



University of Rijeka  
**FACULTY OF ENGINEERING**



**REGULATIONS  
ON POSTGRADUATE UNIVERSITY (DOCTORAL) STUDY  
PROGRAMMES**

Rijeka, September 2018

On the basis of Art. 63, para. 6, pt. 3 of the Act on Scientific Activity and Higher Education (Official Gazette 123/03, 198/03, 105/04 and 174/04, 46/07, 45/09, 63/11, 94/13, 139/13 and 101/14 – O and RUSRH), Art. 104, para. 1 of the Statute of the University of Rijeka (consolidated version of 15 February 2015) and Art. 43 of the Statute of the University of Rijeka Faculty of Engineering, the Faculty Council of the University of Rijeka Faculty of Engineering at its 8<sup>th</sup> regular session on 28 May 2015 laid down the

## **REGULATIONS ON POSTGRADUATE UNIVERSITY (DOCTORAL) STUDY PROGRAMMES**

### **1 GENERAL PROVISIONS**

#### **Article 1**

These regulations regulate the organisation and execution of postgraduate university (doctoral) study programmes (hereinafter: Programmes) and the procedure for the acquisition of the academic degree of Doctor of Philosophy at the University of Rijeka Faculty of Engineering (hereinafter: the Faculty).

The regulations and the appendices are written in Croatian and English. In case of ambiguity, the text in Croatian is to be used.

### **2 ORGANISATION OF PROGRAMMES AND SUBJECT AREAS**

#### **Article 2**

##### ***The title and length of Programme, ECTS credits***

The Programmes are organised as programmes for the acquisition of the academic degree of Doctor of Philosophy in accordance with applicable legislation and regulations of the University of Rijeka and the Faculty. The titles of the programmes are: Postgraduate University (Doctoral) Study Programme in the Field of Engineering Sciences, in the Subjects of Mechanical Engineering, Naval Architecture, Fundamental Engineering Sciences, and Interdisciplinary Engineering Sciences, Postgraduate University (Doctoral) Study Programme in the Field of Engineering Sciences, in the Subject of Electrical Engineering, and Postgraduate University (Doctoral) Study Programme in the Field of Engineering Sciences, in the Subject of Computer Engineering.

The Programmes are carried out in accordance with the European Credit Transfer System (hereinafter: ECTS).

The Programmes are carried out as full-time or part-time. The academic degree of Doctor of Philosophy in the scientific field of Engineering Sciences is awarded upon the fulfilment of all prescribed obligations and a public defence of the doctoral thesis,

At least 180 ECTS credits are acquired upon completion of the programme.

The Programmes are carried out in Croatian for Croatian citizens, whereas for foreign nationals they are carried out in English.

#### **Article 3**

##### ***Scientific field, subjects, branches, and subject areas of the Programme***

The Programmes are carried out in the subjects of Naval Architecture (2.02), Mechanical Engineering (2.11), Fundamental Engineering Sciences (2.15), Interdisciplinary Engineering Sciences (2.16), Electrical Engineering (2.03), and Computer Engineering (2.09) within the scientific field of Engineering Sciences.

Courses within the programmes cover the aforementioned subjects and are organised by subject areas – modules. The modules are of advisory nature and have been formed for the purpose of a clearer overview of related subjects.

The modules of the Postgraduate University (Doctoral) Study Programme in the Field of Engineering Sciences, in the Subjects of Mechanical Engineering, Naval Architecture, Basic Engineering Sciences, and Interdisciplinary Engineering Sciences are Production Engineering, Thermal Power

Engineering, Computational Mechanics, Design and Building of Ships, Mechanical Engineering Design, Quality Assurance and Engineering System Control, and Ecological Engineering and Environmental Protection. The modules of the Postgraduate University (Doctoral) Study Programme in the Field of Engineering Sciences, in the Subject of Electrical Engineering are Electronic and Information Systems and Electric Power Systems and New Technologies. The module of the Postgraduate University (Doctoral) Study Programme in the Field of Engineering Sciences, in the subject of Computer Engineering is Computer Engineering.

#### **Article 4**

##### ***Bodies of the Programme***

The bodies of the Programmes are the Dean, the Faculty Council, the Committee for Postgraduate Study Programmes and Research, the Vice-Dean for Research, the Head of Postgraduate Study Programmes, the heads of modules, and the supervisors.

#### **Article 5**

##### ***Length of Programme***

Postgraduate university (doctoral) study programme takes three years (six semesters). Full-time students lose their student status if they do not complete the Programme within six years from the day of enrolment.

The length of study for part-time students is twice longer compared to the length of study for full-time students. Part-time students lose their student status if they do not complete the Programme within ten years from the day of enrolment.

### **3 ADMISSION TO THE STUDY PROGRAMME**

#### **Article 6**

##### ***Admission procedure, public call for admission, final decision on the execution of Programme***

Admissions to the Programme are carried out on the basis of a public call that is announced by the Faculty Council generally 6 months before the start of classes.

The public call contains information on the conditions and the procedure of admission, number of students accepted, documents that need to be submitted, and the due dates for the application and registration.

The public call is published in Croatian and English on the Faculty's official website and in English on relevant international websites.

The Faculty Council issues the final decision on the execution of the Programme for which a public call has been announced.

#### **Article 7**

##### ***Right to apply to the Programme***

The right to apply to the Programme is given to all Croatian citizens, foreign citizens, and stateless persons.

The precondition to apply to the Programme is the completion of the

- university graduate study programme at the University of Rijeka Faculty of Engineering or other university study programmes at engineering or related faculties from which the candidate has acquired at least 300 ECTS credits including the undergraduate cycle, or
- university undergraduate study programme of at least four years at the University of Rijeka Faculty of Engineering or at other engineering or related faculties on the basis of study programmes initiated before the Act on Scientific Activity and Higher Education entered into force.

