

Pursuant to Article 50 of the Statutes of the Faculty of Civil Engineering - Zagreb, the Faculty Council passed, at its ordinary session held on 5 November 2014, the ORDINANCE ON POSTGRADUATE UNIVERSITY DOCTORAL STUDIES.

The Ordinance has been amended, so the Faculty's administrative services have defined and prepared a consolidated text of the Ordinance consisting of:

1. Ordinance on Postgraduate University Doctoral Studies as passed on 5 November 2014.,
2. Ordinance on Amendments to the Ordinance on Postgraduate University Doctoral Studies as passed on 4 November 2015 and
3. Ordinance on Amendments to the Ordinance on Postgraduate University Doctoral Studies as passed on 9 November 2016.

The Ordinance on Postgraduate University Doctoral Studies and Ordinances on Amendments to the Ordinance on Postgraduate University Doctoral Studies specify the date when they come into force.

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D E A N

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ORDINANCE
on Postgraduate University Doctoral Studies
(consolidated text)

I. GENERAL PROVISIONS

Article 1

(1) This Ordinance regulates issues relating to the structure and implementation of postgraduate university studies for acquiring a doctorate (PhD degree) in sciences as structured and realized by the Faculty of Civil Engineering of the University of Zagreb (hereinafter referred to as: the Faculty), issues relating to the status of students (hereinafter referred to as: Doctoral Candidates), and other issues relating to the doctorate in the sciences.

(2) The issues that are not regulated by this Ordinance shall be regulated in an appropriate way by law and by Ordinance on Doctoral Studies at the University of Zagreb.

Article 2

The expressions that refer to natural persons in this Ordinance in masculine gender are neutral, and refer to persons of both masculine and feminine gender.

II PROVISIONS ON POSTGRADUATE STUDIES FOR PhD DEGREE IN SCIENCES AND PROVISIONS ON DOCTORAL CANDIDATES

Bodies relevant to the Studies

Article 3

(1) The Faculty Council (hereinafter referred to as: the Council) is the body in charge of postgraduate university doctoral studies in sciences (hereinafter referred to as: Doctoral Studies).

(2) The Science Board (hereinafter referred to as: the Board) manages the studies, and it is headed, ex-officio, by the Vice-Dean for Science.

(3) The Council appoints a head for each branch of research for a two-year period, based on the proposal of the head of department whose lecturers conduct the greatest part of the lecturing activity. A person who is a lecturer at Doctoral Studies can be appointed as the head. The same person can be appointed as the head several times.

Organisation of doctoral studies

Article 4

(1) Doctoral Studies are organised and conducted in the scientific area of technical sciences, in several branches of research in the field of civil engineering and in the fields of fundamental technical sciences (geotechnics, water engineering, engineering structures, materials in civil engineering, mechanics of structures, construction management, and transportation engineering).

(2) Doctoral Studies are organised in accordance with the ECTS credit point system and realised in Croatian and English languages.

(3) The academic title acquired at the end of the studies is "PhD in the scientific area of technical sciences".

Article 5

(1) Doctoral Studies consist of lectures, other obligatory forms of work, elective forms of work and the preparation and defence of doctoral thesis.

(2) Doctoral Studies are realised as regular (full time) three-year studies and as part-time four-year studies.

(3) When enrolling in Doctoral Studies, the candidates must submit a written statement that the time at their disposal is sufficient for the fulfilment of obligations relating to full-time or part-time studies.

(4) The duration of lectures is the same for full-time and part-time studies (two semesters), and the duration of other forms of research work is extended in case of part-time studies.

(5) Various forms of work conducted in the course of Doctoral Studies, and the corresponding ECTS credits, are presented in the appendix to this Ordinance, and form an integral part thereof.

(6) ECTS credits indicate the value of obligations fulfilled and not the time needed for their fulfilment.

Enrolment to doctoral studies

Article 6

(1) Doctoral Candidates enrol in Doctoral Studies following a public competition organized by the Council, upon a proposal by the Board, at least one month prior to the start of studies.

(2) No more than 30 Doctoral Candidates may be enrolled each year.

(3) Doctoral Studies may be attended by the candidates who have completed:
- university graduate studies or university undergraduate studies in civil engineering
- university graduate studies or university undergraduate studies in the area of technical sciences and in the fields related to civil engineering, and who, in the course of previous studies, have obtained at least 60 ECTS credits from courses belonging to the field of civil engineering.

