ORDINANCE

ON THE DOCTORAL STUDY PROGRAMME OF FORESTRY AND WOOD TECHNOLOGY

AT THE FACULTY OF FORESTRY AND WOOD TECHNOLOGY, UNIVERSITY OF ZAGREB

Pursuant to Article 43 of the Statute of the Faculty of Forestry and Wood Technology, University of Zagreb, at its 7th regular session held on 29 April 2021, the Faculty Council of the Faculty of Forestry and Wood Technology passed the following

ORDINANCE

ON THE DOCTURAL STUDY PROGRAMME OF FORESTRY AND WOOD TECHNOLOGY AT THE FACULTY OF FORESTRY AND WOOD TECHNOLOGY, UNIVERSITY OF ZAGREB

General provisions

Article 1

- (1) This Ordinance on the doctoral study programme of Forestry and Wood Technology at the Faculty of Forestry and Wood Technology, University of Zagreb (hereinafter: Ordinance), regulates the organisation and delivery of the doctoral study programme, forms of and duration of study, enrolment criteria, manner of delivery of the study programme, teaching and research, procedures to propose and assess the outline of the doctoral dissertation, procedure for the proposal, evaluation and defence of the doctoral dissertation, rights and obligations of students of doctoral studies (hereinafter: doctoral candidates), rights and obligations of supervisors, means of assessing quality, and other issues related to organisation and delivery of doctoral studies.
- (2) The terms used in this Ordinance having gender significance, shall apply equally to both the male and female genders.

Article 2

- (1) The Faculty of Forestry and Wood Technology, University of Zagreb (hereinafter: Faculty) organises and delivers the doctoral study programme of Forestry and Wood Technology (hereinafter: doctoral studies). The Faculty organises and delivers the doctoral studies, and finalises the procedure of attaining the doctor of science degree.
- (2) The Faculty is responsible for the collection and archiving of student data (e.g., in the student records).
- (3) The doctoral study programme trains students for proficiency in scientific research work in the field of the biotechnical sciences, field of forestry and field of wood technology.
- (4) The doctoral studies are organised and delivered in line with the Ordinance on doctoral studies at the University of Zagreb, which prescribes the minimal conditions for the organisation and delivery of doctoral studies, and in accordance with this Ordinance.
- (5) In the calculation of deadlines in the Ordinance in Article 36, paragraphs 3 and 5, Article 38, paragraph 2, Article 41, paragraph 1, and Article 43, paragraph 1, non-working days according to the academic calendar are not included.

Article 3

The definitions of terms used in this Ordinance shall be:

- (1) The doctoral study programme (doctoral studies) is a postgraduate scientific university study programme.
- (2) The Board for Doctoral Studies (hereinafter: Board) is the council for doctoral studies that manages the doctoral study programme and ensures the quality of doctoral studies.
- (3) The Faculty Council is the competent body that appoints the committee for assessment of the outline of the doctoral dissertation and proposal of a supervisor (mentor), the committee for assessment of the doctoral dissertation, and the committee for defence of the doctoral dissertation.
- (4) The study advisor is an employee of the Faculty who holds a scientific-teaching or scientific title (rank). At the time of enrolment to doctoral studies, the Faculty Council appoints a study advisor for each doctoral candidate at the proposal of the Board. The advisor monitors the work and progress of the candidate until the appointment of the supervisor.
- (5) The supervisor is a person who holds a scientific-teaching or scientific title (rank) and is appointed by the Faculty Council, and their role is to guide the doctoral candidate through the process of preparing the doctoral dissertation. The provisions on supervisors also apply in the case of dual-mentorship.
- (6) The Advisory Board for doctoral studies is a body that includes representatives of state and public institutions, state and private companies, non-governmental organisations and alumni from the sectors of forestry and wood technology. The task of the advisory board is to advise the Board on the necessary competencies for doctors of science, and on enrolment quotas and models to finance the work of doctoral candidates.

- (1) The doctoral study programme has a duration of three years, or six semesters.
- (2) In exceptional cases, when the doctoral candidate has performed scientific research related to the topic of the dissertation prior to enrolment into doctoral studies, and can display proof thereof, the doctoral study programme may have a shorter duration than three years, but no less than two years.

- (1) The Faculty Council establishes the Board for Doctoral Studies as a permanent working body. The Board manages the doctoral studies and is entrusted with quality assurance. The Board has nine (9) members appointed to a mandate of two years, and is comprised of:
 - Vice-Dean of the Department of Forestry;
 - Vice-Dean of the Department of Wood Technology;
 - Vice-Dean for scientific research;
 - Head of the doctoral studies programme;
 - Two coordinators (one professor in the doctoral studies programme from each department);
 - Representative of course instructors in the study programme;
 - Two representatives of doctoral candidates.

- (2) The Head of the doctoral studies programme is appointed by the Faculty Council for a two-year term.
- (3) The chairperson of the Board is appointed by the Faculty Council for a two-year term, at the proposal of the Dean.
- (4) The fundamental characteristics of the doctoral study programme are research and learning through research, internationalisation, transparency, international measures of quality, and international competitiveness.
- (5) For the purposes of quality assurance and encouraging mobility of doctoral candidates and course instructors, the doctoral study programme is open to all forms of cooperation with similar institutions in Croatia and abroad.
- (6) For quality assurance and better coordination with participants in the system, the Faculty Council establishes the Advisory Board for doctoral studies as its advisory body. The Advisory Board for doctoral studies advises the Board on the necessary competencies of doctors of science in the sectors of forestry and wood technology, and on the enrolment quotas and models to finance the work of doctoral candidates. The Advisory Board for doctoral studies has seven (7) members with a two-year term, comprised of:
- a representative of the state institution from the sectors of forestry or wood technology;
- a representative of a public institution from the sectors of forestry or wood technology;
- a representative of a state company from the sectors of forestry or wood technology;
- a representative of a private company from the sectors of forestry or wood technology;
- a representative of a non-governmental organisation from the sectors of forestry or wood technology;
- two representatives of alumni, one each from the sector of forestry and sector of wood technology.
- (7) In appointing members to the Advisory Board for doctoral studies, particular attention will be paid to ensure equal representation of representatives from the sector of forestry and the sector of wood technology.

