

Pursuant to Article 62, Paragraph 6, Subparagraph 3 and Article 64, Paragraph 3 of the Act on Science and Higher Education (OG 123/03, 198/03, 174/04, Decision of the Constitutional Court of the Republic of Croatia 2/07, 46/07, 45/09, 63/11, 94/13, 139/13, Decision of the Constitutional Court of the Republic of Croatia 101/14, Decision of the Constitutional Court of the Republic of Croatia 60/15), Article 33, Paragraph 2 of the Statute of the University of Rijeka, and Article 31 of the Rulebook of the Department of Physics of the University of Rijeka (CLASS: 602-04/14-01/166, Reg. No.: 2170-57-003-14-12-1 from 24 December 2014), the Council of the Department of Physics of the University of Rijeka, at the session held on 15 November 2017, has adopted the

Regulation on the Postgraduate University (Doctoral) Study Programme in Physics at the Department of Physics of the University of Rijeka

Article 1

Bearer of the Study

- (1) The Department of Physics of the University of Rijeka (hereinafter: Department of Physics) organises and conducts the postgraduate university (doctoral) study in Physics, scientific area: Natural Sciences, scientific field: Physics (hereinafter: Doctoral study in Physics).
- (2) The Doctoral study in Physics is conducted in accordance with the Regulation on Studies of the University of Rijeka (hereinafter: Regulation on Studies).
- (3) The Doctoral study in Physics is directly managed by the Council of the Doctoral Study in Physics.
- (4) Forms and documents of the Department of Physics and of the University of Rijeka (hereinafter: University) related to the doctoral study are published on the official website of the Department of Physics – *Doctoral study in Physics*.

Article 2

Competencies

- (1) The Doctoral study in Physics is organised for the purpose of creating a new generation of researchers through the development of research competencies required for independently organising research activities in the field of Physics in academic institutions, science and research institutions, industry and in the public and business sectors when such personnel are needed for the successful business development.
- (2) The Doctoral study in Physics is project-based, in such a way that the study is organised as a project enabling the doctoral student to achieve results through scientific research as described in their doctoral dissertation application. Additionally, the study encourages the preparation of the doctoral dissertation within the framework of a financed project with a well-defined scientific and research component.
- (3) By completing the Doctoral study in Physics and obtaining a PhD in the scientific area: Natural Sciences, scientific field: Physics, the Department of Physics guarantees that the young researcher – doctoral student has acquired the competencies of a researcher who can independently take over a

part of a physics research project in academic institutions, science and research institutions, in industry, the public and business sectors, and who can focus their research career towards becoming an independent researcher.

Article 3

Admission

(1) Admission to the Doctoral study in Physics shall be conducted through a public call announced by the Council of the Department of Physics.

(2) The public call shall be published on the official website of the Department of Physics – *Doctoral study in Physics*.

(3) The public call shall include information on the requirements, available vacancies, supporting documentation, fees, and deadlines.

(4) Based on the received applications, the Council of the Department of Physics, following the recommendations of the Council of the Doctoral study in Physics, shall make the final decision on the realisation of the Doctoral study in Physics.

(5) Applicants who wish to gain admission to the Doctoral study in Physics after the study has already formally begun must submit a request for subsequent admission to the Council of the Doctoral Study in Physics which shall include an elaboration and consent from the proposed mentor. The decision regarding the subsequent admission shall be made by the Council of the Doctoral study in Physics.

Article 4

Admission requirements

(1) The Doctoral study in Physics may be applied to by applicants who have previously completed a graduate study programme in accordance with the Bologna or pre-Bologna models.

(2) The Council of the Doctoral study in Physics may, if deemed necessary, summon an applicant for an interview for the purpose of gaining further insight into the applicant's competencies for the successful completion of the Doctoral study in Physics.

(3) The Doctoral study in Physics may be applied to by applicants whose English language competence is sufficient, as assessed by the Council of the Doctoral study in Physics.