#### **Article 8**

##### ***Application documents***

Applicants attach the following to their application to the Programme:

- Application Form PDS-1,
- Curriculum Vitae Form PDS-2,
- evidence of necessary qualifications pertaining to Art. 7,
- official document of exams passed, with a list of marks on the exams and the graduation thesis,
- two recommendations from the applicant's supervisor from the former level of study, or from another person holding a scientific title who is familiar with the applicant's qualities (PDS-3),
- supervision approval with the supervisor's curriculum vitae,
- birth certificate and certificate of citizenship,
- official document of the institution or another legal person or the applicant's signed statement on the coverage of tuition,
- other documents that might be relevant for admission to the programme and for studying,
- Doctoral Student's Sustainable Research Plan form, signed by the supervisor (PDS-15).

PDS-1, PDS-2, and PDS-3 forms are given in Appendix A, B, and C and are an integral part of these Regulations.

Applicants who have earned their degree from a foreign educational institution are required before registration to submit to the Faculty a decision of the competent authority on the recognition of the foreign degree.

## **Article 9**

### ***Selection of applicants***

The proposal on the applicants for admission to the Programme is given to the Faculty Council by the Committee for Postgraduate Study Programmes and Research on the basis of a report of the Committee for Interviews with Applicants to the Postgraduate University (Doctoral) Study Programme appointed by the Faculty Council, that is, on the basis of the following indicators:

- achievement at the former level of study (graduate study, or undergraduate study initiated before the Act entered into force),
- mark received on graduation thesis at the former level of study,
- acquired competences,
- student awards and activities,
- recommendations from the applicant's supervisor at the former level of study, or from another person holding a scientific title who is familiar with the applicant's qualities,
- the applicant's presentation to the Committee for Interviews with Applicants to the Postgraduate University (Doctoral) Study Programme.

The scoring criteria are given in Appendix D, which is an integral part of these Regulations.

## **Article 10**

### ***Enrolment into the Programme without attending classes and taking exams***

Candidates with scientific achievements that are in line with the programme of the doctoral study in terms of their significance and content, may be exempt from attending classes and taking exams.

These candidates must have the equivalent of at least three research papers in which the student is the first author, published in scientific or scientific and professional foreign journals (indexed in Current Contents (CC), Science Citation Index (SCI), or Science Citation Index Expanded (SCIExp)), which are thematically related to their programme of doctoral study, and who have spent at least one semester at a foreign research institution and have actively participated in at least two international scientific conferences.

Active participation in an international scientific conference is understood as registered participation in the conference with one's own research paper (as single author or co-author) and a presentation.

A stay of at least one semester at a foreign research institution is proven with an appropriate official document from the institution, which shows that the stay had the aim of publishing required research papers.

The decision on fulfilling the conditions for exemption from attending classes and taking exams is made by the Faculty Council at the proposal of the Committee for Postgraduate Study Programmes and Research, and with the approval of the Senate, by which the candidate starts the Programme with 42 ECTS credits on that basis. Papers and activities on the basis of which the candidate is exempt from attending classes and taking exams cannot be scored twice, that is, they cannot be scored as other extracurricular activities at the doctoral study programme. Credits (20 ECTS credits) that are collected in the programme by fulfilling programme requirements or by research activities carried out during a visit to universities or research institutions that are not members of the University need to be obtained through additional research activities.

In the case when the student is continuing with studies he or she previously terminated or when he or she exceeded the maximum length of study, exams passed previously may be recognised with the permission of the dean and based on the opinion of the head of the study programme.

The Faculty does not carry out the procedure of awarding the degree of Doctor of Philosophy outside the doctoral study programme.

#### **Article 11**

##### ***Exemption from attending a part of classes and taking certain exams***

Candidates who have acquired certain knowledge on the basis of published research papers or by attending classes and taking exams at the postgraduate master study programme initiated before higher education reform of 2005, may be exempt from attending a part of classes and taking certain exams worth up to 30 ECTS credits.

Candidates with the degree of Master of Engineering Sciences may be exempt from attending classes and taking exams worth up to 42 ECTS credits.

The decision on the exemption from attending a part of classes and taking certain exams is made by the Dean on the basis of the opinion of the Head of Postgraduate Study Programmes.

#### **Article 12**

##### ***Additional programme requirements***

Head of Postgraduate Study Programmes, in agreement with the head of module, may require of the candidate to take and pass a certain number of courses that are relevant to the doctoral study programme, and which are carried out at the level of graduate study programmes at the faculty. This is done on the basis of insight into the candidate's competences that are determined by additional documents, that is, a list of courses from the completed university graduate or undergraduate study programme.

ECTS credits obtained in this way are not counted as credits that candidates are required to obtain within the postgraduate university (doctoral) study programme.

### **4 GUIDANCE THROUGH THE PROGRAMME**

#### **Article 13**

##### ***Committee for Postgraduate Study Programmes and Research***

The Committee for Postgraduate Study Programmes and Research is the key faculty body responsible for managing the Programme and improving its quality. With activities of the Head of Postgraduate Study Programmes and the Quality Assurance Committee, it analyses all aspects of quality of teaching at postgraduate doctoral study programmes.

Members of the Committee for Postgraduate Study Programmes and Research are appointed by the Faculty Council at the proposal of the Dean. The chair of the Committee for Postgraduate Study Programmes and Research is generally the Vice-Dean for Research.