(4) The candidates who did not obtain the required number of ECTS credits will be required to pass differential examinations to be determined by the Board.

(5) The Board may define differential examinations for the candidates who have obtained less than 30 ECTS credits in the branch of research in which the Dissertation will be prepared.

(6) Differential examinations will be taken by Doctoral Candidates after the enrolment in Doctoral Studies. Doctoral Candidates are required to pass differential examinations prior to enrolment in the third semester. Differential examinations are not included in the teaching load of Doctoral Studies.

(7) Doctoral studies may also be attended by the candidates who have obtained an MSc degree according to earlier regulations, and the Board can acknowledge the previously fulfilled obligations that correspond to obligations contained in the program of studies they are enrolling in.

Article 7

(1) A classification procedure is conducted prior to enrolment in Doctoral Studies. The achievement in previous studies is evaluated in the classification procedure.

(2) To be eligible for enrolment, the candidates must meet requirements specified in Article 6 of this Ordinance, their aggregate average grade from undergraduate and graduate studies should be at least 3.5, and they must be proficient in the English language.

(3) An interview with each candidate is an obligatory part of the entrance classification procedure. The candidates must have a recommendation from a potential future mentor in writing the dissertation (hereinafter referred to as: the Mentor), which includes a general description and working title of a broad Dissertation topic.

(4) A candidate not meeting the above average grade requirement may also be eligible for enrolment if he/she presents recommendations from two lecturers at doctoral studies (one of whom must be the candidate's graduate thesis mentor), and if he/she is a co-author of at least one paper presented at a congress/conference or published in a journal. If the graduate

thesis mentor is also the Mentor, the candidate is required to have an additional recommendation (three recommendations in total).

(5) The names of the selected candidates and their qualifications shall be posted on the Faculty's web pages.

(6) At enrolment in Doctoral Studies, the Board appoints to each Doctoral Candidate a mentor/study counsellor who provides assistance to the Doctoral Candidate until the appointment of a Mentor.

(7) Doctoral Candidates shall pay the tuition in the sum defined by the Council.

(8) The Faculty shall be responsible for collecting and storing Doctoral Candidates' data.

Article 7a

(1) Doctoral Candidate may be:

- A person whose study expenses have been covered from the science and higher education system
- A holder of Croatian or international scholarship
- A holder of scholarship from Croatian or international foundations
- A person whose study expenses have been covered by Croatian or international research projects
- A person whose study expenses are borne by the legal entity that employs him/her
- A person who personally bears his/her study expenses

(2) At enrolment, the person who is enrolling in doctoral studies agrees on the conditions of financing the studies (research financing conditions shall be determined at the time of defining the mentor and dissertation draft). In the course of the studies, the source of financing the studies may be changed.

Lectures

Article 8

(1) In the first semester of Doctoral Studies, each Doctoral Candidate must prepare a plan of duties and research, which is jointly signed by the Doctoral Candidate and the mentor/study counsellor and approved by the Board.

(2) This plan of duties and research contains a list of courses enrolled in, the order of exams to be passed, the way in which ECTS credits are acquired and the expected time when the Dissertation theme will be declared.

Article 9

(1) A maximum of 36 ECTS credits can be obtained in the course of lectures as follows: by enrolling in four elective courses each bringing 6 ECTS credits, by enrolling in the obligatory course "Methodology of scientific research", 6 ECTS credits and, exceptionally, by enrolling in another elective course, 6 ECTS credits.

(2) In consultation with the mentor/study counsellor or Mentor, each Doctoral Candidate may also select courses from related Doctoral Studies offered at the University of Zagreb or other universities.

