- (2) The academic workplace is represented by the respective head of the workplace.
- (3) The academic workplaces of the DSP at FM are institutes of the faculty.
- (4) Participation of partner workplaces in the financial, organisational and personnel support of doctoral studies and their representation in the DB and examining committees shall be subject to bilateral agreements between TUL and/or FM and these workplaces, or shall be subject to joint accreditation according to Article 81 of the HEA.

Article 9 Supervisor

- (1) The supervisor is the guarantor of the quality of the doctoral student's professional training. He/she shall be appointed by the Dean on the basis of the results of the admission procedure and in accordance with the provisions of the HEA.
- (2) The role of the supervisor, his/her rights and duties and the requirements for his/her expertise are set out in Article 21 of the SER
- (3) In particular, the supervisor shall the following competencies:
 - a. lead the doctoral student in the preparation of the individual study plan (ISP),
 - b. propose the theme of the doctoral thesis,
 - c. participate in the organisation of studies, preparation of the ISP, including proposals for individual subjects and their guarantors,
 - d. participate in the evaluation of the doctoral student (may also participate in subject examinations as a member of committees, comment on annual evaluations, etc.),
 - e. actively participate in the professional development of the doctoral student and cooperate with him/her in solving the assigned research theme.
- (4) The supervisor shall guarantee the declaration of such themes of doctoral theses that have the potential to find new scientific knowledge published in scientific journals and conference proceedings.

- (5) The supervisor may recommend the appointment of a consultant from among the pedagogical, scientific, or professional staff of FM, partner workplaces or other organisations. The consultant must be able to guide the student during a certain stage of the doctoral study programme through his/her special expertise or methodological and technical abilities. The consultant, with his/her prior consent, shall be appointed by the Dean upon the proposal of the supervisor and after prior discussion within the DB, which shall also be entitled to withdraw him/her.
- (6) The supervisor, through the head of the academic workplace, shall propose a framework theme or thematic area of the doctoral thesis. The theme shall be announced for the admission procedure after discussion within the DB and approved by the Dean. The supervisor usually participates in the admission procedure of applicants admitted to the doctoral thesis theme proposed by him/her.
- (7) The supervisor shall participate in the SDE and defence of his/her doctoral students' DTH, including the non-public part, with the exception of the closed committee meeting according to the instructions of the Chairperson of the committee. However, he/she may not be a member of the Board for the SDE or the Board for the Defence of the DTH, which his/her doctoral students decide upon.
- (8) The supervisor may teach a maximum of five doctoral students at the same time. An increase in this number for individual supervisors shall be permitted by the Dean on a request of the DB, and in particular based on the results of their doctoral students' studies.
- (9) The supervisor expresses his/her opinion on the regular annual evaluation of the doctoral student(s) entrusted to him/her, in terms of their professional results and unambiguous recommendation to continue with the studies, or whether he/she proposes termination of the studies with the appropriate justification.
- (10) For the defence of the DTH, the supervisor shall prepare an opinion on the doctoral student, in which he/she shall briefly:
 - a. summarise the important facts about the studies of the doctoral student and evaluate their course and results, the theme of the work, the area of research,
 - b. comment on the objectives of the work, open issues, motivation for their solution, invention, independence, activity, productivity of work,
 - c. comment on the doctoral student's key results, publication activity, other R&D outputs and the doctoral student's contribution to their creation of: key ideas, new solutions, experimental verification, applications,
 - d. comment on the involvement of the doctoral student in projects (SGS, GACR, MEYS, etc.),
 - e. mention the pedagogical practice of the doctoral student, involvement in teaching and leading Bachelor's or Master's theses,
 - f. comment on the results of plagiarism control in IS STAG (both in writing int eh evaluation and in IS STAG),
 - g. recommend or not recommend the doctoral thesis for defence.
- (11) In the event that the proposed supervisor is not an employee of TUL¹ and the doctoral student performs creative activities mainly at the supervisor's workplace outside of TUL, the Dean may appoint a consultant from FM to ensure the relevant coordination with FM and participate in the leadership of the doctoral student in accordance with the regulations of TUL.