The Committee for Postgraduate Study Programmes and Research:

- determines which applicants fulfil the conditions to apply to the Programme and propose to the Faculty Council a list of applicants who are suggested to be accepted to doctoral study programmes,

- generally meets a week before the session of the Faculty Council and reports to the Dean and the Faculty Council on its sessions
- considers the execution of the programmes of the studies and discusses issues related to their execution,
- discusses doctoral theses submitted for assessment,
- continuously analyses existing Programmes and, with the aim of their continuous improvement, presents evaluation results and proposes to the Faculty Council changes to the programmes and the modes of execution of the programmes,
- provides supervisor reports to the Dean, that is, to the Faculty Council,
- proposes to the Faculty Council supervisors, co-supervisors, and members of the committee for the evaluation of thesis topic and the defence of thesis,
- proposes to the Faculty Council members of the Committee for Interviews with Applicants to Postgraduate University (Doctoral) Study Programmes.

#### **Article 14**

##### ***Head of Postgraduate Study Programme***

The Head of Postgraduate Study Programme

- is generally a member of the Committee for Postgraduate Study Programmes and Research,
- partakes in preparations for establishing, starting, and operating postgraduate study programmes,
- is concerned with the preparation and execution of the programmes of the studies,
- confirms the selection of courses at the proposal of the supervisor before the student enrolls into these,
- determines the schedule for classes in agreement with course instructors,
- proposes supervisors and co-supervisors to the Committee for Postgraduate Study Programmes and Research,
- keeps track of student registration and reports to the Vice-Dean for Postgraduate Study Programmes and Research,
- pays note to documentation and other files in connection with the Programme, partakes in the preparation of materials for the sessions of the Faculty Council when the Council discusses the Programme,
- submits an annual report to the Dean on programme activities on Form PDS-4 (Appendix 4: Annual Report on Programme Activities)
- sees that decisions and conclusions of the Faculty Council regarding the Programme are implemented,
- informs instructors about the teaching schedule and sees that classes are held regularly,
- attends the defence of thesis topic and the defence of thesis.

#### **Article 15**

##### ***Vice-Dean for Research***

The Vice-Dean for Research

- is concerned with modernizing study programmes,
- calls and chairs meetings of the Committee for Postgraduate Study Programmes and Research.

#### **Article 16**

##### ***Dean***

The Dean

- proposes members of the Committee for Postgraduate Study Programmes and Research to the Faculty Council,
- accepts or rejects the annual report on student activity,
- accepts or rejects the annual report on supervisor activity,
- decides on the justification of the reasons on the basis of which the student seeks a hiatus to be granted.

#### **Article 17**

## ***Faculty Council***

### **The Faculty Council**

- approves the proposal of the programme of postgraduate study and its changes,
- makes a decision on appointing course instructors at postgraduate study programmes,
- makes a decision on issuing a call for admission of students,
- makes the final decision on the execution of the Programme for which a public call has been issued, if there is a sufficient number of applicants who meet the conditions for admission, and decides on the list of students who are approved for registration,
- approves supervisors and co-supervisors at the proposal of the Committee for Postgraduate Study Programmes and Research,
- approves members of the committee for the evaluation of thesis topic and doctoral thesis,
- makes a decision on the members of the Committee for Interviews with Applicants to Postgraduate University (Doctoral) Study Programmes,
- initiates the suspension of the procedure for acquiring the academic degree of Doctor of Philosophy,
- decides on other issues connected to the organisation and execution of postgraduate study programmes in accordance with the Act and the Statute.

## **Article 18**

### ***Supervisor and co-supervisor***

Upon application to the Programme, the student must, in agreement with the head of module and potential supervisor, propose a supervisor who is a professor at the postgraduate study programme or another recognized expert who is not a member of the faculty and who has been elected to a scientific title. Supervision approval is proved by a recommendation that clearly shows that the professor accepts the role of the student's supervisor.

Only an instructor who at the moment of appointment fulfils the conditions for a supervisor (co-supervisor) prescribed by the special provision of the University of Rijeka can be appointed to be a supervisor or a co-supervisor. Furthermore, only an instructor who in the past five years published at least two papers in a journal indexed in Current Contents, Science Citation Index, or Science Citation Index Expanded can be appointed to be a supervisor (co-supervisor) of the doctoral thesis.

Only an instructor who in the last five years published at least two papers in a journal indexed in Current Contents, Science Citation Index, or Science Citation Index Expanded may be appointed as a doctoral thesis supervisor. Upon supervisor registration, it is required, with the supervisor's approval, to attach the supervisor's curriculum vitae and documents showing that he or she fulfils this condition.

At the proposal of the Committee for Postgraduate Study Programmes and Research, the Faculty Council upon approving admission appoints the supervisor, who takes on the obligation of providing professional guidance to the student in writing the doctoral thesis.

If the proposed supervisor is not a member of the faculty teaching at the Faculty's postgraduate study programme, the Faculty Council generally appoints a supervisor or co-supervisor from the professors who teach at the postgraduate study programme.

The Faculty Council may appoint a co-supervisor in other cases as well, when it recognises that he or she may benefit the student throughout the study.

### **The supervisor or co-supervisor**

- assists the student in designing the programme of the doctoral study,
- plans together with the student the dynamics of taking exams from the first semester,
- instructs the student to choose study obligations from the second semester and plans together with the student the dynamics of fulfilling these obligations,
- instructs the students in the appropriate content of certain courses at graduate level, if in certain parts the student's knowledge is not at the level where he or she can easily progress in the doctoral study programme,
- instructs the students in bibliography,

- instructs the student in applying appropriate scientific and research methods in connection with the joint field of research,
- assists the student in selecting and precisely defining the topic of the doctoral dissertation,
- is responsible for providing professional guidance to the student in writing the doctoral thesis,
- is responsible for establishing contacts with the university or research institution at which the student aims to fulfil a part of his or her study obligations,
- submits to the Head of Postgraduate Study Programmes the annual report on student activity in October,
- ensures conditions for the scientific research of the doctoral student, either as the head, associate head, or associate on a research project, or in a different manner,
- has received a positive opinion from the Faculty on previous supervisory work,
- has received supervisor training, such as having co-supervised a student, attended a workshop, etc.