- (3) When six or more Doctoral Candidates are enrolled in a course, the teaching activity is conducted in the form of lectures and, in case of a smaller number of Doctoral Candidates, the teaching is conducted in the form of consultations.
- (4) For each course, the teaching activity is normally completed within one semester.
- (5) The teaching activity for a course can also be organised in a shorter period of time as teaching in shifts or as teaching in blocks (block scheduling).
- (6) Total weekly obligations of Doctoral Students taking part in direct postgraduate studies may amount to no more than 12 hours and, if lecturing is organised over a shorter period of time, then weekly obligations of Doctoral Students may exceptionally exceed 12 hours per week.
- (7) Teaching in the form of lectures may not exceed 30 percent of the total load envisaged in study programmes (including the writing of dissertation). The load is presented in line with the European Credit Transfer and Accumulation System (ECTS) or it is evaluated in another way.
- (8) The implementation plan for each academic year is passed by the Council at the proposal of the Board. This implementation plan contains: a list of courses, corresponding ECTS credits and the names of lecturers who will be course coordinators, a schedule of courses, and the way the teaching will be conducted.
- (9) Based on the Board's decision, and after the Mentor's/study counsellor's or Mentor's opinion has been obtained, Doctoral Candidates may spend one semester in the course of their studies at another scientific organisation, within the country or abroad. The Doctoral Candidate and his/her mentor/study counsellor or Mentor shall propose a research program to be realised at another scientific organisation. This program may also envisage taking an appropriate examination. The ECTS coordinator shall acknowledge the examinations passed in this respect after an appropriate opinion is formulated by the course lecturers.

Examinations and other tests

Article 10

- (1) Knowledge of Doctoral Candidates can be tested and graded during classes, and the final grade will be awarded at the examination.
- (2) The success obtained by Doctoral Candidates at examinations and other tests shall be expressed using the following grades: 5 - excellent, 4 - very good, 3 - good, 2 - pass, 1 – fail. The Faculty is required to keep continuous records about the examinations. The following passing grades shall be entered into the filing register and other documents relating to Doctoral Candidates: 5, 4, 3, and 2. The grade fail (1) is a non-passing grade and is entered in the filing register only.
- (3) It can be specified in the implementation plan that some teaching activities can be conducted without grading, or that they are evaluated through descriptive grades, or that the final grade can be determined through tests and grading during the teaching activity, or that grades obtained by Doctoral Candidates in distinct forms of teaching activity will be taken into account when defining the final grade representing the knowledge of Doctoral Candidates obtained for a particular course at examination and/or other forms of verification. The lecturer conducting a teaching activity has the right to test and evaluate the knowledge of Doctoral Candidates in any form of teaching activity.

Article 11

- (1) Only Doctoral Candidates who have fulfilled all requirements specified in the implementation syllabus will be allowed to take examinations. The examinations are public and Doctoral Candidates have the right to request that oral exams be open to the public.
- (2) Examinations can be theoretical and practical and they are taken either in written form only, in oral form only, or in both written and oral forms, or through realization/presentation of practical work. The entire exam must be completed within no more than five working days, except in especially justified cases.

Article 12

- (1) If a Doctoral Candidate is not satisfied with the grade obtained during examination, he/she has the right to take the examination in front of a committee, provided that he/she has submitted a written application for re-taking the exam within 24 hours after being informed about the grade.
- (2) This repeated exam shall be organized within three days following the submittal of the Doctoral Candidate's application.
- (3) The Dean or a person authorised by the Dean shall appoint a three-member committee for this exam.
- (4) The course lecturer must be one of the committee members, but he/she may not be its president.
- (5) At least one of the committee members must be a lecturer of some other course. The committee makes its decision by majority of votes.
- (6) A written test or a written part of the exam shall not be re-taken in front of the committee, but it will be graded once again by the committee.
- (7) The Committee is required to keep minutes of the exam, and these minutes must include the final decision about the grade. The minutes will be submitted to the Dean i.e. to the person authorised by the Dean.

Other required forms of work

Article 13

- (1) Generic skills are developed and acquired in the scope of the required course "Methodology of scientific research", bringing 6 ECTS credits, as presented in Article 9, Paragraph 1. This course consists of lectures and corresponding workshops.
- (2) Research seminars and discussion groups are established in order to develop research work, adopt scientific methodology and promote a critical way of thinking.
- (3) The following activities are included in the research seminar: public defence / discussion about the theme and original scientific contribution of the Dissertation and, possibly, presentations about the course of writing the Dissertation with a discussion, guest lectures and similar obligatory forms of work.

(4) Doctoral Candidates are required to make presentations at seminars (at least one presentation each year, and at least one presentation in the English language during the studies), and to take part in other seminars. Seminars are organised by lecturers and heads of research areas. They are organised during all three years of doctoral studies and the attendance at these seminars brings 16 ECTS credits at the first year of studies, while one ECTS credit is gained in the second year and the third year of studies.