¹ e.g., he/she works at the Academy of Sciences of the Czech Republic

Technical University of Liberec | Faculty of Mechatronics, Informatics and Interdisciplinary Studies Studentská 1402/2, 461 17 Liberec 1, Czech Republic | www.fm.tul.cz

Article 10 Consultant

- (1) In the event that the theme of the DTH requires specific guidance or professional consultation that cannot be performed by the supervisor, a consultant may be appointed to ensure the agreed part of the vocational education of the doctoral student with the supervisor. The consultant is usually a leading expert and is proposed by the supervisor during the preparation of the ISP.
- (2) After discussion with the DB, the consultant shall be approved and appointed by the Dean based on the supervisor's proposal.

Part IV. Studies in the DSP

Article 11 Characteristics of the studies

- (1) The standard length of studies in the DSP at FM is four years and is supervised by a supervisor according to the ISP, which is approved by the DC.
- (2) Studies in the DSP may be full-time or in a combined form. The requirements for the student and for the course of the studies are the same for both forms.
 - a. Full-time students study and work at the relevant academic workplace and the content of their studies and work is determined by the supervisor together with the head of the department. The doctoral student is present at the workplace according to the requirements of the head of the relevant academic workplace and the supervisor.
 - b. Students in the combined form shall study and work mainly outside the academic workplace, meeting the requirements of the ISP and participating in the work of the academic workplace on the basis of mutual agreement with the supervisor together with the head of the relevant academic workplace.
- (3) The doctoral student shall be entitled to six weeks off per calendar year.
- (4) The administrative aspects of the studies in the DSP and the schedule of the doctoral student are provided by the SD.

Article 12 DSP scholarship

- (1) Students studying in the EU member country in the standard full-time period of study may be awarded a doctoral scholarship in accordance with the relevant directive of the Dean. In the event that the student does not fulfil the obligations of the ISP without serious grounds, the Dean may reduce, suspend, or withdraw the scholarship.
- (2) Students in the full-time and combined form may be awarded a scholarship in accordance with the Scholarship Regulations of FM, the Scholarship Regulations of TUL and the Directive of the Dean on doctoral scholarships at FM.

Article 13 Study applications

(1) Admissions to study in a study programme are governed by Articles 48 to 50 of the HEA and Article 4 of the Statute of TUL. Admissions to the doctoral study programme are conditional upon the due completion of a Master's study programme according to the HEA.

- (2) Candidates for doctoral studies shall be admitted on the basis of the results of the admission procedure, which usually takes place in February and June (it may also take place on another date set by the Dean).
- (3) It is possible to apply for studies continuously throughout the year. The SD may be contacted for more information.
- (4) The application form shall be filled in exclusively electronically, through the IS-STAG portal [https://stag.tul.cz/portal/studium/uchazec/eprihlaska.html?pc lang=en]. After completing the application form, it must be printed, signed, and delivered with the following documents to FM. Unless otherwise specified, the following documents (printed and signed originals/copies) are an integral part of the application:
 - a. proof of the Master's degree, certified copy of diploma (TUL graduates do not need to provide a certified copy), copy of diploma supplement, or other certificates. Applicants from abroad shall be obliged to submit the nostrification of the documents on the achieved education, whereby the proof of the nostrification may be postponed in conformity with the HEA,
 - b. a structured curriculum vitae (including address and contact details);
 - c. a list of professional publications or scientific and research activities or internships,
 - d. a cover letter (approximately one page),
 - e. upon agreement with the future supervisor, it is necessary to fill in the application details theme, academic workplace, and name of the proposed supervisor,
 - f. thematic area of study,
 - g. confirmation of payment of the administrative fee (in accordance with the Statute of TUL²) to the account of TUL,
 - h. a copy of at least a level B2 English language examination certificate the applicant applies for a doctoral degree programme accredited in English and
 - 1. the English language is not the official language of the applicant's country of origin, or
 - 2. has not completed previous education in a study programme accredited in the English language (must be documented).

The test certificate may in exceptional cases be replaced by an examination.

- i. a copy of at least a level B2 Czech language examination certificate, if the applicant applies for a doctoral study programme in the Czech language, and
 - 1. is not a Czech citizen, or
 - 2. has not completed previous education in a study programme accredited in Czech language, unless governed by another regulation.

The test certificate may in exceptional cases be replaced by an examination.