(4) Applicants who have graduated from a foreign higher education institution must submit the *Decision of the recognition of their foreign higher education qualifications for the purpose of continuing higher education in the Republic of Croatia* (academic recognition), issued by the Academic Recognition of Foreign Higher Education Qualifications Office of the University of Rijeka.

(5) The Council of the Doctoral study in Physics determines any differences that the students of the Doctoral study in Physics must complete if they did not previously graduate from a scientific-research graduate study programme in Physics. The students must pass the differences no later than the enrolment into the second year of the Doctoral study in Physics.

(6) As an exception, following a written request by the doctoral student and written elaboration by the mentor, the deadline for passing the differences may be extended until the enrolment into the third year of the doctoral study. The decision on the extension is made by the Council of the Doctoral study in Physics.

(7) The Council of the Doctoral study in Physics shall determine whether the applicant fulfils all the admission requirements for admission to the Doctoral study in Physics.

(8) The final applicant roster for admission into the Doctoral study in Physics shall be determined by the Council of the Doctoral Study in Physics.

(9) For each applicant admitted into the Doctoral study in Physics, the Council of the Department of Physics, based on recommendations from the Council of the Doctoral study in Physics, shall name a mentor and, if deemed necessary, a co-mentor.

Article 5

Application for admission

(1) Application to the public call for the Doctoral study in Physics shall be conducted in accordance with the Regulation on Studies and the implementing documentation stemming from it.

(2) The applicant shall submit their application to the Council of the Department of Physics using the form: Application for admission into the Doctoral study in Physics, no later than on the day specified in the public call.

(3) In addition to the application, the applicant shall submit the supporting documentation specified in the public call.

(4) The application to the Doctoral study in Physics shall include:

- The applicant's personal information,
- The applicant's education information,
- A statement by a person holding a research rank that they are willing to be the applicant's mentor,
- A recommendation by at least one person holding a research rank,
- A note whether the applicant is competing for a full-time or part-time position in the Doctoral study in Physics,
- A statement on the sources of funding for the Doctoral study in Physics,
- A Curriculum Vitae (European CV format) which, in addition to basic information, includes professional and academic experience, including (if exists):
 - Professional training or practical work in the field related to the topic of the Doctoral study in Physics,
 - Scientific publications,
 - Participation in international scientific conferences,
 - Student awards, holding courses in a higher education institution, being a demonstrator
- Proof of required qualifications:
 - Graduate study diploma degree (copy),
 - Grades of graduate study (official transcript),
 - Average grade of graduate study,

- Master's thesis grade
- A Letter of Motivation, in which the applicant shall elaborate on their motivation for applying to the Doctoral study in Physics.

(5) If the documents are not in Croatian or English, they must be translated and certified in either Croatian or English.

(6) The applicant shall receive the results of the tender in written form.

Article 6

Financing of the study

(1) The Doctoral study in Physics is financed through scientific projects, grants, the budget of the Department of Physics, the budget of the University of Rijeka, other constituents' funds or the funds of non-University organisations who send their applicants to the Doctoral study in Physics, and tuition fees.

(2) The fees for the Doctoral study in Physics are covered in partial instalments before enrolment into the first three years of the study, or in whole before enrolment.

(3) The decision on the financing methods and tuition fee is made by the Council of the Department of Physics following the recommendation of the Council of the Doctoral study in Physics.

(4) The applicant shall sign the *Contract on studying and mentorship* which regulates mutual rights and commitments.

Article 7

The language of the study

(1) The Doctoral study in Physics may be organised and conducted in Croatian and/or English.

(2) The part of the Study Programme in which only Croatian-speaking doctoral students participate may be organised and conducted in Croatian.

(3) The part of the Study Programme in which doctoral students with insufficient knowledge of Croatian participate shall be organised and conducted in English.

(4) The doctoral dissertation shall be written and defended in English.