### **Article 19**

#### ***Student***

Each year in October the student submits to the Dean, via the Head of Postgraduate Study Programmes, a report on activity on Form PDS-5 (Appendix F: Annual Doctoral Candidate Report).

The student has the right to change the supervisor and/or the doctoral thesis topic by submitting a written request and a statement from the supervisor on Form PDS-6 (Appendix G: Request to Change Topic and/or Supervisor).

### **Article 20**

#### ***Annual Report on Student Activity***

Each year in October the supervisor submits to the Dean, via the Head of Postgraduate Study Programmes, a report on student activity on Form PDS-7 (Appendix H: Annual Supervisor Report).

The report referred to in the preceding paragraph:

- evaluates the student's activity in the previous year,
- evaluates the student's progress in the Programme,
- assesses further course in the Programme,
- highlights the student's particular achievements,
- points to the student's shortcomings and indicates remedial measures,
- points to possible non-compliance with the University Code of Ethics.

If the report is negative, the student needs to be informed of it before it is submitted to the Dean, that is, to the Faculty Council, and the student has the right to respond to it.

### **Article 21**

#### ***Negative Annual Report***

If the Dean, that is, the Faculty Council accepts a negative report on student activity, the supervisor and the co-supervisor are required to develop a plan of student activity for the following year and monitor throughout that year whether the plan is being carried out by meeting each month regularly with the student.

The report, of which the student needs to be informed and to which it has the right to respond, is submitted to the Dean, that is, the Faculty Council at the end of that semester.

## **5 EXECUTION OF THE PROGRAMME AND PROGRAMME OBLIGATIONS**

### **Article 22**

#### ***Programme obligations***

The table below outlines programme obligations and the number of ECTS credits gained for fulfilling each obligation. The stay at other universities or research institutions outside the University of Rijeka must be at least three months long and it must be undertaken during the study. This obligation refers to

full-time students. It does not refer to part-time students, who can gain 20 ECTS credits through additional scientific and research activities.

Programme obligation	Number of ECTS credits
class obligations	min. 42
scientific and research activity	min. 118
stay at other institutions	20

### **Article 23** *Class obligations*

Class obligations pertain to attending classes and taking exams in required and elective courses, in which at least 42 ECTS credits can be obtained.

Required courses are prescribed by the study programme and consist of joint courses and core courses of a certain module.

Elective courses for each subject area of the Programme are prescribed by the study programme.

As part of elective courses, the student is offered topics that are connected with the field of research of his or her supervisor; the student covers one topic in detail in the form of a paper.

Topics within elective courses may change depending on the course instructor's current scientific and research activity.

Courses that can be taught in English are prescribed by the study programme.

The student can enrol into courses at other postgraduate university (doctoral) study programmes worth up to 18 ECTS credits on the basis of a contract on studying or an agreement made between the Faculty and the institution at which the other programme is carried out.

If the student has passed all required exams and has acquired 42 ECTS credits, he or she can enrol into other courses and take exams at other postgraduate university (doctoral) study programmes that are relevant for the doctoral thesis. ECTS credits obtained in this way can be entered into the student's grade book.

### **Article 24** *Scientific and research activity*

Scientific and research activity consists of defining the original hypothesis, determining the way the hypothesis relates to what is known thus far in the given field of research, a detailed elaboration of the hypothesis that shows in a logical way how it can be applied in the field of research, and providing evidence for the sustainability of the hypothesis.

Scientific and research activity is evaluated through required and elective activities. Mandatory scientific and research activities are worth 90 ECTS credits. At least 118 ECTS credits need to be obtained through required and elective scientific and research activities. The activities and the assigned credits are given in the table below.

A paper published in a journal is a paper that has been accepted for publication, which can be seen on the journal's website, and that has been assigned a DOI number.

Part-time students who have not stayed at another university or a research institution for at least 3 months need to obtain 20 ECTS credits through additional scientific and research activities.

Required activities	Number of ECTS credits
preparing and submitting the doctoral thesis topic	8
public defence of the doctoral thesis topic	2
two public presentations of research results	6
publishing an original scientific paper, with the student being the first author, in a foreign	20

scientific journal (or two in a national journal) indexed in Current Contents, Science Citation Index, or Science Citation Index Expanded; the paper needs to present the results of the entire or a part of own research carried out for the doctoral thesis	
completed doctoral thesis that has been positively evaluated	50
public defence of the doctoral thesis	4
Total	90

Elective activities	Number of ECTS credits
publishing an original scientific paper in a foreign scientific journal indexed in Current Contents, Science Citation Index, or Science Citation Index Expanded	20
publishing an original scientific paper in a national journal indexed in Current Contents, Science Citation Index, or Science Citation Index Expanded	10
publishing a research paper in a journal not indexed in Current Contents, Science Citation Index, or Science Citation Index Expanded	5 (max. 10)
publishing a paper in conference proceedings of an international scientific conference	3 (max. 6)
presenting a paper published in conference proceedings of an international scientific conference at the very conference	2 (max. 4)

### **Article 25**

#### ***First semester of the Programme***

In the first semester of the Programme, the student enrolls into 5 courses. The student is provided with theoretical foundations of a certain subject area through classes in joint courses and required and elective courses of the field, which is worth 30 ECTS credits.

### **Article 26**

#### ***Second semester of the Programme***

In the second semester, the student, in agreement with the supervisor, enrolls into two elective courses worth a total of 12 ECTS credits and begins to engage in scientific and research activities by researching the state of the field and producing the hypothesis.

The student may enrol into more than two elective courses if he or she, in agreement with the supervisor, estimates that these additional elective courses will not interfere with the fulfilling of programme obligations.