Article 14 Admission procedure

- (1) The application for admission to studies in the DSP is assessed by the Committee for Admission of Student to Studying in the DSP (hereinafter referred to as the "Committee"), which is appointed (ad-hoc or permanent) for the relevant DSP by the Dean based on a proposal from the DB made up of leading experts in the field.
- (2) The Committee, together with the future supervisor, shall assess the written materials (see above), the applicant's previous study results, the results and defence of the state final examination, and the quality and focus of the DTH.

² [cit. 1/12/2023] <u>https://www.tul.cz/en/students/fees-for-students/</u>

Technical University of Liberec | Faculty of Mechatronics, Informatics and Interdisciplinary Studies Studentská 1402/2, 461 17 Liberec 1, Czech Republic | www.fm.tul.cz

- (3) The Committee shall also assess the nature of the practice and its relation to the DSP to which the applicant is applying.
- (4) After examining the application, the Committee shall invite the applicant to an oral interview. An oral interview may be waived in justified cases.
- (5) During the oral interview, the Committee shall assess the applicant's competences for the selected study programme. The oral interview shall last for 15-30 minutes, and the applicant must prove in particular his/her motivation. Furthermore, knowledge of areas related to the planned focus of study may be assessed. At the same time, the ability to communicate in English (for study programmes in Czech and English) and Czech (for foreign applicants applying for study programmes in Czech) shall be assessed.
- (6) The oral interview may also be conducted by video conference at the discretion of the Committee, in particular for foreign applicants.
- (7) The recommendation of the Committee shall be forwarded to the Dean, who shall decide on the admission/rejection of the applicant.

Article 15 Commencement of studies

- (1) The applicant shall receive a written decision on admission, including the date of enrolment for studies, if admitted within 14 days of the interview; for foreign students, the term may be longer due to the standard delivery time. The commencement of studies of doctoral students will take place according to the agreement with the supervisor, and in the case of foreign students it is necessary to submit proof of nostrification (i.e., proof of previous education) by the date of enrolment for studies. The submission of proof of nostrification may be postponed in conformity with the HEA.
- (2) The applicant shall become of student of the DSP on the day of enrolment. The doctoral student shall be a member of the academic community of FM and the academic community of TUL and shall be subject to the rights and obligations arising from the HEA and the relevant internal regulations of FM and TUL. The basis of his/her study obligations is the fulfilment of the ISP under the guidance of the supervisor.

Article 16 Interruption, termination of studies

- (1) The Dean may interrupt the studies on the basis of a written request from the relevant doctoral student - the request shall contain the justification and duration of such an interruption and a statement from the supervisor, the DB and the head of the academic workplace. The interruption of studies shall be permitted by the Dean, who determines in his/her decision the conditions and duration of the interruption - the time and conditions of the interruption are given by the SER.
- (2) At the time of interruption of the studies, the relevant person shall not be a student. After expiry of the period for which the studies were interrupted, the relevant person shall be entitled to re-enrol in the studies.
- (3) The effect of interruption of studies on the payment of a scholarship shall be governed by the Dean Directive on the Awarding of Scholarships to Students of the DSP.
- (4) The maximum total duration of an interruption shall be in accordance with the provisions of Article 54 of the HEA and Article 30 of the SER.
- (5) An interruption may not be permitted in the case that upon commencing the studies after the interruption the student would have to immediately terminate his/her studies according to

Article 56(b) of the HEA, i.e., due to a failure to meet the requirements arising from the study programme.

(6) Part Four of the SER deal with the termination and cessation of studies.