Tasks of the doctoral study programme

Article 6

- (1) The tasks of the doctoral study programme are to:
 - 1. create new and relevant knowledge and findings and their applications;
 - 2. educate researchers and foster excellence in the selected scientific area;
 - 3. train doctoral candidates to take an independent, research-based and interdisciplinary approach to problems, to conduct independent research, and to critically assess the work of others:
 - 4. acquire knowledge, experience and skills that allow doctors of science to creatively resolve complex issues in forestry and the wood industry in a research-based manner;
 - 5. internationalise the research work conducted at the Faculty.

Components of the doctoral study programme

- (1) The doctoral study programme includes classes and scientific research work.
- (2) The central component of the doctoral study programme is scientific research and creation of new and relevant knowledge.
- (3) The compulsory forms of work within the framework of doctoral studies are seminars, workshops and discussions, aimed at developing creativity and research work, critical thinking, adoption of methods and general skills.
- (4) Classes in the form of lectures may not exceed 30% of the total workload envisaged in the study programme. The work load in the programme is expressed in accordance with the European credit transfer system (ECTS).
- (5) In accordance with the possibilities and in line with the previously established conditions, classes at the doctoral study programme are also open to all doctoral candidates at the University of Zagreb. Parts of the research and classes in doctoral studies may also be partially opened to doctoral candidates from other universities, with previously established conditions and signed agreements.
- (6) In order to achieve an interdisciplinary approach, doctoral candidates, with the substantiation and approval of their supervisory and consent of the Faculty Council, may enrol in parts of classes and perform parts of their research at the University or other institutions.
- (7) The Board may require doctoral candidates pass differential courses to acquire the fundamental knowledge necessary to attend and complete their studies.
- (8) Courses are carried out in an individual field of the doctoral study programme, and are organised by the head and coordinators of the doctoral study programme.

Forms of doctoral study

- (1) Doctoral studies may have the following forms:
 - 1. Doctoral study programme delivered by the Faculty;
 - 2. Dual-doctorate in which the candidate receives two degrees, with compulsory dual mentorship, i.e., international and inter-institutional co-mentorship (*cotutelle de thèse*);
 - 3. Joint studies executed by two or more universities, whereby only one university is the programme leader;
 - 4. Sandwich model in which the doctoral candidate enrols in the study programme at one university and receives the degree of the institution delivering the study programme, but performs their research at multiple places and may have multiple supervisors;
 - 5. Joint studies executed by two or more different universities where each university is accredited and at least one is outside the Republic of Croatia; each university participates in the enrolment of doctoral candidates, and the doctoral candidate may receive a single degree from two or more universities, or the degree from the university at which they enrolled in the studies, where it states that the studies were a joint study programme.

- (1) For the purpose of increasing research and teaching capacities, ensuring uniform criteria, stimulating an interdisciplinary approach and improving the cost effectiveness of doctoral studies, the Faculty may become part of a doctoral school within the biotechnical field or other scientific fields. The Board considers the possibilities of joining to form doctoral schools and gives its recommendation, which is confirmed by the Faculty Council.
- (2) The Senate decides on the proposal to establish cooperation at the level of a doctoral school, at the proposal of the leader of the study programme.

Enrolment criteria and duration of doctoral studies

Article 10

- (1) The enrolment criteria are determined by the Board in line with the valid regulations. The Faculty Council confirms the enrolment criteria.
- (2) A public call for enrolment into the doctoral study programme is published at least 30 days prior to the start of classes. The decision to publish the public call, the enrolment quotas for the enrolment of candidates into the doctoral study programme, and the decision on costs of the doctoral study programme are made by the Faculty Council. The public call must list the name of the study programme, enrolment criteria, list of all necessary documents required for enrolment, duration of the study programme, costs of the study programme, and application deadline. The public call is published in the media and on the Faculty website.

Article 11

- (1) With the application for enrolment into the study programme, the applicant must enclose:
 - 1. filled out application form (form DR.-A *Application to the call for enrolment to the doctoral study of Forestry and Wood Technology*, which is found in the appendix to this Ordinance);
 - 2. degree from an undergraduate or integral undergraduate and graduate study programme (original or notarised copy);
 - 3. certificate of passed examinations of the undergraduate or integral undergraduate and graduate study programme (supplementary document on the study programme);
 - 4. curriculum vitae;
 - 5. list of published scientific and professional papers;
 - 6. photocopy of an identification document (personal ID card or passport) display the original at the time of enrolment;
 - 7. written statement on the payment of study programme costs.
- (2) Applications are submitted to the Student Office of the Faculty.

Article 12

(1) Enrolment into the doctoral study in the field of forestry is, as a rule, open to persons who have completed university undergraduate study in the Forestry Department or the undergraduate and the graduate study of Forestry or the undergraduate and the graduate study of Urban forestry, nature conservation and environmental protection at the Faculty of Forestry and Wood Technology, University of Zagreb, with a grade point average of 3.50 or higher.

- (2) Enrolment into the doctoral study in the field of wood technology is, as a rule, open to persons who have completed university undergraduate study in the Department of Wood Technology or the undergraduate study of Wood Technology and graduate study of Wood Technology Processes or the graduate study of Wood Product Design at the Faculty of Forestry and Wood Technology, University of Zagreb, with a grade point average of 3.50 or higher.
- (3) For persons who have completed undergraduate studies, the grade point average is calculated as the arithmetic mean of all passed courses, and for persons who have completed the integral undergraduate and graduate study programme, the grade point average is calculated as the weighted average of both study programmes (as the complex arithmetic mean of the average grades and number of earned ECTS credits in the undergraduate and graduate study programmes).