Article 8

Structure of the Study Programme and ECTS credits

(1) The Doctoral study in Physics is comprised of four units, and each doctoral student must meet the minimal requirements expressed in ECTS credits.

- *The scientific research*, aimed at the preparation and defence of the doctoral dissertation.

The doctoral student conducts scientific research under supervision and with the assistance of a mentor and co-mentor (if appointed). The doctoral student shall actively participate in seminars in which they present the results of their research, as well as seminars in which other doctoral students present their results. The doctoral student shall regularly report on their work to the Council of the Doctoral study in Physics.

During the preparation of the doctoral dissertation, the doctoral student shall:

- Defend the *Doctoral dissertation field of research*, thus achieving no less than 5 ECTS credits,
- Defend the of the *Doctoral dissertation topic*, thus achieving no less than 5 ECTS credits,
- Receive a positive *Report on the evaluation of the doctoral dissertation*, thus achieving no less than 90 ECTS credits.

The doctoral student shall achieve no less than 100 ECTS points through *the scientific research*.

- *The Study Programme of the Doctoral study in Physics* shall ensure that the doctoral student acquires essential competencies for the successful completion of the doctoral study programme.

The doctoral student shall fulfil all commitments of the Study Programme as prescribed by Article 9 of this Regulation.

The doctoral student shall achieve no less than 30 ECTS credits through the successful completion of *the Study Programme*.

- *The internationalisation of research* which encourages the doctoral student to get involved in current worldwide scientific trends.

The doctoral student shall be involved in the exchange of scientific ideas with scientists from other renowned science and research institutions. These activities (related to the doctoral dissertation) include residency at renowned domestic or foreign higher education or scientific institution, active participation in international projects and collaborations, participation in international conferences and holding guest lectures.

- Through residency at renowned universities and scientific and research institutions the doctoral student can achieve no more than 20 ECTS credits,
- Through active participation in international projects and collaborations the doctoral student can achieve no more than 10 ECTS credits,
- Through participation as a guest lecturer the doctoral student can achieve no more than 10 ECTS credits,
- Through participation in international conferences (congresses, summer schools, journal clubs, seminars, workshops) the doctoral student can achieve no more than 10 ECTS credits.

The doctoral student shall achieve no less than 20 ECTS points through *the international of research*.

- *The elective activities* through which the doctoral student's scientific recognition is encouraged.

The doctoral student must publicly present their ideas, accomplishments and knowledge achieved throughout the duration of the Doctoral study in Physics, through presentations and publications of communications, scientific and professional papers, in scientific and professional journals, at domestic and international scientific conferences, and through teaching.

- For an article published in the WoS database, the doctoral student can achieve no more than 20 ECTS credits, depending on the journal's Q-factor and the doctoral student's contribution,

- For communications and posters at scientific conference the doctoral student can achieve no more than 5 ECTS credits,
- For a published professional paper the doctoral student can achieve no more than 5 ECTS credits,
- The doctoral student may participate in teaching activities (e.g. teaching assistant on a course or through participation in an appropriate accredited programme) and thus achieve no more than 10 ECTS credits.

The doctoral student shall achieve no less than 20 ECTS credits through *the elective activities*.

(2) For the duration of the Doctoral study in Physics, the doctoral student shall achieve no less than 180 ECTS credits. Through the commitments defined by the Doctoral study in Physics, the doctoral student shall achieve no less than 170 ECTS credits. The doctoral student can achieve additional ECTS credits through various activities within the scope of any of the four study programme units, for example through increased scientific activity or through the expansion of their generic competencies through the General Study of the Study Programme. The Council of the Doctoral study in Physics, following the doctoral student's mentor's recommendation, determines the ECTS credits awarded to the doctoral student for each of the activities described by the Paragraph 1 of this Article.

(3) The requirements which the doctoral student must fulfil within the scope of the Doctoral study in Physics are prescribed by the *Contract on studying and mentorship*.