Article 17 Individual study plan

- (1) Studies in the DSP are conducted according to an individual study plan (ISP) under the guidance of a supervisor, or with the participation of a consultant. The ISP is the basic document of individual vocational training of the doctoral student. In accordance with Article 18(3) of the SER, this document shall in particular:
 - a. determine the subjects and their content, expected dates of examinations and specification of specific areas of study (in accordance with valid accreditation, usually a subject with a theoretical basis, two specialised subjects and a subject focused on advanced parts of technical English),
 - b. define the theme of the scientific research or creative research and development activities, which defines open issues in the field and thereby defines the theme underlying the DTH;
 - c. suggest a professional internship listing the selected workplace, the theme of collaboration,
 - d. be in accordance with the standard length of study, the HEA and other regulations of TUL and FM on student duties.
- (2) The ISP shall be elaborated by the supervisor in agreement with the doctoral student and, where appropriate, the consultant, in accordance with the provisions of the SER and submitted to the relevant DB for approval. Together with the proposal of the ISP, the supervisor (or consultant) shall submit an extended a one- (max. two-) page abstract to the DB, which describes in detail the area of research and development, summarises the current state of knowledge of the issue with links to literature and defines the open issues, which may be the subject of the scientific research or creative activities of the doctoral student. The doctoral student and the supervisor shall be informed of the outcome of the discussion.
- (3) Changes in the ISP DB study programme may represent:
 - a. a change to the content of ISP the proposed change in the ISP shall be approved by the DB on the basis of the supervisor's proposal in relation to the specification of the ISP,
 - b. a change to the time schedule of the ISP (extension of study) approved by the DB upon a request recommended by the supervisor; the supervisor shall attach a proposal to change the time schedule of the ISP,
 - c. an interruption of studies authorised by the Dean upon the request of the relevant doctoral student with the relevant prerequisites, see Article 16,
 - d. a change in the form of study approved by the Dean on the basis of an application recommended by the supervisor; the supervisor shall attach a proposal to change the ISP,
 - e. a change of supervisor authorised by the Dean after a prior statement from the DB on the basis of a written request from the relevant doctoral student or supervisor with a statement of the doctoral student and the original and proposed supervisor.
- (4) Changes are possible only on the basis of a written request submitted through the SD.

Article 18 Course of studies, students' duties and control of studies

- (1) Doctoral students usually participate in pedagogical activities in one of the following: exercises in specialised subjects in Bachelor's or Master's study programmes, supervising students' work, professional seminars and consultations.
- (2) During his/her studies, the doctoral student undertakes a compulsory internship abroad in accordance with the accreditation; however, for at least three months. Based on a recommendation of the supervisor and the prior approval of the DB, the doctoral student may also complete an internship at an important research centre in the Czech Republic. The internship (workplace, specialisation) must be carried out in accordance with the approved ISP. In the event that there has been a change or clarification from the time of approval of the ISP to the commencement of the internship, this is considered a change in the ISP (see Article 17(3)). After completing the professional internship, the doctoral student may ask the Dean for recognition of the internship. Afterwards the internship shall be entered into the IS/STAG.
- (3) Doctoral students shall be obliged to pass examinations in subjects within two years of commencement of the doctoral study (the period of interruption of study shall not be included, and the period of professional internship shall not be included in the actual length; however, for a maximum period of one year).
- (4) The essence of studies in the DSP is to carry out original research in performing a specific scientific or research task related to the theme of the doctoral thesis and, depending on the nature of the assignment, also engineering activity of a constructional and technological nature at the highest level of knowledge. The doctoral students publish the results of their research activities.
- (5) According to the possibilities of the relevant academic workplace, it is desirable to participate in the preparation and solution of scientific research projects related to the theme of the doctoral thesis and to participate in the student grant competitions.
- (6) Publication of the results of the doctoral student includes articles in major journals of the field (impacted or reviewed), contributions at major international conferences in the field (according to the ISI or SCOPUS database) published in English in the conference proceedings or other sufficiently significant results according to the valid R&D evaluation methodology.
- (7) In accordance with Article 18(2) to (8) of the SER, the DB shall annually assess the fulfilment of the ISP during the previous calendar year. At the beginning of December, the SD shall send an Annual Evaluation of Students in the DSP form to all supervisors and doctoral students who have been studying for more than six months as of 31 December. The supervisor shall comment on the fulfilment of tasks, passing of examinations, elaboration of the doctoral thesis, publishing activities and propose measures. After adding the opinion of the head of the relevant academic workplace, the supervisor shall submit the annual evaluation to the SD within the prescribed deadline (the first week in January). The SD shall then submit the annual evaluation to the relevant DB for discussion, where the fulfilment of the ISP and obligations are stated.
- (8) The DB shall issue a recommendation to the Dean and then retroactively inform the individual doctoral students and supervisors of the outcome of the discussion of the DB.
- (9) The supervisor or the Chairperson of the DB may submit a proposal for termination of studies at any time during the year. In such a case, the DB shall consider the proposal within one month. The Dean may terminate the studies based on a proposal from the DB.