- (1) Enrolment in the doctoral study programme is open to persons who have completed undergraduate or graduate study programmes in the field of forestry or the field of wood technology at another university, including study programmes in other countries, with the possible requirement to pass differential examinations.
- (2) Enrolment may also be approved for persons who have completed university undergraduate or graduate study programmes in other scientific areas and fields, with the passing of differential examinations.
- (3) The decision on the approval of enrolment and differential examinations is made by the Faculty Council, at the proposal of the Board.

Article 14

- (1) A Master of Science from the field of forestry or field of wood technology may directly enrol in the appropriate field of doctoral studies.
- (2) Exceptionally, enrolment may be approved for Masters of Science from other scientific areas and fields, with the passing of differential examinations.

Article 15

(1) At the proposal of the Board, the Faculty Council may exceptionally approve the enrolment of an applicant who has completed undergraduate or integrated undergraduate and graduate study in the field of forestry or wood technology with a grade point average of less than 3.50. The Board gives their recommendation on approval of enrolment based on an analysis of the scientific research work of the applicant (analysis includes published papers in scientific journals indexed in the databases CC (Current Contents), SCI (Science Citation Index) or SCIE (Science Citation Index Expanded), participation in competitive projects, professor and potential supervisor recommendations, and a proposal on the field of research).

Article 16

- (1) The applicant must have active use of the English language.
- (2) An interview with the candidate is a compulsory and integral part of the enrolment procedure, and it is performed by the Board.

- (1) The selection of applicants for enrolment into doctoral studies is performed on the basis of the success in undergraduate or integrated undergraduate and graduate studies among candidates meeting the criteria from Articles 12, 13, 14, 15 and 16 of this Ordinance, and according to the criteria listed in the call for enrolment of doctoral candidates.
- (2) The final decision on the delivery of the doctoral studies in line with the published public call is made by the Faculty Council at the proposal of the Board, if it is established that there is a sufficient number of applicants meeting the enrolment criteria.
- (3) During enrolment, all necessary conditions for the completion of studies in the envisaged time period are clearly defined.
- (4) The name of selected candidates is publicly released on the Faculty website.
- (5) The costs of the doctoral study programme are paid prior to enrolment in each of the six semesters, in equal instalments of the total cost, or at once prior to enrolment in the study programme. In the case of withdrawal from studies during the time courses are in session, the doctoral candidate or other paying the costs of study shall have no right to request a refund of the paid amount for coverage of the costs of the study programme. The costs of printing the diploma and costs pertaining to the graduation ceremony of doctors of science are borne by the doctoral candidate.

- (1) At the time of enrolment into doctoral studies, the Faculty Council, at the proposal of the Board, assigns each doctoral candidate a study advisor from amongst the Faculty teaching staff.
- (2) The study advisor takes on and performs the tasks of the supervisor until the supervisor is appointed, and monitors the work and progress of the doctoral candidate.
- (3) The course of the doctoral studies is described in the form DR.-B that is found in the appendix to this Ordinance.

- (1) The doctoral candidate has the right to complete the study programme under the same conditions as at the time of enrolment within a period of eight (8) years. This eight-year period shall not include justified rest periods (due to pregnancy, maternal leave, parental or adoptive parent leave, extended illness, other justified and substantiated reasons).
- (2) A rest for a rest period from the obligations of the doctoral candidate is submitted to the Board within 30 days from the date of learning of the circumstances for which the rest period is sought, or in the shortest possible time. The Board decides on approvals for rest periods.
- (3) Within a maximum of 30 days after the cessation of the circumstances for which the rest period was requested, the doctoral candidate submits a request to the Board for the continuation of studies. The Board then decides on the new deadline for the completion of study.
- (4) In the case that the quality of the work of the doctoral candidate, assessed through annual evaluation procedures by the Board, is not satisfactory, the Faculty Council may, at the proposal of the Board, decide to revoke the doctoral candidate's right to continue their studies.

(1) The doctoral study programme is delivered as a regular study programme in line with the study programme outline and curriculum. The decision thereto is passed by the Faculty Council at the proposal of the Board.

Article 21

- (1) The study programme consists of:
 - 1. the academic title or degree to be conferred upon the completion of study;
 - 2. enrolment criteria;
 - 3. outline of the content of compulsory and elective courses and the number of hours required for their delivery;
 - 4. credit hours of each course in line with the ECTS system;
 - 5. form of executing classes and the manner of verifying knowledge for each course;
 - 6. learning outcomes;
 - 7. conditions for student enrolment into the next semester or next year of study, and prerequisites for enrolment into individual courses or groups of courses;
 - 8. manner of completing the study programme;
 - 9. provisions on the conditions under which students who have interrupted their studies may continue their studies;
 - 10. manner of quality assurance of the doctoral studies.
- (2) The doctoral study programme is specifically tailored for each doctoral candidate from among the compulsory and elective courses offered, based on the ECTS system. The credit hour value of each course, points awarded for scientific activity and the number of points for the proposal of the doctoral thesis are established in the study programme.

Article 22

- (1) The curriculum is adopted for each academic year, and establishes the following:
 - 1. teachers and associates to deliver classes according to the study programme;
 - 2. place of delivery of classes;
 - 3. start and completion and schedule of delivery of classes;
 - 4. forms of classes (lectures, seminars, exercises, consultations, etc.);
 - 5. manner of taking examinations;
 - 6. examination periods;
 - 7. other important facts for the proper delivery of classes.
- (2) The curriculum is passed by the Faculty Council on the basis of the study programme outline at the start of every academic year.
- (3) The curriculum is published on the Faculty website.

Article 23

(1) Doctoral candidates are required to regularly attend lectures and participate in all envisaged forms of classes. Regular class attendance is confirmed by the course instructor with their signature in the student index record. The semester is confirmed by the Dean based on the confirmation of regular class attendance and completion of all required obligations.