Article 9

The Study Programme

(1) Execution of the Study Programme:

- The study programme is organised and conducted by the Department of Physics of the University of Rijeka in cooperation with researchers from other constituents of the University or organisations outside of the University of Rijeka,
- Any researcher who is not an employee of the Department of Physics of the University of Rijeka shall sign a collaboration/service contract within the scope of the Doctoral study in Physics, with written consent by the head of the researcher's native organisation,
- The study programme and its amendments are proposed by the Council of the Doctoral study in Physics and adopted by the Council of the Department of Physics,
- The study programme is comprised of a General Study and a Specific Study.

(2) Duration of the Study Programme:

- One study year is the time period which the doctoral student requires to fulfil their commitments as prescribed by the *Contract on studying and mentorship* for that study year. This period may be shorter or longer than one calendar year,
- All courses of the Doctoral study in Physics apart from seminars are held during the first study year,
- As an exception, with written elaboration by the course coordinator and consent of the mentor, a course may be extended to the second study year. The decision on this extension is made by the Council of the Doctoral study in Physics.

(3) General Study

- The General Study ensures general (generic) research competencies and enables the doctoral student to acquire a level VIII education qualification,
- The doctoral student may, as part of the General Study, enrol into accredited courses within or outside of the field of physics at the University of Rijeka or beyond,
- Doctoral students may come from different backgrounds with different previous knowledge, so they are able to acquire different general competencies. Part of the standard competencies regarding the doctoral study (defining the aims and tasks of a scientific paper, independently discovering and using literature and other sources of knowledge, etc.) are acquired through the compulsory course Seminar in Physics at the Doctoral study in Physics, and the doctoral student may expand this type of competency through courses such as Methodology of Scientific Research held at several other doctoral study programmes at the University of Rijeka. The doctoral student may also expand their knowledge in other areas, such as applied mathematics, informatics, biotechnology and similar, through relevant courses at doctoral study programmes at the University of Rijeka, or they can acquire the required competencies through appropriate courses at other Croatian universities or abroad,
- The decision regarding the amount of achieved ECTS credits at particular courses of the General Study, as well as amendments to the amount of achieved ECTS credits shall be made by the Council of the Doctoral study in Physics following the recommendation of the mentor.

(4) Specific Study

- The Specific Study is a coherent research unit through which the doctoral student may acquire specific research competencies from the scientific field of Physics required to conduct high quality research in domestic and foreign science and research institutions, as well as companies in the public and private sectors,
- The Specific Study is composed of the Compulsory and Optional parts:
Compulsory part of the Specific Study:
 - The Compulsory part of the Specific Study includes a research programme conducted through elective courses and seminars encompassing a coherent unit within the scope of the Doctoral study in Physics,
 - The Department of Physics employs experts in fields related to the courses of the Compulsory part of the Specific Study, and the doctoral student's dissertation topic must fit into one of those fields,
 - The doctoral student must enrol into at least one elective course of the Compulsory part of the Specific Study and pass it by the end of the first study year,
 - Each elective course within the scope of the Compulsory part of the Specific Study awards 10 ECTS credits,
 - The doctoral student must actively participate in the seminars of the Doctoral study in Physics through presentations and comments for the duration of the study,
 - Through active participation in seminars within the scope of the compulsory course Seminar in Physics, the doctoral student achieves 5 ECTS credits.

Optional part of the Specific Study:

- The Optional part of the Specific Study includes specific activities required for the implementation of the doctoral student's research project and acquiring specific competencies required for mastering the area of the doctoral dissertation,
- The doctoral student must enrol into at least one course of the Optional part of the Specific study.

The Optional part of the Specific Study is comprised of Specific classes and Physical techniques.

Specific classes:

- Specific classes are specific lectures organised in such a way to assist the doctoral student in mastering specific research related to their doctoral dissertation,
- Each course within the scope of Specific classes awards 8 ECTS credits.