(5) Discussion groups are also an obligatory form of work and they bring 1 ECTS credit per each year of studies. Discussion groups are organised by mentors/study counsellors or Mentors; discussion topics cover recent scientific achievements, relevant new literature overview, selected themes of interest for the current and future research, etc.

(6) A total of 27 ECTS credits should be obtained through other required forms of work.

(7) ECTS credits for the forms of work structured and implemented by the Faculty, mentioned in Paragraph 2 of this Article, are defined and entered in the student's transcript by the mentor/study counsellor or Mentor.

(8) For the forms of work that are not structured and implemented by the Faculty, ECTS credits are defined and entered in the student's transcript by the ECTS coordinator, after a consultation with the mentor/study counsellor or Mentor.

Elective forms of work

Article 14

(1) Elective forms of work include: publication of papers, enrolment in additional elective courses, development at other scientific organisations, summer schools or other appropriate workshops either at the university or at other scientific organisations.

(2) Eight ECTS credits must be obtained through elective forms of work (ECTS credits for elective courses are presented in Article 9, Paragraph 1).

(3) The required ECTS credits must be obtained in at least two different activities.

(4) ECTS credits for the forms of work structured and implemented by the Faculty, mentioned in Paragraph 1 of this Article, are defined and entered in the student's transcript by the mentor/study counsellor or Mentor.

(5) For the forms of work that are not structured and implemented by the Faculty, ECTS credits are defined and entered in the student's transcript by the ECTS coordinator, after consultation with the mentor/study counsellor or Mentor.

Dissertation

Article 15

(1) Dissertation is a principal part of the studies, and it includes research work, preparation of Dissertation and Dissertation defence. Before the Dissertation defence, every Doctoral Candidate must have at least one paper published or accepted for publishing (the candidate being the only author or one of the main authors) in a journal indexed in the Current Contents - Science Citation Index Expanded database, which is thematically linked to the doctoral research. Ten ECTS credits will be awarded for this paper. 115 ECTS credits will be

awarded for all activities related to the Dissertation. Doctoral studies end with the preparation and defence of the Dissertation.

- (2) Dissertation can be written and defended either in Croatian or English language. The title, abstract and key words of the Dissertation must be written in both Croatian and English language. The abstract must enable understanding the paper's objectives, research methods, results and conclusions.
- (3) Graphical layout of the Dissertation is prescribed by the University.
- (4) Dissertation must be an original scientific work and must be composed of the following chapters: the premise of the work, relevant overview of the current state of knowledge in the field of research, description of methods used in the candidate's research, description of the candidate's research with the presentation of results, conclusion from which an indisputable original scientific contribution can be seen and a list of literature used by the candidate.

Course of studies

Article 16

- (1) To be able to enrol in the second year of studies, each Doctoral Candidate must pass three courses, one of which must be the "Methodology of Scientific Research", obtain 17 credits as defined in Article 13, Paragraphs 4 and 5, of this Ordinance and obtain a positive report from the mentor/study counsellor for the first year of the studies.
- (2) To be able to enrol in the third year of doctoral studies, each Doctoral Candidate must obtain all ECTS credits relating to the first year of studies and 2 ECTS credits as defined in Article 13, Paragraphs 4 and 5, of this Ordinance, as well as have a positive mentor's report for the second year of studies.
- (3) In case annual evaluations made by the Board reveal that the quality of a Doctoral Candidate's work is not satisfactory, the Board may decide to revoke this Doctoral Candidate's right to continue the studies.
- (4) Doctoral Candidates are allowed to enrol in the first and second year of studies no more than two times.

Article 17

The number of ECTS credits awarded to the Doctoral Candidates transferring from other Doctoral Studies will be compliant with the provisions of the Faculty's programme of studies and this is regardless of the number of ECTS credits awarded to such candidates in the scope of the program of studies they are transferring from.

Article 18

- (1) Doctoral Candidates shall be entitled to complete their studies under the conditions under which they enrolled, within eight years. A Doctoral Candidate may submit an application to continue doctoral studies before the expiration of the eight-year period. Based on the application submitted, the Board defines the conditions for continuing the studies. Said eight-year period does not include the period of inactivity due to justified reasons (pregnancy, maternity leave, parental or adoptive parent leave, prolonged period of illness and other justified and explained cases).