Article 24

(1) A doctoral candidate may only enrol in a higher semester of the doctoral study programme if they have confirmed the previous semester and have completed all obligations required by

the study programme outline and curriculum in accordance with this Ordinance and other regulations.

- (2) The prerequisites for enrolment into the third semester are:
 - · 8 ECTS credits earned from compulsory courses and a minimum of 7 ECTS credits from courses in the elective module from the first year of study;
 - · submitted annual report on the doctoral candidate;
 - positive assessment of the annual report by the study advisor/supervisor on the doctoral candidate's progress.
- (3) The prerequisite for enrolment into the fifth semester are:
 - · all ECTS credits (36 ECTS credits in total) earned from coursework;
 - · outline (synopsis, topic) of the doctoral dissertation submitted and defended;
 - · supervisor appointed;
 - · drafted and approved research financing proposal;
 - · submitted annual report on the doctoral candidate;
 - positive assessment of the annual report by the study advisor/supervisor on the doctoral candidate's progress.

Article 25

- (1) Student knowledge is verified and assessed during the teaching year, and the final grade is determined in the examination. The success achieved in the examination is available to interested members of the professional public.
- (2) The right to insight into the examination documentation may be given to a person who shows a legal interest within a period of one year of the date of holding the examination.

- (1) The Faculty Council may entrust Faculty teaching staff who have been appointed at least into the scientific-teaching title (rank) of assistant professors to teach classes in the doctoral study programme.
- (2) A professor emeritus may participate in the delivery of classes in doctoral studies.
- (3) The delivery of part of whole of a teaching programme may be entrusted to a course instructor, scientist or expert from outside the Faculty, or a course instructor from another higher education institution, or an internationally recognised scientist.
- (4) If the person from paragraph 3 of this Article has not been appointed into a scientific-teaching title, they must be appointed into the corresponding nominal title.
- (5) To improve the teaching and scientific work, the Faculty may invite and appoint prominent teachers and scientists from abroad to be guest lecturers to hold classes in the doctoral studies.
- (6) The decision on invitation and appointment of guest lecturers is made by the Faculty Council at the proposal of the Board.

- (1) The achievement of the study programme of doctoral studies is monitored and coordinated by the Board, which is responsible to the Faculty Council.
- (2) All administrative tasks for the purposes of the doctoral study programme are performed by the Student Office, which is responsible to the Board.

Mentorship

Article 28

- (1) A supervisor may be appointed from among the Faculty teaching staff who is:
 - 1. appointed into at least the scientific-teaching title (rank) of assistant professor or title of scientific associate or the equivalent, if the supervisor has attained their academic title abroad:
 - 2. an active scientist in the field of research in which the doctoral dissertation is performed, or the head or member of a research project;
 - 3. a person who is scientifically active and relevant in the international scientific community and who has published scientific papers related to the proposed doctoral research:
 - 4. a person who has published, or accepted for publication, at least one paper in an international or domestic scientific journal in the A1 category (indexed in the database Web of Science WoS) in the first (Q1) or second (Q2) quartile (and on which the person is the first or corresponding author) in the last five years.
- (2) A supervisor may also be a *professor emeritus* of the Faculty, or a regular member of the Croatian Academy of Sciences and Arts who was an employee of the Faculty.
- (3) The decision on appointment of the supervisor is made by the Faculty Council at the proposal of the Board.
- (4) For the purposes of quality assurance of the doctoral work, dual mentorship is possible where justified.
- (5) Dual mentorship is justified in the case of interdisciplinary research that covers at least two different scientific areas/fields/branches or in the case of conducting research in at least two institutions. One of the supervisors must be an employee of the Faculty.
- (6) Prior to taking on their first mentorship, a person who has not previously supervised a doctoral candidate should attend the supervisor workshop organised by the University or by a recognised international school.
- (7) The Board decides on the number of doctoral candidates that a supervisor may have at any one time. The Faculty Council confirms the decision of the Board.
- (8) A member of the Faculty teaching staff may also serve as a supervisor at another university, with the permission or the Faculty or the University.
- (9) A person appointed as a supervisor prior to going into retirement may complete that mentorship, with the consent of the Faculty Council.

Supervisor obligations

- (1) The supervisor is required to guide the doctoral candidate through the development of the doctoral dissertation, track the quality of the doctoral candidate's work, encourage publication of their work, and enable participation in scientific projects.
- (2) If there are multiple supervisors, each takes responsibility for a previously specified part of the research and procedures to develop the doctoral dissertation.
- (3) The supervisory regularly submits the progress report on the doctoral candidate to the Board, in line with the general act of the Faculty or University, on the University form (form DR.SC.-05 *Annual supervisor report*, which is found in the appendix to this Ordinance).

Rights and obligations of doctoral candidates

- (1) The doctoral candidate is required once per year, at the end of the academic year, on the University form DR.SC.-04 *Annual report on the doctoral candidate*, to submit the report on their work to the Board, with a possible presentation of their research. The report is filled out via the university *Online doctoral candidate database* (OBAD) using the AAI@EduHr electronic identity. The electronic identity of doctoral candidates is assigned by the Faculty system administrator. An example of the form DR.SC.-04 is found in the appendix to this Ordinance.
- (2) The doctoral candidate is required to participate in workshops, seminars, invited lectures and other events organised within the doctoral study programme.
- (3) The doctoral candidate is required at the start of every academic year, no later than 1 November, to regulate their status and to enrol in a higher semester, repeat the semester or enter a rest period. If the doctoral period does not regulate their status by 1 November of the current academic year in the ISVU system, they will be automatically enrolled as repeating the same semester.
- (2) The doctoral candidate has the right to change their supervisor or proposal of the doctoral research, with a written request and explanation of the current supervisor, on the University form DR.SC.-06 *Request for a chance of topic and/or supervisor*, which is found in the appendix to this Ordinance. The decision is made by the Faculty Council at the proposal of the Board.
- (3) The doctoral candidate is required prior to defending the doctoral dissertation to have published, or accepted for publication, at least one paper in an international or domestic scientific journal in the A1 category (indexed in the database *Web of Science* WoS) in the first (Q1) or second (Q2) quartile in the scientific field that is thematically related to the doctoral research (and on which the candidate is the main author). Each paper may qualify only one doctoral candidate unless there is suitable justification to the contrary (such as equal co-authorship).
- (4) The doctoral candidate is required to participate in evaluating the quality of the doctoral studies by filling out the survey questionnaire.