Physical techniques:

- Physical techniques are specific techniques the doctoral student requires in order to master specific research related to their doctoral dissertation.
Considering the type of doctoral dissertation, Physical techniques may include:
 - Learning complex theoretical models and their application,
 - Learning complex numerical models and simulations,
 - Learning complex laboratory techniques and working with experimental instruments.
- Each course within the scope of Physical techniques awards 7 ECTS credits.

(5) The full list of courses of the *Compulsory and Optional parts of the Specific Study*, as well as the course descriptions and holders of the courses, can be found in the Description of the Study Programme, and is briefly presented in the Department of Physics' publication *Courses of the Doctoral study in Physics*.

(6) Courses in which 5 or more students enrol in shall be held as planned, while courses in which less than 5 people enrol in may be held as consultations.

(7) The decision on holding courses as consultation is made by each course coordinator with consent of the mentor.

(8) Fulfilling the commitments of the Study Programme awards no less than 30 ECTS credits.

Article 10

Seminars

(1) During the first year of study of the Doctoral study in Physics the doctoral students attend the compulsory course *Seminar in Physics*, while in higher study years they actively participate in seminars organised by the Council of the Doctoral study in Physics in collaboration with the course coordinator *Seminar in Physics*, as well as mentors and co-mentors.

(2) As part of the seminars, the doctoral students, apart from acquiring general competencies related to scientific papers, present the research they conduct within the scope of the Doctoral study in Physics, analyse the techniques used, present the problems they encounter, analyse new papers and contemporary literature from their field (journal club), discuss the papers they are preparing for conferences or for publishing, and comment their colleagues' presentations.

(3) The doctoral students must, at least once per year during the study, publicly present current topics regarding their doctoral dissertation and their accomplishments at the Seminar in Physics course.

(4) Especially relevant are seminars which the doctoral student presents in front of all mentors, co-mentors and lecturers of the Doctoral study in Physics, held before particular commitments:

- The doctoral student submits *the Doctoral dissertation field of research application* to the Council of the Doctoral study in Physics,
- The doctoral student submits the *Doctoral dissertation topic application* to the Council of the Doctoral Study in Physics,
- The doctoral student submits the *Doctoral dissertation grade request* to the Council of the Doctoral study in Physics.

Article 11

Bodies of the Doctoral study in Physics

(1) Council of the Doctoral study in Physics

- The Council of the Doctoral study in Physics is managed by the Head of the doctoral study,
- Administrative business of the Council is conducted by the Administrator of the doctoral study.

(2) Mentor

- If deemed necessary, the doctoral student is also appointed a co-mentor.

(5) Doctoral Dissertation Topic Defence Committee

(6) Doctoral Dissertation Evaluation Committee

- (It may be the same as the Doctoral Dissertation Topic Defence Committee)

(7) Doctoral Dissertation Examination Committee

- (It may be the same as the Doctoral Dissertation Evaluation Committee)

Article 12

Council of the Doctoral study in Physics

(1) The Doctoral study in Physics is directly managed by the Council of the Doctoral study in Physics.

(2) The Council of the Doctoral study in Physics consists of at least three permanent members appointed by the Council of the Department of Physics.

(3) If the execution of the Doctoral study in Physics involves other constituents of the University of Rijeka or institutions beyond the University of Rijeka, their scientists may be appointed as associate members of the Council of the Doctoral study in Physics.

(4) Associate members are proposed by their native constituent/institution, and are confirmed by the Council of the Department of Physics following the recommendation by the Council of the Doctoral study in Physics.

(5) Collaborating institutions which sign a Collaboration Contract with the Department of Physics regarding the Doctoral study in Physics appoint at least one associate member to the Council of the Doctoral Study in Physics.

(6) The total number of associate members may not be greater than the number of permanent members of the Council of the Doctoral Study in Physics.