(2) After the completion of Doctoral Studies, Doctoral Candidates shall have gained at least 180 ECTS credits.

Article 19

Doctoral Candidates who have interrupted their studies, at their request, may resume the doctoral studies after having met the requirements contained in the program of studies they are enrolling in.

Dissertation mentor

Article 20

(1) A person can be appointed as Mentor if he/she:

- holds at least the research-and-teaching rank of assistant professor or the rank of research associate, or an equivalent rank, if the prospective mentor has acquired his/her academic rank in another country
- is the head or a member of a research project, i.e. a researcher active in the field in which the dissertation is prepared
- is active in science, relevant in the international scientific community, and has published research papers related to the proposed doctoral research
- has published research papers over the past five years.

(2) In exceptional cases, a professor emeritus or a regular member of the Croatian Academy of Sciences and Arts can also be a Mentor, if approved by the Council.

(3) In order to ensure the proper quality of the dissertation, a dual mentorship may be allowed, if there is a need for such type of mentorship (e.g. to ensure interdisciplinarity of research, the conduct of research at several scientific organizations, etc.).

(4) A Mentor is a lecturer at the Faculty and, in case two Mentors are appointed, one of these Mentors may be a person who is not employed with the Faculty.

(5) A Mentor is appointed by the Council at the proposal of the Board. The Mentor's consent must be obtained prior to such appointment.

(6) At the proposal of the Board, the Council decides on the number of Doctoral Candidates a Mentor is allowed to have at the same time.

(7) A Mentor can request to be relieved of his duty. A new Mentor will be appointed as defined in this Article.

(8) Prior to appointment to his/her first mentorship duty, the Mentor must complete the Mentors' workshop organised by the University or by a recognized international school.

(9) A Mentor who is not employed with the Faculty must sign a contract on cooperation and assumption of responsibility with the Dean.

(10) A lecturer from the Faculty can also be a Mentor at another university, subject to approval by the Faculty.

(11) A Mentor who has assumed the Mentorship position before his/her retirement is entitled to complete the Mentorship duty, subject to approval of the Council.

(12) A Mentor will guide a Doctoral Candidate during the preparation of his/her Dissertation, monitor the quality of the Doctoral Candidate's work, encourage the publication of his/her papers and enable him/her to take part in scientific projects.

(13) If several Mentors have been appointed, each one shall assume the responsibility for a previously defined part of research and dissertation preparation procedure.

(14) Once a year, the Mentor shall submit to the Board his/her report on Doctoral Candidate's work, using an appropriate form specified by the University.

(15) In the period before the appointment of the Mentor, the report will be submitted by the mentor/study counsellor.

(16) Doctoral Candidates have the right to change the Mentor or the theme of doctoral research once, based on a written request and statement written by the former mentor, using a University form. This shall be decided on by the Council.

Submittal of Dissertation draft

Article 21

(1) The submittal of Dissertation draft must include: the proposal of Dissertation title in Croatian and English languages, justification of the theme with description of the body of knowledge in this field, research objective and research plan, description of research method, content of research, expected original scientific contribution of the Dissertation, a list of literature to be used during the preparation of the Dissertation and Mentor appointment proposal. The Dissertation theme will be submitted using a University form.

(2) When submitting his/her draft, a Doctoral Candidate shall also submit a statement stating that he/she shall conduct original research and that he/she has not initiated the procedure for acquiring a PhD degree at any other scientific organisation.

(3) The Council will establish a committee formed of 3 members (exceptionally 5 members) for determining the requirements and approving the Dissertation draft. Each member of the Dissertation Draft Evaluation Committee must have at least the research-and-teaching rank of assistant professor or research associate rank. At least one of the committee members must be a lecturer or researcher who is not employed by the Faculty and who does not participate as a lecturer in these studies.

(4) The Dissertation draft proposal shall be accepted by the Council based on the report submitted by the committee. The proposed Mentor must not be the chair of the committee.

(5) Each Doctoral Candidate is required to complete a public defence of the theme in the scope of the Dissertation draft approval procedure.

(6) The public defence of the theme shall be held at the Faculty in front of the committee for determining requirements and theme approval, which must include its evaluation in the report.