Status of the doctoral candidate

Article 31

- (1) The status of the doctoral candidate is attained with enrolment into the regular doctoral studies. The status of the doctoral candidate is proven with the document whose content and form is prescribed by the minister responsible for science and higher education.
- (2) Persons registered in doctoral studies have the status of a regular student, and in that sense, all the general provisions prescribed by the Faculty Statute apply to them accordingly.
- (3) The doctoral candidate enrolled in the doctoral studies at the Faculty may be:
 - 1. a person whose study costs are covered from the science and higher education system;
 - 2. a person holding a stipend from a Croatian or international foundation;
 - 3. a person whose study costs are covered by Croatian or international scientific research projects;
 - 4. a person holding a Croatian or international scholarship;
 - 5. a person whose study costs are covered by the legal entity in which they are employed;
 - 6. a person bearing the study costs themselves.
- (4) At the time of enrolment into the study programme, the person enrolling in the doctoral study programme contracts the terms of financing their studies. The terms of financing research are determined at the time of designation of a supervisor and the draft of the doctoral dissertation (topic, synopsis).
- (5) During their studies, it is possible to alter the source of financing of studies.

Doctoral dissertation

Article 32

- (1) The doctoral dissertation is a public, scientific work subject to public, scientific assessment.
- (2) Limitations of the public nature of the doctoral dissertation is possible only in exceptional cases, as prescribed by Article 46 of this Ordinance.
- (3) The doctoral dissertation is independent work on a specific topic or posed problem. The purpose is to show that the doctoral candidate has mastered contemporary scientific methods and is trained for independent scientific research work. The doctoral dissertation must contain an original scientific contribution in the given scientific field.

- (1) The forms of the doctoral dissertation are:
 - 1. Scientific monograph.
 - 2. Collection of published scientific papers accompanied by a critical review chapter that consists of an introduction, discussion, conclusion, and a comprehensive review of the relevant literature (Scandinavian model). The critical review positions the results of the doctoral dissertation in the context of the current scientific knowledge. This form of dissertation is only possible as part of a research project in the doctoral study programme, and scientific papers must be published following the enrolment into doctoral studies. The scientific papers compile and proposed as the doctoral dissertation must form a new whole

of at least three papers published in journals indexed in the *Web of Science* and *Scopus* databases in the field of the doctoral research. Each paper may qualify only one doctoral candidate, except with special substantiation. The doctoral candidate must be the main author in at least two of these papers. The combined papers must give a new scientific contribution in relation to the individual papers. Such a dissertation, including the published papers, is subject to the same evaluation and grading procedure as all other forms of the doctoral dissertation.

Article 34

- (1) The doctoral dissertation may be written in Croatian or in English.
- (2) The title, abstract and keywords of the doctoral dissertation must be written in Croatian and in English. The abstract must enable an understanding of the aims of the work, the research methods, results and conclusions.
- (3) If the doctoral candidate wishes to prepare the dissertation in English, then the forms DR.SC. must be filled out in both Croatian and in English.
- (4) The graphic appearance of the doctoral dissertation is prescribed by the University (form DR.SC.-08 *Instructions for design of the doctoral dissertation*, which is found in the appendix to this Ordinance).

Procedure for the submission, assessment and approval of the outline of the doctoral dissertation and proposal of the supervisor

- (1) During the studies, earliest in the first and latest by the end of the fourth semester, the supervisor is designated and the outline of the doctoral dissertation is approved (synopsis, topic) (this and the following provisions also apply to cases of dual mentorship).
- (2) At the time of designation of the supervisor and approval of the outline of the doctoral dissertation, the conditions of the research are established, in particularly the conditions of financing the research.
- (3) The doctoral candidate initiates the process of acceptance of the outline of the doctoral dissertation by submitting the application, which contains general information about the doctoral candidate, curriculum vitae and list of papers of the doctoral candidate, proposed title of the doctoral dissertation, data on the proposed supervisor and their competences, substantiation of the outline of the doctoral dissertation, and the expected original scientific contribution of the proposed research, assessment of costs of the research, and the statement of the doctoral candidate that they have not proposed a doctoral dissertation on the same topic at any other study programme of the University or at another university.
- (4) The outline of the doctoral dissertation is proposed on the University form (DR.SC.-01 *Proposal of the topic of the doctoral dissertation*), via the university *Online database of doctoral candidates* (OBAD) using the AAI@EduHr electronic identity. An example of the form DR.SC.-01 is found in the appendix to this Ordinance.

- (5) The Board considers whether all conditions for initiation of the procedure to propose the outline of the doctoral research have been met.
- (6) The Faculty Council, at the proposal of the Board, appoints the committee for assessment of the outline of the doctoral dissertation and proposal of the supervisor. This committee consists of three or five members, whose scientific activities is in the field of the doctoral dissertation, where at least one member is not a course instructor in the doctoral studies nor is an employee of the Faculty.
- (7) The members of the committee for assessment of the outline of the doctoral dissertation must be appointed to at least the scientific-teaching title of assistant professor or title of scientific associate, or the equivalent title if this is a member of the committee who has earned their title abroad.
- (8) In the case of dual mentorship, the committee for assessment of the outline of the doctoral dissertation must have at least five members if the proposed supervisor are also members of the committee.
- (9) The proposed supervisor may not be appointed as chair of the committee.
- (10) A *professor emeritus* may be a member of the committee for assessment of the draft of the doctoral dissertation and proposal of the supervisor.