In the second semester, the student is required to hold at the Faculty of Engineering a public presentation on the results of his or her research. The date of the public presentation is announced at least 7 days in advance on the Faculty website. The supervisor submits a report on this presentation to the Head of Postgraduate Study Programmes.

## **Article 27**

### ***Third semester of the Programme***

In the third semester, the student begins with research related to the doctoral thesis.

## **Article 28**

### ***Other semesters of the Programme***

In other semesters, the student is fully involved in research related to the doctoral thesis, which includes writing the thesis. In the fourth semester, the student is required to hold another public presentation of his or her research results. The supervisor submits a report on this presentation to the Head of Postgraduate Study Programmes.

The student submits the doctoral thesis topic upon enrolling into third year, which is presented at a public defence before the end of the fifth semester.

Programme obligations of a certain semester may be fulfilled within another semester if that does not violate the logical order of the study programme and if it is not in contradiction with the University Regulations on Study Programmes.

## **Article 29**

### ***Conditions for enrolment into further semesters***

To enrol into the next semester, the previous semester needs to be verified.

To enrol into the third semester, it is required to pass the courses from the first semester and in that way obtain at least 30 ECTS credits, and to have a positively evaluated public presentation of the results of own research.

To enrol into the fourth semester, it is required to pass all courses from the second semester and in that way obtain at least 12 ECTS credits.

To enrol into the fifth semester, it is required to have had a positively evaluated public presentation of the results of own research during the first two years of study and to have submitted the doctoral thesis topic.

To enrol into the sixth semester, it is required to publicly defend the doctoral thesis topic and in that way obtain 10 ECTS credits.

In the sixth semester, it is required to complete and submit the doctoral thesis for evaluation. When the Faculty Council accepts a positive report of the Committee for the Evaluation of Doctoral Thesis, the student obtains 50 ECTS credits.

## **Article 30**

### ***Submitting doctoral thesis topic***

The student submits the doctoral thesis topic in agreement with the supervisor as a condition for enrolment into the third year of the Programme.

The submission contains the title of the doctoral thesis, an overview of the scientific discipline to which the thesis belongs, research subject, research purpose and goals, explanations of working hypotheses, research methods to be used, general content, expected scientific contribution, application of research results, and a list of references and other sources.

The doctoral thesis topic is submitted on Form PDS-8 (Appendix I: Submission of Doctoral Thesis Topic).

The submission should in its form and content clearly show that the candidate is capable of independent scientific and research work that is based on scientific and research methodology.

The student is also required to submit the supervisor's written approval with the submission of the doctoral thesis topic.

### **Article 31**

#### ***Evaluation and defence of doctoral thesis topic***

The student publicly defends the doctoral thesis topic before the Committee for the Evaluation of Doctoral Thesis Topic that consists of an odd number of members who are appointed by the Faculty Council and who hold a scientific and teaching title or a scientific title and are recognised experts in the field of the doctoral thesis topic, and before the supervisor and the Vice-Dean for Research or the Head of Postgraduate Study Programmes. At least one member of the Committee is not an employee of the University of Rijeka.

The date and place of the defence of the doctoral thesis topic must be announced at least one week earlier.

The Committee for the Evaluation of Doctoral Thesis Topic has the task of determining whether the suggested topic is with its content and scope in line with the required level of the doctoral programme, whether it is possible to carry out original scientific research on the topic that is in line with international criteria for quality doctoral theses, and whether the candidate is capable based on his or her academic qualities and knowledge acquired during the Programme to reach such a high goal with the assistance from the supervisor.

Based on the submission of the topic and the public defence, the Committee for the Evaluation of the Doctoral Thesis Topic, within three months of the submission, submits a report on Form PDS-9 (Appendix J: Evaluation of Doctoral Thesis Topic) to the Faculty Council. This report needs to contain, among other things, a conclusion in which an evaluation is provided for the submission and the defence of the doctoral thesis topic, with an explanation of the evaluation and a proposal to the Faculty Council.

At the proposal of the Committee for the Evaluation of Doctoral Thesis Topic, the Faculty Council may ask the student to amend the submission. If the Committee evaluates the submission negatively after the student was asked to amend it, the Faculty Council will issue a decision on suspending the procedure for the acquisition of the degree of Doctor of Philosophy and inform the student.

The Faculty Council is required, within six months from the day of the initial submission, to issue a decision on accepting or rejecting the doctoral thesis topic and inform the student of this (Form PDS-10 – Appendix K: Decision on the Approval of Doctoral Thesis Topic).

## **6 DOCTORAL THESIS AND COMPLETION OF THE PROGRAMME**

### **Article 32**

#### ***Completion of the Programme***

The Programme is completed when all exams have been passed, when all other programme obligations have been fulfilled, and when the doctoral thesis has been successfully written and publicly defended.

### **Article 33**

#### ***Doctoral thesis***

The doctoral thesis is original scientific and research work that thoroughly addresses a single issue within a single branch of science or several branches, and with which the student proves that he or she is capable of carrying out independent research, and which makes a significant internationally recognised contribution to the scientific field of Engineering Sciences.

The contribution to the scientific field of Engineering Sciences shall be seen as significant and internationally recognised if the student publishes as the first author the results of the entire or part of research that was carried out for the purposes of the doctoral thesis; the results need to be published in at least one original scientific paper in a foreign journal (or two papers in a national journal) from the field of Engineering Sciences that is indexed in Current Contents, Science Citation Index, or Science Citation Index Expanded.

The aforementioned contribution must be clearly and explicitly explained in the introduction to the doctoral thesis. With this explanation, the introduction also needs to contain a detailed overview of previous research that is relevant to the doctoral thesis topic. The contribution of the thesis needs to emphasise the advantages and disadvantages in relation to existing achievements.

The doctoral thesis is created under the supervision of the supervisor. The doctoral thesis is public.