- (10) In the case of non-fulfilment of the deadlines pursuant to Article 18(3) and Article 20(2), herein, the payment of the scholarship shall be suspended until the obligations are fulfilled.
- (11) In the case of non-fulfilment of study obligations and in the case of neglecting studies, the supervisor or the Chairperson of the DB may submit a proposal to the Dean for reduction or withdrawal of the scholarship or for termination of the studies.

Article 19 Examination of a professional subject

- (1) The guarantor of the subject of the DSP is usually a professor or associate professor. At the same time, he/she is usually an examiner if he/she meets the requirements of the HEA.
- (2) In order to fulfil the study part of the DSP, the doctoral students shall take examinations in the subjects listed in the ISP. The doctoral students prepare for the prescribed examinations according to the instructions of the guarantor or the lecturer (by attending lectures, self-study, professional consultations) in accordance with ISP and relevant legislation (SER etc.).
- (3) Examinations of the subjects of the ISP shall be taken before a committee (at least two members). The examination is prescribed by the ISP and/or the subject guarantor, the presence of a member of the relevant DB or other experts, or a supervisor, is recommended.
- (4) Upon completion of the professional examination, the examiner (guarantor or lecturer of the subject) shall prepare the "Record of passing the professional examination in DSP", add the signatures of all participants and, in cooperation with the SD, the result of the examination shall be entered into IS STAG without undue delay. The doctoral student shall receive the original document and a deliver copy to the supervisor and the SD for further processing and archiving.

Article 20 State Doctoral Examination

- (1) The SDE is organised in accordance with the HEA and SER (Article 22) and its task is primarily to assess the disertability of the submitted theme and the professional competence of the doctoral student to successfully elaborate the submitted theme to defend his/her DTH.
- (2) The doctoral student is obliged to submit an application for the SDE within three years from the commencement of studies (the period of interruption of study shall not be included, and the period of professional internship shall not be included in the actual length; however, for a maximum period of one year). The doctoral student shall submit an application for the SDE to the SD after completing all of his/her study obligations according to ISP. The doctoral student is obliged to have one publication result with their own significant author's share at the time of submitting the application. He/she submits the application, including the supervisor's opinion, on the prescribed form including other particulars according to the prescribed specimen. The SDE is governed by the relevant provisions of the HEA and the SER.
- (3) The doctoral student also submits their thesis in printed form, and their curriculum vitae (see the SER) and also sends them in electronic form to the SD.
- (4) The application and thesis are submitted to the relevant DB and published on the website in the documents for discussion within the DB. The proposal for the composition of the committee and the expert evaluator of the thesis (which is not in a conflict of interest and is not from the same workplace as the supervisor or the doctoral student) is submitted to the Dean via the SD.
- (5) The Dean assesses the results of the studies and determines the date of the examination based on the opinion of the DB. Usually, the SDE will take place within 90 days of the date of submission of the application.

- (6) After elaborating the "Application for the SDE", appointing the committee, setting the date and place of the examination, the doctoral student and the supervisor are informed via the SD and the date of the SDE is published on the website.
- (7) The recommended structure of the thesis is as follows:
 - a. introduction,
 - b. summary and evaluation of existing world knowledge in the field of the doctoral thesis theme,
 - c. definition of the objectives of the doctoral thesis based on an analysis of the current situation,
 - d. overview of the results already achieved and published in the theme area,
 - e. outline of the idea of the future direction of the doctoral thesis,
 - f. conclusion,
 - g. list of used literature,
 - h. presentation of doctoral student's own publications related to the theme,
 - i. structured professional curriculum vitae (without personal information).
- (8) The recommended structure of the thesis assessment is as follows:
 - a. summary of the focus of the thesis,
 - b. evaluation of originality and benefit of the work,
 - c. assessment of the student's approach to the theme,
 - d. assessment of the student's readiness to solve the issue,
 - e. recommendations for further work,
 - f. any questions on the SDE.
- (9) The Dean shall appoint the Committee for the SDE based on a proposal of the DB. The Committee shall consist of a Chairperson, a Vice-Chairperson and at least three other members. Only professors, associate professors and experts approved by the SB may hold the SDE. At least one committee member must be a person outside the academic community of TUL and an absolute majority of the committee must be from outside the supervisor's workplace. The expert evaluator of the thesis shall be a member of the Committee for the SDE. Neither the supervisor nor the consultant shall be a member of the Committee for the SDE.
- (10) The progress of the SDE shall be overseen by the Chairperson of the Committee and usually includes:
 - a. Introduction of the doctoral student by the supervisor,
 - b. presentation of the thesis by the doctoral student,
 - c. familiarisation with the expert evaluator's opinion, discussion of the Committee on the presented theme; individual questions with a brief evaluation of the doctoral student's responses are recorded on the discussion sheet,
 - d. examination by the appointed members of the committee on the themes that are important from the perspective of the DTH; individual questions with a brief evaluation of the doctoral student's responses are recorded on the discussion sheet,
 - e. closed meeting of the Committee, if necessary,
 - f. non-public evaluation of the course of the SDE, which includes a discussion without the participation of the public or the student, and a vote on the evaluation of the SDE,
 - g. the members of the committee decide on the proposal for the evaluation of the doctoral student by secret ballot; ballot papers signed by the scrutineers are enclosed in a sealed envelope enclosed with a protocol stating the number of voters and the individual number of votes,