- (1) The proposed outline of the doctoral dissertation is defended publicly before the committee for assessment of the outline of the doctoral dissertation and the proposed supervisor and before other doctoral candidates and other interested persons. In the case the doctoral dissertation will be written in English, the doctoral candidate and members of the committee will come to an agreement as to whether the outline of the doctoral dissertation will be defended in Croatian or in English.
- (2) The Faculty Dean publishes the name of the doctoral candidate, the proposed title of the doctoral dissertation, and the date, time and place of defence of the outline of the doctoral dissertation, at least eight days prior to the date of the scheduled defence.
- (3) The committee for assessment of the outline of the doctoral dissertation and proposed supervisor assesses the possible original scientific contribution, assesses the financial and organisational feasibility of the research, and proposes the supervisor. The committee must issue its decision no later than three months after the submitted proposal and appointment. The committee submits its report to the Board on form DR.SC.-02 Assessment of the topic of the doctoral dissertation, which is found in the appendix to this Ordinance.
- (4) At the proposal of the Board, the Faculty Council must give its comments on the proposal of the committee for assessment of the outline of the doctoral dissertation and proposed supervisor at its next session.
- (5) On the basis of the positive assessment of the outline of the doctoral dissertation, the Faculty Council passes the decision to accept the outline of the doctoral dissertation and to appoint the supervisor. The form DR.SC.-03 *Decision on approval of the topic of the doctoral dissertation*,

which is found in the appendix to this Ordinance, is filled out by the appointed supervisor and no later than one month submits it to the authorised person for signature.

- (6) The Council for that area forwards the outline of the doctoral dissertation and appointment of the mentor for adoption to the University Senate. The Senate confirms the outline of the doctoral dissertation and appointment of the supervisor at its next session.
- (7) All scientific research on or with humans or animals must be in accordance with the regulations, and have the consent of the Faculty or University ethics committee, and of the institution in which the research is carried out, the individual consent of all individuals if they are capable of giving such consent, or the consent of their proxies or legal guardians.
- (8) The file of each doctoral candidate that is submitted to the University of Zagreb records office must contain:
 - Form DR.SC.-01 *Proposal of the topic of the doctoral dissertation* (filled out and signed);
 - -Form DR.SC.-02 Assessment of the topic of the doctoral dissertation (filled out and signed);
 - -Form DR.SC.-03 *Decision on approval of the topic of the doctoral dissertation* (filled out and signed);
 - Decision of the Faculty Council on the appointment of the committee for assessment of the outline of the doctoral research and appointment of the supervisor;
 - -Decision of the Faculty Council on acceptance of the outline of the doctoral dissertation;
 - -Opinion of the Ethics committee of the constituent (for proposals of topics where this is required).

Procedure to assess the doctoral dissertation

Article 37

- (1) The doctoral study programme is completed by earning a minimum of 180 ECTS credits and preparation and public defence of the doctoral dissertation. The studies must be completed within the deadline listed in Article 19 of this Ordinance.
- (2) Prior to submitting the doctoral dissertation to the assessment procedure, it is determined whether the doctoral candidate had completed all obligations envisaged in the study programme. The doctoral candidate may submit the doctoral dissertation for assessment only after confirming the completion of all semesters, earning the necessary number of ECTS credits, and covering all study costs.

- (1) The doctoral candidate submits the doctoral dissertation for assessment, with the written consent and opinion of the supervisor on the conducted research and achieved original scientific contribution, to the Student Office, which registers receipt of the dissertation and forwards it to the Board. The assessment procedure of the doctoral dissertation begins with the filling out of the form DR.-C Application for the initiation of the procedure to assess the doctoral dissertation, which is found in the appendix to this Ordinance.
- (2) If the supervisor refuses to give their consent, they must provide written explanation of their reasons within 15 days of receipt of the notification. In both cases, the mentor's explanation, and if required the forms DR.SC.-04 and DR.SC.-05, are submitted to the members of the

committee for assessment of the doctoral dissertation, who take it into consideration during their assessment.

- (3) For the assessment of the doctoral dissertation, the doctoral candidate submits the doctoral dissertation in hard-copy in spiral binding in four (4) copies, and also in electronic form. One copy of the doctoral dissertation in spiral binding is submitted to the Faculty Library for public review, at least eight (8) days prior to the session of the Faculty Council at which the grade will be proposed.
- (4) The Student Office sends the title and abstract of the doctoral dissertation to the University, which simultaneously with the appointment of the committee for assessment of the doctoral dissertation, publishes the title and abstract of the dissertation in both Croatian and English on the University website.

Article 39

- (1) The Faculty Council, at the proposal of the Board, appoints the committee for assessment of the doctoral dissertation, whose scientific activity is from the same area as the doctoral dissertation.
- (2) This committee has three to five members, of which at least one member is not an instructor in the study programme nor a Faculty employee, and if possible is an employee of another Croatian or foreign university or similar institution.
- (3) In the case of dual mentorship, the committee for assessment of the doctoral dissertation must have at least five members if the supervisors are also members of the committee.
- (4) If the Faculty Council has appointed five members of the committee, the doctoral candidate is required to submit an additional two copies of the spiral-bound doctoral dissertation.
- (5) The supervisor may not chair the committee for assessment of the doctoral dissertation. The Faculty Council, at the proposal of the Board, may pass additional rules on the participation of the supervisory in the committee.

Article 40

- (1) Members of the committee for assessment of the doctoral dissertation must be appointed to at least the scientific-teaching title of assistant professor, or the title of scientific associate, or the equivalent title if the committee member earned their title abroad.
- (2) The chairperson of the committee for assessment of the doctoral dissertation must be an employee of the Faculty and hold a scientific-teaching title.
- (3) The members of the committee for assessment of the doctoral dissertation are required to act confidentially with all data and findings in the dissertation under the release of the assessment, in order to protect the scientific contribution of the doctoral dissertation and all intellectual property.