(7) The report of the committee for determining the dissertation draft approval requirements shall contain:

1. requirements to be met prior to the preparation of the Dissertation, scientific area and field the Dissertation is related to, evaluation of the topicality and content of the research and the language in which the Dissertation will be written,

2. Filled in forms for draft submittal (DR.SC. - 01) and theme evaluation (DR.SC. - 02).

The dissertation draft approval and mentor proposal committee shall propose its evaluation of the originality of scientific contribution and the assessment of the financial and organisational feasibility of the research, as well as propose an appropriate Mentor no later than three months after the submittal of the application.

(8) The Council shall appoint a Mentor to each Doctoral Candidate whose dissertation draft has been accepted.

(9) Each Doctoral Candidate has to initiate the dissertation draft approval procedure at such a time that will enable the University Senate to confirm the draft and the Mentor no later than in the course of the fifth semester.

(10) The approved dissertation draft brings 13 ECTS credits.

Article 22

(1) A Doctoral Candidate who has made significant scientific achievements may exceptionally be allowed to register his/her Dissertation draft even without attending the lectures and passing the exams. Such scientific achievements shall be determined by the Council, upon the proposal of the committee.

(2) The Board may also recognise the fulfilment of other obligations that correspond to the obligations from the program of studies.

(3) The provisions of this Ordinance shall be applied as appropriate to the submittal of the draft, appointment of committees and defence of the Dissertation.

Evaluation of Dissertation

Article 23

(1) After gaining 78 ECTS credits, out of which no more than 14 ECTS credits through elective forms of work, and after completing and submitting the Dissertation, each Doctoral Candidate shall initiate the Dissertation evaluation procedure.

(2) The Dissertation Evaluation Committee will be appointed by the Council. The committee will be composed of three or five members, of which at least one member shall not be a lecturer at these studies, nor shall he/she be employed with the Faculty and who is preferably employed with other Croatian or foreign university or associated institution. The Mentor may not be the chair of the Evaluation Committee.

(3) Each member of the Dissertation Evaluation Committee must have at least the research-and-teaching rank of assistant professor or research associate rank.

(4) When initiating the Dissertation evaluation procedure, the Doctoral Candidate will submit his/her application and no less than four copies of the Dissertation in a temporary binding, at least three weeks before the Council session during which the committee will be appointed. One copy will be kept at the Faculty's library for public inspection, while other copies will be used by the members of the Dissertation Evaluation Committee.

(5) Together with his/her application for the appointment of the Dissertation Evaluation Committee, the Doctoral Candidate will also submit a written consent of the Mentor. If the

Mentor refuses to give his consent, he shall be required to present his reasons in written form within 15 days after receiving the written notification about the initiated procedure from Paragraph 4 of this Article.

(6) The Dissertation Evaluation Committee submits its report to the Council, with its evaluation and proposal, within two months after the establishment of the committee and the receipt of the dissertation. The chairman of the committee prepares a report based on the gathered opinions of committee members, and this report shall be signed by all of the committee members. Every committee member has the right to submit his/her evaluation separately.

(7) The evaluation of the committee may be: the thesis is accepted, the thesis must be improved and re-evaluated or the thesis is rejected. The report must contain: general information about the thesis, objectives of the thesis and research methods applied, presentation of the Dissertation contents with a description of each chapter, evaluation of the thesis, conclusion and proposal. In the evaluation of the thesis, the committee must comment on the compatibility of the Dissertation with its theme. In conclusion of a positive report, the committee must give an unambiguous statement about the contribution to the original scientific field in which the Dissertation was made, and this original scientific contribution must be explained. Based on the committee's report, the Dissertation will be accepted by the Council and the latter will make a decision about public defence.

(8) 80 ECTS credits will be awarded for the accepted Dissertation.

(9) If the Council establishes that the Dissertation Evaluation Committee's report does not constitute a definite foundation for the evaluation, the committee's membership will be extended by adding new members or a new committee will be established and asked to prepare a new report, in which case, committee members must write separate reports.

(10) If the committee's report is negative, and if the Council does not decide to act in accordance with Paragraph 9 of this Article, the Council will make a negative decision about the Dissertation and advise the Doctoral Candidate about such decision.

Defence of Dissertation

Article 24

(1) The doctoral candidate whose Dissertation has received a positive evaluation has the right and duty to publicly defend his/her thesis in front of the Dissertation Defence Committee, which will be appointed by the Council.