- h. The overall evaluation of the SDE with either pass or fail is recorded in the progress report of the SDE, including any recommendations for further work by the student on the theme of the DTH.
- (11) After completing the non-public part of the SDE, the student is publically informed of the result.
- (12) The progress report is archived in the student's personal file, individual discussion sheets are attached, and the SD writes the completion of the exam in the IS STAG.

Part V. Doctoral thesis

Article 21 Requirements for the doctoral thesis

- (1) The DTH must contain the original results of the individual work of the doctoral student. The content and formal aspects of the DTH correspond to the practice of publishing scientific results in the given field.
- (2) The conditions and requirements for the DTH are stated in Article 23 of the SER and the current Directive of the Rector on the uniform regulation and publication of Bachelor's, Master's, rigorous, doctoral and habilitation theses.
- (3) In the event of extremely successful publishing activity of the doctoral student, the DTH may be written in the form of a set of articles. The work must meet the requirements for a doctoral thesis according to the SER and the following requirements:
 - a. The DTH contains at least four articles, at least two of which must be published in impact journals of quartile 1 or 2 in one of the FORD categories according to the OECD branch structure (Frascati manual), conference papers published in peer-reviewed proceedings of international conferences, that have a high prestige in the scientific community. At least two of these journal articles must have already passed the review process at the time of submission of the DTH.
 - b. The doctoral student is first author of all of the submitted articles.
 - c. The DTH is monothematic and consistent. The articles cover a common theme, which is also the theme of the DTH.
 - d. The work contains an introduction and joint conclusions of at least 40 pages.
- (4) The DTH must be available to the public for review from the moment when its defence is publicly announced.

Article 22 Application for the defence of the doctoral thesis

- (1) The doctoral student completes the scientific and research part of his/her studies by writing and submitting his/her DTH. The doctoral student submits an "Application of the Defence of the Doctoral Thesis" on the appropriate form, supported by the required documents (see Article 22(5)). The doctoral student may be asked by the dean, the opponent or a member of the DB or the defense committee to declare his/her percentage share of the results in the case of collective work. In such case, he/she shall proceed in the same way as described in Article 21(3).
- (2) It is possible to apply for the defence of the doctoral thesis only after successful completion of the SDE, after fulfilling all of the study obligations and after the completion of the DTH. The defence of the DTH in the DSP is governed by the HEA and the relevant provisions of the SER.

- (3) The deadline for submitting an application for the defence of a doctoral thesis is no later than six years from the enrolment for studies. In justified cases, the Dean may extend the deadline for submitting the application for defence.
- (4) Three results recorded in the WoS or Scopus database, of which at least one result is:
 - a. a first author article in a major journal in the field (impacted or reviewed),
 - b. where appropriate, another sufficiently significant first author result according to the valid R&D evaluation methodology.
- (5) The doctoral student shall submit the "Application for the Defence of the Doctoral Thesis" on the appropriate form, which is delivered to the SD with the following documents:
 - a. three copies of the DTH in the required format. Specimens of the cover and cover pages of final theses are governed by the current Directive of the Rector on the unified regulation and publication of Bachelor's, Master's, rigorous, doctoral and habilitation theses and scripts of the Methodology of processing of Bachelor's and Master's theses.
 - b. ten copies of the "Abstract of the Doctoral Thesis". An abstract of the doctoral thesis is briefly presented in the summary, with the essential conclusions of the doctoral thesis and a complete overview of the literature used, up to a maximum of 24 pages. The abstract is published on the FM website.
 - c. a list of publication results of the doctoral student stating his/her own share in the case of results that have more than one author and the share of authors is not distributed evenly.
 - d. the supervisor's opinion on the doctoral thesis see Article 9(10).
 - e. a structured professional curriculum vitae of the student of the DSP.