Article 41

(1) The committee for assessment of the doctoral dissertation is required to issue its written report with the grade of the doctoral dissertation within 90 days of its appointment and receipt of the dissertation, not counting non-working days.

- (2) The chairperson of the committee prepares the report pursuant to the collected written opinions of the committee members, and the report is signed by all committee members. Each committee member is entitled to submit a separate assessment.
- (2) The report with the assessment of the doctoral dissertation is written in Croatian, and in the case the doctoral dissertation is written in English, the report is also written in English.
- (3) The committee is required to submit the assessment and proposal in writing and in digital format to the Board for consideration, which then gives its proposal to the Faculty Council for adoption. The written form is submitted on form DR.SC.-10 *Report on the assessment of the doctoral dissertation*, which is found in the appendix to this Ordinance.

- (1) In its report, the committee for assessment of the doctoral dissertation proposes:
 - 1. acceptance of the doctoral dissertation with an explicit statement on the achieved original scientific contribution, or
 - 2. revision of the doctoral dissertation and final assessment, or
 - 3. rejection of the doctoral dissertation, after which the doctoral candidate loses the right to attain the doctor of science degree in that study programme.
- (2) The substantiation is a compulsory part of the report.
- (3) At its next session, the Faculty Council passes the decision on the assessment of the dissertation and appoints the committee for the dissertation defence.
- (4) After passing the decision on the assessment of the dissertation, interested members of the expert public may have supervised insight into the doctoral dissertation.

Procedure of defending the doctoral dissertation

- (1) The doctoral candidate may approach the defence of the doctoral dissertation after the Faculty Council accepts the positive assessment of the committee for assessment of the doctoral dissertation, and no later than within two months.
- (2) The doctoral dissertation may be bound in hard cover after acceptance of the positive assessment. The doctoral dissertation is bound in hard cover in ten copies in A4 format and is submitted in hard copy and digital form to the Student Office prior to the defence.
- (3) For a positively assessed doctoral dissertation, the Faculty Council appoints the committee for defence of the doctoral dissertation, at the proposal of the Board.
- (4) The committee for defence of the doctoral dissertation may have three or five members. The committee for defence of the doctoral dissertation may consist of the same members as the committee for assessment of the assessment of the doctoral dissertation.
- (5) The supervisor may participate in the procedure to defend the doctoral dissertation, in accordance with Article 39 of this Ordinance.

- (6) In the case of dual mentorship, the committee for defence of the doctoral dissertation must have at least five members if the supervisors are members of the committee.
- (7) The chairperson of the committee for defence of the doctoral dissertation is required to determine the scribe for the defence and to propose to the Faculty Council the date, time and place of the public defence of the accepted doctoral dissertation. The Faculty Council passes its decision on the proposal.

- (1) The defence of the doctoral dissertation is public. The Faculty Dean publicly releases the name of the doctoral candidate, topic of the doctoral dissertation, and the date, time and place of defence at least eight (8) days prior to the date scheduled for the defence.
- (2) The public defence may be postponed under exceptional circumstances (inability of the doctoral candidate or committee member to attend the defence due to illness, etc.). In that case, the doctoral candidate submits the *Request for postponement of the public defence* on the form University DR.SC.-07 via the university *Online doctoral candidate database* (OBAD) using the AAI@EduHr electronic identity. An example of the form DR.SC.-07 is found in the appendix to this Ordinance. Pursuant to the received request, the decision thereto is made by the Faculty Dean.
- (3) The defence is held in the premises determined by the Faculty, in the language in which the doctoral dissertation was written, unless otherwise agreed between the committee and the doctoral candidate. In the case of a joint or dual doctorate, the defence may be held at another university.
- (4) The protocol of the defence of the doctoral dissertation is determined on form DR.SC.-11 *Record of the defence of the doctoral dissertation*, which is found in the appendix to this Ordinance.

Article 45

- (1) The committee for defence of the doctoral dissertation issues its grade after the defence. The grade at the defence may be *rite*, *cum laude*, *magna cum laude* or *summa cum laude*. The grade may be made by a unanimous decision of the committee for defence of the doctoral dissertation, or by a majority vote. In the case the doctoral dissertation is not defended, the chairperson of the committee informs the doctoral candidate thereto and the procedure for attaining the doctor of science degree is halted.
- (2) The record on the procedure of the defence is written in Croatian, and in the event of a defence in English, the record is also written in English. The record is signed by all members of the committee and the scribe. An official record of the defence of the doctoral dissertation is kept by the Faculty.
- (3) The defence of the doctoral dissertation may be held only once.

Article 46

(1) In the event the research results of the doctoral dissertation include innovations suitable for the protection of intellectual property rights, the doctoral candidate and the supervisor may notify the University Technology Transfer Office thereof. In that case, the doctoral candidate, with the consent of the supervisor, prior to the submission of the doctoral dissertation for defence, may request the submitted dissertation to be treated as confidential, until the moment of its public release.

- (2) The Technology Transfer Office conducts the procedure of legal protection and commercialisation of the research results, in accordance with the Ordinance on the Technology Transfer Office. In that case, the public defence may be delayed, with the agreement of the doctoral candidate, for a maximum of one year from the submission of the doctoral dissertation for assessment. The request for a postponement of the public defence must be accompanied with the confirmation from the Technology Transfer Office.
- (3) The doctoral candidate attains all copyrights through the very act of preparation of the doctoral dissertation.

Publication and archiving of the doctoral dissertation

Article 47

- (1) The doctoral dissertation is permanently published on the public internet database of doctoral dissertations of the National and University Library if the author has given their written consent thereof.
- (2) The doctoral dissertation is submitted in hardcopy to the National and University Library and to the University archive, no later than one month after its defence.