(2) The committee will be composed of three or five members, out of which at least one member shall not be a lecturer at these studies, nor shall he/she be employed with the Faculty. Dissertation Defence Committee may be made up of the same members as the Dissertation Evaluation Committee. The Mentor may take part in the dissertation defence procedure but he may not be the chair of the Committee.

(3) At least eight days must elapse between the Council's decision on the appointment of the Dissertation Defence Committee and the actual defence of the Dissertation.

(4) The time specified in Paragraph 3 of this Article can be reduced for justified reasons.

Article 25

(1) The Doctoral Candidate's presentation given during the defence of the Dissertation may not last more than 45 minutes. The Dissertation will be defended in the language in which it was written.

(2) The Dissertation defence must contain an explanation of the paper's structure, an explanation and justification of the use of research methods and a defence of the original scientific contribution.

After the candidate's presentation, the members of the committee will ask questions that must be related to the theme of the Dissertation.

(3) Each committee member may ask no more than three questions. Persons present at a public defence may formulate questions in written form and the chair of the committee will then decide on the validity of such questions and forward these questions to the candidate.

(4) Once the candidate has replied to the questions, the committee will decide whether or not the candidate has defended his/her Dissertation. The result of the decision on defended dissertation may be: "rite, cum laude, magna cum laude or summa cum laude".

(5) Twelve ECTS credits will be awarded for successful defence of the Dissertation.

(6) Minutes shall be kept about the defence of the Dissertation.

(7) The Dissertation shall be defended only once.

Candidate's rights and obligations after defending the Dissertation

Article 26

(1) After a successful defence of his/her Dissertation, the Doctoral Candidate is required to submit, within 30 days, the final version of the Dissertation in printed form and in electronic format. The form of the final version of the Dissertation has to be compliant with the Croatian standard HRN ISO 7144.

(2) The Dissertation shall be permanently published in the public online database of doctoral dissertations of the National and University Library if the author approved this in writing.

(3) The Dissertation shall be stored in both written and electronic form at the Faculty, and it shall be stored in written form only at the National and University Library and in the University Archives.

Article 27

(1) The Doctoral Candidate shall acquire the rights pertaining to the PhD degree on the day he/she has successfully defends his/her doctoral thesis, and he/she shall obtain full rights arising from the academic title, as well as the diploma, after having taken an oath at the graduation ceremony and after his/her name has been entered in the register of PhDs.

(2) Within one month following the defence, the Doctoral Candidate shall fill in the university form for awarding the PhD degree and submit the bound doctoral thesis and, if he agrees to it in writing, its electronic version for publication on the web pages of the Faculty and University.

(3) The doctoral diploma shall be presented to the candidate by the Rector at the diploma award ceremony which must be attended either by the Doctoral Candidate in person or by his/her proxy who must hold a PhD degree.

Article 28

(1) In case the results of research conducted in the scope of the dissertation involve an innovation giving rise to the protection of intellectual property rights, the Doctoral Candidate and the Mentor may advise the University's Technology Transfer Office about this situation. In this case, the Doctoral Candidate can, with the approval of his/her Mentor, and before the submittal of the dissertation for evaluation, request that the dissertation be treated with confidentiality until its public defence.

(2) The Technology Transfer Office will conduct the Procedure for Legal Protection and Commercialisation of Research Results in full compliance with the Ordinance on the Technology Transfer Office.

In such a case, public defence may be postponed, with the approval of the Doctoral Candidate, but no more than for one year following the submittal of the dissertation for evaluation. The application for the postponement of public defence must be accompanied by a certificate issued by the Technology Transfer Office.

(3) The Doctoral Candidate acquires copyright by the very act of creating the Dissertation.

Revocation of academic degree

Article 29

(1) The academic degree may be revoked via a procedure corresponding to academic degree awarding if it is established that the PhD degree was acquired contrary to prescribed acquisition criteria or if it is established that plagiarism occurred or that research procedure violated ethical principles.

(2) Anyone who believes that PhD degree was acquired contrary to prescribed criteria, ethical principles or that it involves plagiarism shall report this to the Council in writing.

(3) The Council shall appoint a Committee that will submit a report on the basis for the accusation. The report shall be deliberated on at a session which may be attended by both the reporting and reported parties.

(4) The Council decision shall be sent for approval to University authorities.