The doctoral thesis can be submitted for evaluation and accepted for defence as a monograph (traditional model), or it can be based on published research papers (Scandinavian model).

The length of the traditional model of the doctoral thesis is between 100 and 150 pages, and the appendix may not have more than 50 pages. In exceptional cases when the doctoral thesis needs to be of greater length, it is required to seek written permission from the Committee for Postgraduate Study Programmes and Research, with a detailed explanation of the request.

The doctoral thesis based on published research papers contains at least 50 pages of an overview and at least five accompanying published research papers in which the student is the first author of at least three papers and a co-author only with the supervisor and co-supervisor.

The papers in the doctoral thesis that is based on published papers need to form a whole in terms of the content and logical connections, they need to be directly connected with the topic of the thesis, and they need to be original scientific papers published in foreign journals in the field of Engineering Sciences indexed in Current Contents, Science Citation Index, or Science Citation Index Expanded.

The format of the doctoral thesis and other details are prescribed by the University of Rijeka Regulations on the Format and Binding of Doctoral Theses and the University of Rijeka Guidelines for Formatting and Binding Doctoral Thesis.

The student is personally responsible for obtaining written permission for partially or entirely reproducing previously published copyrighted material. This refers to the student's previously published work for which the student no longer owns copyright and to work that has been published by other researchers.

The doctoral thesis may be written in Croatian or English.

### **Article 34**

#### ***Request for the evaluation of doctoral thesis***

The student who has passed all exams at the doctoral study programme and has fulfilled all other prescribed obligations submits a written request for the evaluation of the doctoral thesis to the Head of Postgraduate Study Programmes.

The student must attach the following to the request:

- two copies of the curriculum vitae on a standardised form,
- written approval of the supervisor and co-supervisor that the thesis meets the criteria of the doctoral thesis, with a proposal for the members of the Committee for Evaluation,
- document signed by the supervisor and co-supervisor that confirms that the doctoral thesis has been checked using the University of Rijeka's official anti-plagiarism software,
- unbound copies of the doctoral thesis; provide as many copies as there are members of the Committee for the Evaluation of Doctoral Thesis,
- CD with the entire content of the doctoral thesis in an acceptable electronic format,
- summary of the doctoral thesis (20 – 30 lines) in Croatian and English,
- confirmation of required stay at another institution (for full-time students),
- proof of meeting requirements from Art. 24,
- official note that the title of the doctoral thesis has been proofread by the official proof-reader at the University of Rijeka,
- official note that expenses of the programme have been settled,
- signed Statement of Permission for Making the Doctoral Thesis Publicly Accessible (Appendix S).

### **Article 35**

#### ***Committee for the Evaluation of Doctoral Thesis***

The doctoral thesis is evaluated by the Committee for the Evaluation of Doctoral Thesis that consists of an odd number of members holding a scientific and teaching or a scientific title and who are recognised experts in the field of the doctoral thesis topic. The members are appointed by the Faculty Council at the proposal of the Committee for Postgraduate Study Programmes and Research, and at least one member must not be an employee of the University of Rijeka. The supervisor and co-supervisor cannot be members of the Committee for the Evaluation of Doctoral Thesis.

The Committee for the Evaluation of Doctoral Thesis decides on the evaluation of the doctoral thesis by the majority of votes and needs to report on the evaluation of the doctoral thesis to the Faculty Council within three months from the day the doctoral thesis was received. The report of the Committee is submitted on Form PDS-11 (Appendix L: Report on the Evaluation of Doctoral Thesis).

The report of the Committee for the Evaluation of Doctoral Thesis must contain a conclusion that explicitly states what the original scientific contribution of the doctoral thesis is, and the members of the Faculty Council must be provided with the report at the moment when the faculty is called to the session of the Faculty Council. At the session of the Faculty Council the chair of the Committee submits a short oral report with an emphasis on the original scientific contribution of the doctoral thesis. Appended to the report is an individual opinion of each member of the Committee regarding the results of the doctoral thesis, with a special emphasis on the scientific contribution of the thesis. The recommended length for the opinion is between one and two pages.

If the Faculty Council finds that the report of the Committee for the Evaluation of Doctoral Thesis does not provide a sound basis for issuing a decision on the evaluation of the doctoral thesis, it can appoint new members to the Committee for the Evaluation of Doctoral Thesis and ask them to submit separate reports, or it can appoint a new committee and ask that it evaluates the doctoral thesis again and submit a report.

### **Article 36**

#### ***Amendment and decision on the evaluation of doctoral thesis***

At the proposal of the Committee for the Evaluation of Doctoral Thesis, the Faculty Council may ask the student to amend the doctoral thesis.

If the Faculty Council accepts a negative evaluation of the Committee even after the requested amendment was carried out, the Faculty Council issues a decision to suspend the procedure for the acquisition of the academic degree of Doctor of Philosophy and informs the student.

When the Faculty Council accepts a positive evaluation of the doctoral thesis, it generally at the same session appoints the Committee for the Defence of Doctoral Thesis and a secretary of the procedure.

The Committee for the Defence of Doctoral Thesis is comprised of members appointed under the same conditions as members of the Committee for the Evaluation of Doctoral Thesis.

### **Article 37**

#### ***Defence of doctoral thesis***

The student who has passed all exams and fulfilled all obligations of the doctoral study programme may engage in defending the doctoral thesis.

The defence of the doctoral thesis is held within two months at most from the day the Faculty Council accepted a positive evaluation of the doctoral thesis.

The doctoral thesis needs to be available to the public by being published at the official web page of the Faculty at least 15 days before the date of the defence.

The Committee for the Defence of Doctoral Thesis determines the date and place of the defence, taking into account the supervisor's and the student's suggestions.