Graduation ceremony

Article 48

- (1) The doctoral candidate attains the rights of a doctor of science in the field of the biotechnical sciences, scientific field of forestry or scientific field of wood technology, the envisaged work rights, granted upon the successful defence of the doctoral dissertation, and attains the full right to the academic title and degree upon taking the oath at the graduation ceremony and entry into the book of doctors of science.
- (2) Within one month of the defence, the doctoral candidate is required to fill out the university form for the graduate ceremony into the degree of doctor of science, and to submit the bound doctoral dissertation and, if they agree, the confirmation of agreement to release the electronic version of the dissertation on the website of the National and University Library.
- (3) The doctoral degree is conferred by the Rector at the formal graduation ceremony, where the doctoral candidate may attend in person or by their proxy who must hold the degree of doctor of science.

Quality assurance of doctoral studies

Article 49

(1) The Board is required to ensure detailed records on the research work and other performed study obligations for each individual doctoral candidate, including the work plan (such as development of the doctoral candidate's portfolio). The Board is required to take care of the

load and success of the supervisory, and for each supervisor to keep records on the number of doctoral candidates they are guiding, and the number of doctoral candidates who have defended the doctoral dissertation.

- (2) The Board regularly conducts self-assessment based on supervisor reports (form DR.SC.-05 *Annual supervisor's report*, which is found in the appendix to this Ordinance) and the report of the doctoral candidate (form DR.SC.-04 *Annual report of the doctoral candidate*, which is found in the appendix to this Ordinance), and the work report is submitted to the Faculty Council and the University on the form University DR.SC.-09 *Annual report on the work of the study programme*, which is found in the appendix to this Ordinance.
- (3) The criteria to assess the doctoral study programme include: scientific production of professors and doctoral candidates, relevancy and quality of doctoral dissertations, statistical indicators on the duration of study, statistical indicators on the annual number of new doctors in relation to the number of doctoral candidates, achieved international cooperation, and the employability of doctors of science.
- (4) The self-assessment report is submitted during the reaccreditation process.
- (5) The Board conducts anonymous surveys of students of the doctoral study programme during their studies, if they drop out of the study programme or have an extended rest period, and upon completion of the study programme, in which they use the survey forms 1, 2 and 3 which are included in the appendix to this Ordinance and form its integral part.
- (6) The doctoral candidates have the right and opportunity to file anonymous complaints concerning the delivery of the doctoral study programme.

Revocation of the academic degree

- (1) In the case the academic degree of doctor of science is attained contrary to the prescribed conditions for its attainment, or due to ascertaining plagiarism or procedures in the research that are contrary to the ethical principles, the awarded academic degree may be revoked from the person (hereinafter: accused) in a procedure which is analogous to the procedure for awarding the academic degree.
- (2) The accuser, or person who deems that the academic degree of doctor of science has been attained contrary to the prescribed conditions, ethical principles or due to plagiarism, submits their written claim to the Board for doctoral dissertations of the University of Zagreb. The Board for doctoral dissertations of the University of Zagreb forwards the claim to the Faculty, as the institution delivering the doctoral study programme.
- (3) At the proposal of the Board, the Faculty Council appoints a committee which files a report on the justification of the claim. The Faculty Council decides on the report at its session, where both the accuser and the accused may be present.
- (4) The decision of the Faculty Council is sent for approval to the competent bodies of the University.

Transitional and final provisions

Article 51

(1) The Faculty Council is competent for the interpretation of the provisions of this Ordinance.

Article 52

- (1) The doctoral candidates who enrolled in doctoral studies prior to the entry of this Ordinance into force and who have no interrupted their studies, may fulfil the conditions for initiation of the procedure of the assessment of the doctoral dissertation by the rules in effect at the time of enrolment.
- (2) Doctoral candidates whose topic of the doctoral dissertation has been accepted prior to the entry into force of this Ordinance, may fulfil the criteria for initiation of the procedure of the assessment of the doctoral dissertation by the rules in effect at the time of enrolment.

Article 53

(1) As of the date of entry of this Ordinance into force, the Ordinance on doctoral studies at the University of Zagreb, Faculty of Forestry, adopted on 24 November 2016 shall cease to have effect.

Article 54

(1) This Ordinance shall enter into force on the eighth day from the date of its publication on the notification board and the Faculty website.

CLASS: 003-05/16-01/05 REG NO: 251-72-03-16-1 Zagreb, 29th April 2021

Dean

Prof. Tibor Pentek, PhD

This Ordinance was published on the notification board and Faculty website on 30th April and enters into force on 8th May 2021.

List of forms appended to this Ordinance:

Forms of the University of Zagreb:

- 1. Form DR. SC. -01 *Proposal of the topic of the doctoral dissertation*;
- 2. Form DR. SC. -02 Assessment of the topic of the doctoral dissertation;
- 3. Form DR. SC. -03 Decision on the approval of the topic of the doctoral dissertation;
- 4. Form DR. SC. -04 *Annual report of the doctoral candidate*;
- 5. Form DR. SC. -05 *Annual report of the supervisor*;
- 6. Form DR. SC. -06 Request for change of topic and/or supervisor;
- 7. Form DR. SC. -07 Request for postponement of the public defence;
- 8. Form DR. SC. -08 *Instructions for design of the doctoral dissertation*;
- 9. Form DR. SC. -09 Annual report on the work of the study programme;
- 10. Form DR. SC. -10 Report on the assessment of the doctoral dissertation;
- 11. Form DR. SC. -11 Record from the defence of the doctoral dissertation.

Internal forms of the Faculty:

- 1. Form DR. A. Application for the call for enrolment to the doctoral study programme of Forestry and Wood Technology
- 2. Form DR. B. *Course of the doctoral study programme*
- 3. Form DR. C. Request for initiation of the procedure to assess the doctoral dissertation

Survey forms:

- 1. Survey Form 1 Survey Form for students enrolled in the doctoral study programme of Forestry and Wood Technology
- 2. Survey Form 2 Survey Form for students wishing to withdraw from the doctoral study programme of Forestry and Wood Technology
- 3. Survey Form 3 Survey Form for students who have completed the doctoral study programme of Forestry and Wood Technology

All forms are available online at: http://unizg.sumfak.hr/