Monitoring of studies

Article 30

(1) The implementation of studies shall be monitored by the Board, which shall inform the Council about this activity at least once a year. The studies shall be monitored at the Doctoral Candidate level via reports submitted by study counsellors/mentors or Mentors, and via reports submitted by lecturers.

(2) The Board shall watch over the Mentors' workload and success and shall keep record, for each Mentor, of the number of Doctoral Candidates enrolled, and the number of Doctoral Candidates who have defended their doctoral thesis. The Board shall be responsible for the

detailed record of research activities and other academic obligations of each Doctoral Candidate, including the plan of duties.

(3) Each year, the Board shall conduct a self-evaluation based on the annual reports of Mentors and Doctoral Candidates, and shall present a report on its work to the Council and the University, using an appropriate University form. Annual self-evaluation reports shall be attached to the re-accreditation request.

(4) The evaluation criteria comprise: scientific production of lecturers and Doctoral Candidates, teaching, relevance and quality of Dissertations, statistical indicators of the duration of studies, statistical indicators of the annual number of new PhDs relative to the number of Doctoral Candidates, results achieved in international cooperation and the employment prospects for PhDs.

(5) At the end of semester, each lecturer will write a short report to the head of research area in which he/she conducted a teaching activity. This report must contain a description of the way in which teaching activity was conducted, the number of hours of teaching, the number of Doctoral Candidates who attended the lectures, the method used to evaluate the work of Doctoral Candidates and their current grades.

(6) At the end of semester, the head of research areas writes a report to the Board about the teaching activity, based on short reports submitted by lecturers. This report must contain a description of the way in which teaching activity was conducted, the number of hours of teaching, the number of Doctoral Candidates who attended the lectures, the method used to evaluate their work and their current grades.

(7) Each year, the Doctoral Candidate is required to submit to the Board a report about his/her work (possibly including a presentation of his/her research), using a University form.

III TRANSITIONAL AND FINAL PROVISIONS

Article 31

(1) Exceptionally, the class enrolled in 2014/2015 will be awarded 6 ECTS credits for Dissertation in the first semester, and these credits will be taken from the total number of credits realized by the approval of the Dissertation draft (Article 21, Paragraph 10).

(2) The provision contained in Article 13, Paragraph 4, shall also apply to the class enrolled in 2014/2015.

(3) Non-working days according to the academic calendar shall not be included in the calculation of deadlines in this Ordinance.

Article 32

On the day of its entry into force, this Ordinance supersedes the consolidated text of the Ordinance on Postgraduate Doctoral Studies (CLASS: 003-05/13-02/01 Ref. No: 251-64-04-04-13-2 Zagreb, 4 July 2013), with the exception of the provisions of Articles 2, 3, 6 - 8, 12 - 15 and 17 - 21, which will solely apply to the Doctoral Candidates enrolled prior to the academic year of 2014/2015.

Article 33

This Ordinance will be announced on the notice board and the web pages of the Faculty.

**POSTGRADUATE UNIVERSITY DOCTORAL STUDIES
FOR THE ACQUISITION OF PhD DEGREE**

doctoral studies in CIVIL ENGINEERING

Table 1. Structure of the program of Doctoral Studies with the corresponding ECTS credits

Form of activity	Description of activity		NOTE	ECTS	ECTS total	
Dissertation	Research, preparation and defence of Dissertation				115	
	Obligatory paper in CC/SCIE journal					
Lectures	4 elective courses, 6 ECTS each			24	24	
Other required forms of work	Methodology of scientific research (development of generic skills)		course (lectures and workshops)	6	27	
	Research seminar		16 ECTS in the first year; 1 ECTS in the second and 1 ECTS in the third year	18		
	Discussion groups		1 ECTS per year	3		
Other elective forms of work (ECTS credits must be obtained from at least two different activities)	1	additional elective course		maximum 1 course	6	14
	2	published research papers (minimum 4 credits)	Journals A		6	
			Journals B		3	
			Journals C		2	
			international conference	paper with presentation poster session	2 1	
	3	research at other scientific institutions	minimum 1 month of stay	maximum 3 ECTS.	1 ECTS credit per month	
	4	summer schools in the area of research	maximum 2 schools	without exam with exam	1 2	
	5	other workshops	maximum 2 ECTS	workshops with total duration of three days 1 ECTS		
TOTAL					180	