At least eight days before the defence of the doctoral thesis, the first and last name of the student, the title of the doctoral thesis, the members of the Committee for the Defence of Doctoral Thesis, and the time, date, and place of the defence are announced on the Faculty's notice board.

If within the period defined in the preceding paragraph the student fails to engage in the defence of the doctoral thesis without a reasonable excuse, the Dean, at the proposal of the Committee for the Defence of Doctoral Thesis, suspends the procedure for the acquisition of the academic degree of Doctor of Philosophy and informs the student.

The doctoral thesis may only be defended once.

When research results from the doctoral thesis include an innovation that needs to be protected in terms of intellectual property, the student and the supervisor may notify the University of Rijeka Technology Transfer Office. In that case, the student may, with the supervisor's approval, request before the submission of the doctoral thesis that the thesis be treated as confidential until it is publicly defended.

The Technology Transfer Office carries out the Procedure of legal protection and commercial use of research results in accordance with the Regulations of the Technology Transfer Office. In that case, the public defence may, with the student's approval, be postponed up to one year from the submission of the doctoral thesis for evaluation. The request to postpone the public defence is submitted on Form PDS-12 (Appendix M: Request to Postpone Public Defence). A notice from the Technology Transfer Office needs to be attached to the Request.

### **Article 38**

#### ***Proceedings of the defence of doctoral thesis***

The defence of the doctoral thesis is public and minutes are taken.

The Chair of the Committee of the Defence of Doctoral Thesis commences the proceedings of the defence of the doctoral thesis by stating general information regarding the students, the results of his or her study, and reads the reports on the basis of which the Faculty Council initiated the proceedings of the defence of the doctoral thesis.

Upon reporting of the Chair of the Committee for the Defence of Doctoral Thesis the student presents the content of the doctoral thesis and explains the conclusion he or she has reached in the thesis, which may take up to 45 minutes.

After the student's presentation, the Chair of the Committee for the Defence of Doctoral Thesis gives the floor to the members of the Committee, and later to those present, who ask questions and make comments and, if needed, ask for clarification regarding the thesis and the defence.

The student is required to answer all asked questions and provide requested clarification. At his or her request, the student may be granted a short break to prepare the answers.

After the Committee for the Defence of Doctoral Thesis determines that the subject of the defence has been sufficiently discussed, the Chair of the Committee concludes the proceedings and the Committee retires for deliberation.

At the deliberation, the Committee for the Defence of Doctoral Thesis votes to reach a decision on the result of the defence. Upon returning from deliberation, the Chair of the Committee publicly announces the decision with a comment on whether the candidate has defended the doctoral thesis by unanimous vote, by majority vote, or has not defended it.

The protocol of the defence is prescribed in Form PDS-13 (Appendix N: Protocol of the Defence of Doctoral Thesis).

### **Article 39**

#### ***Minutes of the defence of doctoral thesis***

Minutes are taken of the public defence of the doctoral thesis. These minutes contain the following information: student's last name (first name of parent) and first name, registration number, personal identification number, qualification upon completed university undergraduate or graduate study programme or postgraduate study programme for the acquisition of the degree of Master of Science, names of Committee members, date of decision of Faculty Council on accepting doctoral thesis topic, date of defence, course of defence with questions asked, and conclusion of Committee showing acquisition of the academic degree of Doctor of Philosophy in given field and subject.

Minutes of the defence are submitted on Form PDS-14 (Appendix O: Minutes of the Defence of Doctoral Thesis).

#### **Article 40**

##### ***Secretary of the Committee for the Defence of Doctoral Thesis***

The Secretary of the Committee has the following duties:

- organises work related to ensuring conditions for setting up the defence of the doctoral thesis,
- prepares documents necessary for defence proceedings for the Chair of the Committee for the Defence of Doctoral Thesis
- prepares forms regarding the protocol and minutes of the defence,
- instructs those present before the commencement of the defence on the code of conduct during the defence,
- carries out all duties related to the documentation of the defence of the doctoral thesis,
- carries out all other duties in agreement with the Chair of the Committee for the Defence of Doctoral Thesis.

#### **Article 41**

##### ***Bound doctoral thesis***

At least 10 days before the defence, the student submits to the Head of Postgraduate Study Programmes 9 copies of the bound doctoral thesis. If the Committee for the Defence has more than three members, the student should, appropriately, submit more copies of the thesis. The Head then acts in line with applicable legislation and regulations of the University of Rijeka and the Faculty.

Upon defending the doctoral thesis, the student fills out the information sheet on the author and members of the Committee for the Defence of Doctoral Thesis in the thesis (I. Author, II. Doctoral Thesis, III. Members of the Committee for the Evaluation of Doctoral Thesis, IV. Members of the Committee for the Defence of Doctoral Thesis) with the signatures of the members of the Committee and the date of defence.

#### **Article 42**

##### ***Doctoral thesis with postponed publishing***

When as part of the doctoral study programme the research is carried out for the needs of the business sector or in cooperation with a research centre in the business sector, the council of the Programme may exclude the public from the defence of the doctoral thesis and postpone its publishing, to protect intellectual property, up to three years, or until the patent application is publicly announced.

In the case referred to in the preceding paragraph, members of the committee sign a statement of confidentiality of data.

#### **Article 43**

##### ***Doctor of Philosophy degree***

On the basis of a positive decision of the Committee for the Defence of Doctoral Thesis (Appendix P: Decision on the Defence of Doctoral Thesis), the University awards the degree of Doctor of Philosophy.

The degree is presented by the Rector at the promotion ceremony.

#### **Article 44**

##### ***Register of Doctors of Science***

Special records are kept on the defence of doctoral theses in the form of a register, and it is kept by the Faculty.