Article 23 Commencement of the defence of the doctoral thesis

- (1) After checking the fulfilment of the formal requirements, the SD shall publish the necessary documents on the FM website, inform the Chairperson of the DB of the request to commence the defence of the DTH and provide him/her with all the required documents in the necessary format.
- (2) The SD shall check the addition of the doctoral thesis in the STAG database and complete the date of submission.
- (3) The DB shall discuss the submitted documents, the level of fulfilment of the doctoral student's duties, the fulfilment of the conditions for the commencement of the defence of the doctoral thesis and, if approved, propose to the Dean the expert evaluators of the DTH.
- (4) After collecting the reports from the expert evaluators, the DB shall propose the composition of the Defence Committee for the DTH.
- (5) The Committee shall have at least seven members including the Chairperson. In accordance with the SER, at least two members must be persons from outside of the TUL academic community and more than half of the members must not be employed in the same department/institute as the supervisor or doctoral student. Neither the supervisor nor the consultant shall be a member of the Defence Committee for the DTH.
- (6) If the Dean agrees with the composition, the SD discusses the proposal with the proposed members and the Dean appoints the Committee.
- (7) The agreed date of the defence is published on the FM website in accordance with the SER.

Article 24 Report of the Expert Evaluator

- (1) The Dean, based on the proposal of the DR, shall appoint the expert evaluators of the doctoral thesis in accordance with the SER and the relevant provisions of this Directive.
- (2) The DTH shall be assessed by at least two expert evaluators who are significant experts in the relevant scientific field and at least one of them must be a professor or associate professor. Without limiting the provisions of the SER, at least two expert evaluators may not be in employment with TUL. In exceptional and justified cases, the Dean may grant an exemption.
- (3) The expert evaluators may be members of the defence committee.
- (4) The expert evaluators are obliged to submit a written report and return the DTH within one month from the delivery of their appointment or notify the SD within 15 days from the delivery of the expert evaluator's appointment that he/she cannot prepare the report.
- (5) In accordance with the SER, the expert evaluator's report shall contain in particular:
 - a. summary of the results of the work,
 - b. evaluation of originality and benefit of the work,
 - c. evaluation of the related publishing activity of the doctoral student, and the share of the doctoral student in the individual publications,
 - d. comments on the text, language, and graphic level,
 - e. defence questions,
 - f. conclusions in the following prescribed form:
 - In his/her doctoral thesis, the author demonstrated/did not demonstrate the ability of independent creative work in the given field.
 - The work meets/does not meet the standard requirements for doctoral theses in the given field.
 - g. date and signature of the expert evaluator (may also be electronic).

Article 25 Defence of the doctoral thesis

- (1) The defence of the DTH is organised in accordance with the SER.
- (2) The defence of the DTH will usually take place within 30 days after receiving all of the assessments. The deadline for the defence is agreed by the SD in collaboration with the Chairperson of the DB, the members of the defence committee and the expert evaluators and is announced at least two weeks before the date of the meeting to the applicant and the members of the defence committee. The place and date of the defence are published in the public part of the FM website.
- (3) At the latest two weeks before the date of the defence, all of the members of the defence committee, the supervisor and the doctoral student will receive an invitation, expert evaluator reports, author's summary, and a doctoral thesis in electronic form.
- (4) The defence of the DTH is open to the public. It is conducted in the form of a scientific debate between the applicant, the expert evaluators, other members of the defence committee and other participants in the defence.
- (5) The participation of expert evaluators is necessary during the defence. If, for exceptional reasons, one of them cannot be present and has given a positive opinion, the defence may take place in the presence of at least one expert evaluator.
- (6) The defence shall be overseen by the Chairperson or the Vice-Chairperson of the Defence Committee.
- (7) In the public part of the defence, the following procedure is usually applied:

- a. the Chairperson invites the supervisor to introduce the doctoral student, to present the basic facts concerning his/her studies and to evaluate the main results of the work;
- b. the applicant gives a brief introduction to the content of the DTH in the form of a presentation,
- c. the expert evaluators present the substantial content of their opinions (in the absence of the expert evaluator the report is read out in full),
- d. the applicant provides his/her opinion on the expert evaluators' reports, and in particular their objections and inquiries;
- e. the Chairperson initiates a discussion in which all present may participate. In the discussion it is possible to verify the correctness of the knowledge contained in the DTH.
- (8) After the public part of the defence, a closed session shall be held:
 - a. the Chairperson of the defence committee has the right to invite other persons to the meeting in the closed session,
 - b. the Chairperson of the defence committee has the right to declare the closed meeting of the defence committee, which is attended only by the appointed members of the Committee,
 - c. the defence committee assesses the level of work submitted and the applicant's ability to defend the results and opinions. The members of the defence committee decide on the proposal for awarding the academic title by secret ballot. The ballots signed by the scrutineers in a sealed envelope are attached to the protocol.
- (9) The submission of a proposal for the academic title shall require an absolute majority of the positive votes of all members of the defence committee.
- (10) If the outcome of the vote is "fail", then the defence committee shall, in a closed session, decide by a vote to justify the negative opinion and the decision on the way forward, recommendations for a new defence.
- (11) After the closed session of the defence committee, the next part of the defence is public, and the result of the meeting is immediately notified to the doctoral student during this part.
- (12) A "Protocol on Defence of the Doctoral Thesis", signed by the present members of the defence committee, shall be prepared on the course of the defence and on the result of the voting.
- (13) In the event of an unsuccessful defence, the protocol shall include a justification and recommendation for further work.
- (14) The defence of the doctoral thesis may be repeated once. Submission of the application for a repeated defence must take place no later than one year after the unsuccessful defence, unless in exceptional cases the Dean decides otherwise.

Article 26 Online meetings of committees

- (1) Meetings of SDE committees and the Defence Committee (hereinafter referred to as "meetings") may, in justified cases, be carried out by means of remote communication (hereinafter referred to as "online meetings"). An on-line meeting, in the sense of this article, shall mean any meeting in which at least one member of the relevant committee participates by means of remote communication.
- (2) The examined doctoral student and the Chairperson of the committee, or a member of the committee authorised by him/her, at least shall be present during the meeting in a single room, which shall be technically equipped to record the meeting.

- (3) On-line meetings must be carried out in such a way that in cases stipulated by the HEA, the meetings are publicly accessible.
- (4) The Chairperson of the committee shall announce the decision on the on-line meeting and the conditions under which it will take place sufficiently in advance in the invitation to the meeting. The invitation shall state how the members of the committee and the public may join the meeting and how other persons present at the meeting may speak.
- (5) It is possible to vote at an online meeting. A secret ballot is possible in the event that the technical means used in the online meeting allow it. The method of voting must be uniform for all members of the committee, and all members of the committee must be informed about it in advance. In the case of voting at an online meeting (e.g., Article 20(10/g) and Article 25(8/c)), the result of the voting shall be shown to all members of the committee, and the printed record of the voting shall be placed in an envelope that shall be signed by the Chairperson of the committee.
- (6) By joining the on-line meeting, consent to the holding of a meeting in the online form shall be expressed, including the recording of the meeting. If a member of the committee joins the meeting after the beginning of the meeting or, conversely, leaves the meeting early, he/she shall be obliged to announce this within the used system. The recording of the meeting shall be archived for a period of five years.
- (7) Documentation of online meetings and minutes of meetings shall be provided and signed by the Chairperson of the commission or a person authorised by him/her. Records of voting, or other reports provided by the relevant system, shall also be attached to the minutes.

Part VI. Final and transitional provisions

- (1) This revision 02 replaces the original wording of the Directive from 1 July 2021.
- (2) Students who passed the SDE before 1 July 2021 shall be governed by Directive No. 2/2016 for the submission of their application for defence of their DTH.