The register of Doctors of Philosophy contains the following information; last name (first name of parent) and first name, place and date of birth, previously completed university undergraduate or graduate study programme, scientific field and subject, title of thesis, name of supervisor (co-supervisor), members

of the committee for the evaluation of thesis, date of decision on accepting the thesis, members of the committee for the defence of thesis, date of defence, evaluation of the defence of thesis, scientific field and subject in which the student acquired the academic degree of Doctor of Philosophy, and the name and date of enrolment into the postgraduate university (doctoral) study programme.

## **7 STUDENT RIGHTS AND RESPONSIBILITIES**

### **Article 45**

#### ***Contractual relations***

With the candidate who has been accepted to the Programme as a full-time student, an employment contract is signed for the position of an assistant for a set time no longer than six years.

With the candidate who has been accepted to the Programme as a full-time student who finances the study him- or herself, a contract for studying with payment is signed, which determines the rights and responsibilities of both parties.

### **Article 46**

#### ***Student rights and responsibilities***

The student has the rights and responsibilities that are in line with applicable legislation and regulations of the University of Rijeka and the Faculty.

### **Article 47**

#### ***Suspension of student responsibilities***

Student rights and responsibilities are suspended during pregnancy and maternity leave, in case of prolonged illness, and in other justifiable cases.

The Dean decides on whether a reason is justified on the basis of a request submitted by the student via the Head of Postgraduate Study Programmes.

The students whose rights and responsibilities have been suspended may continue the Programme in line with the current study programme.

### **Article 48**

#### ***Continuing the Programme after termination***

The student whose student status has been terminated may continue with the Programme if the Faculty Council approves the continuation on the basis of the opinion and proposal of the Committee for Postgraduate Study Programmes and Research.

The student who continues with the Programme after his or her status has been terminated is required to accept all changes in the study programme that may have occurred during the absence, as well as cover all the costs of the Programme in line with the conditions of the call for the generation in which the student is continuing with the Programme.

On the basis of the decision of the Head of Postgraduate Study Programmes, the student from the preceding paragraph may have his or her passed exams, courses taken, and other programme obligations recognised if they are identical to those in the current programme.

### **Article 49**

#### ***End of student status***

A person loses the student status:

- upon completion of the Programme,
- upon withdrawing from the Programme,
- when the Faculty Council issues a decision on suspending the procedure for the acquisition of the academic degree of Doctor of Philosophy,
- when he or she does not complete the Programme in time.

The Faculty Council decides on the suspension of the procedure for the acquisition of the academic degree of Doctor of Philosophy on the basis of the opinion and proposal of the Committee for Postgraduate Study Programmes, in accordance with these Regulations and other applicable legislation and regulations of the University of Rijeka and the Faculty.

The full-time student loses the status of doctoral student when his or her employment contract ends due to a serious breach of duties or the Code of Ethics.

## **8 TRANSITIONAL AND FINAL PROVISIONS**

### **Article 50**

#### ***Fulfilled programme obligations and obtained ECTS credits of current students***

For students enrolled into the Programme on the date of adoption of these Regulations (current students), all of their fulfilled obligations, obtained ECTS credits, and enrolled semesters of the Programme are recognised.

Current students are required to fulfil all of the obligations registered in their grade books in a way determined by the study programme they enrolled into.

### **Article 51**

#### ***Enrolment of current students in the following semester of the Programme***

Current students continue with the Programme according to the study programme that was applicable at the time of enrolment.

### **Article 52**

#### ***Regulations appendices***

An integral part of these Regulations are:

- Appendix A – Application Form (PDS-1)
- Appendix B – Curriculum Vitae Form (PDS-2)
- Appendix C – Recommendation Form (PDS-3)
- Appendix D – Applicant Selection
- Appendix E – Annual Report on Programme Activities (PDS-4)
- Appendix F – Annual Doctoral Candidate Report (PDS-5)
- Appendix G – Request to Change Topic and/or Supervisor (PDS-6)
- Appendix H – Annual Supervisor Report (PDS-7)
- Appendix I – Submission of Doctoral Thesis Topic (PDS-8)
- Appendix J – Evaluation of Doctoral Thesis Topic (PDS-9)
- Appendix K – Decision on the Approval of Doctoral Thesis Topic (PDS-10)
- Appendix L – Report on the Evaluation of Doctoral Thesis (PDS-11)
- Appendix M – Request to Postpone Public Defence (PDS-12)
- Appendix N – Protocol of the Defence of Doctoral Thesis (PDS-13)
- Appendix O – Minutes of the Defence of Doctoral Thesis (PDS-14)
- Appendix P – Decision on the Defence of Doctoral Thesis
- Appendix R – Doctoral Student's Sustainable Research Plan (PDS-15)
- Appendix S – Statement of Permission for Making the Doctoral Thesis Publicly Accessible

### **Article 53**

#### ***Interpretation of Regulations***

The interpretation of the provisions of these Regulations may be provided by the Dean by his or her decisions or binding instructions. These regulations are provided in Croatian and English language. In the case of any kind of disputes about the Regulations, the version in Croatian language is to be used as a basis for interpretation.

**Article 54**

***Changes and amendments to Regulations***

The changes and amendments to these Regulations are carried out in a way prescribed for its adoption.

**Article 55**

***Entry into force***

These Regulations enter into force on the day they are posted on the Faculty's notice board. By entry into force of these Regulations, the Regulations of 25 May 2013, Class: 003-05/15-1/01, Reg. n.: 2170-57-01-15-1, cease to be applicable.

**DEAN:**

Professor Jasna Prpić-Oršić, Ph.D.

Class: 003-05/18-1/02  
Reg. n.: 2170-57-01-18-1  
Rijeka, 28 September 2018

These Regulations have been posted on the Faculty's notice board on 28 September 2018, when they have entered force.

**OFFICE SUPERVISOR:**

Tomo Vergić, LLB