(7) Associate members participate in the business of the Council of the Doctoral study in Physics on equal terms.

(8) The members of the Council of the Doctoral study in Physics are appointed for a term of five years. Members may be reappointed for additional terms.

(9) The Council of the Department of Physics may make a decision to relieve a member of the Council of the Doctoral study in Physics of duty during their term if they assert that the member is not conducting their duties well. New members of the Council of the Doctoral study in Physics are appointed in the same manner as the members whose term has ended.

(10) Permanent members of the Council of the Doctoral study in Physics appoint the Head of the doctoral study from their ranks. The Head of the doctoral study is a member of the Council of the Department of Physics. The Head of the doctoral study manages the business of the Council of the Doctoral study in Physics and is responsible for its business. The term of the Head of the doctoral study lasts 5 years and the same person may be reappointed.

(11) The members of the Council of the Doctoral study in Physics decide on matters within the purview of the Council of the Doctoral Study in Physics by a majority vote of members present at the Council session, if there is a majority of the total number of permanent members present at the session.

(12) The Head of the doctoral study has the power of veto over the decisions of the Council of the Doctoral study in Physics.

(13) The Council of the Doctoral study in Physics:

- Recommends the execution of the Doctoral study in Physics to the Council of the Department of Physics,
- Submits the Study Programme of the Doctoral study in Physics to the Council of the Department of Physics, its amendments, as well as other implementing acts and forms required for the execution of the Doctoral study in Physics within the purview of the Council of the Department of Physics, including recommendations for the tender and the tender application for admission into the Doctoral study in Physics,
- Manages the financing of the study, including the propositions for the financing methods and tuition fee,
- Determines applicants' aptitude to be admitted into the Doctoral study in Physics, including confirming education levels, English language competence, and financial commitments towards the doctoral study,
- Determines the differences applicants must enrol into and the deadline to pass them,
- Conducts the selection of applicants to be admitted into the Doctoral study in Physics,
- Determines the appropriateness of proposed mentors and, if deemed necessary, recommends/approves the appointment of co-mentors, keeping in mind the total number of applicants that each mentor and co-mentor may manage,
- Approves the Applicant Study Plan following the mentor's recommendation,

- Drafts the *Contract on studying and mentorship* for each applicant which defines the requirements the doctoral student must fulfil within the scope of the Doctoral study in Physics,
- Organises the Study Programme of the Doctoral study in Physics and appoints lecturers for the Study Programme,
- Organises seminars of the Doctoral study in Physics in collaboration with mentors and co-mentors,
- Decides which processes of the doctoral study (classes, field and topic of research defence) shall be in Croatian and which shall be in English,
- Monitors the quality of classes of the doctoral study through questionnaires filled out by the doctoral students, and using other appropriate methods,
- Proposes changes of the duration of the Doctoral study in Physics for each doctoral student if it deems it justified to the Council of the Department of Physics,
- Proposes to the Council of the Department of Physics the appointing of:
 - Mentors and co-mentors (if deemed necessary),
 - Doctoral Dissertation Topic Defence Committees,
 - Doctoral Dissertation Grading Committees,
 - Doctoral Dissertation Defence Committees
- At least once per year attends the doctoral students' presentation regarding their results accomplished in the preceding period,
- Accepts the *Annual Doctoral Student's Report* on their work during the preceding year and forwards it with their opinion to the Council of the Department of Physics,
- Accepts the mentor's and co-mentor's report on the doctoral student's work, including the *Annual Mentor's Report*, and forwards it to the Council of the Department of Physics,
- Grades the *Annual Doctoral Student's Report* and the *Annual Mentor's Report*; if one of the reports is graded negatively, the Council of the Doctoral study in Physics may extend the deadline to submit the revised report for no more than 3 (three) months; if the Council of the Doctoral study in Physics negatively grades the revised report, and the Council of the Department of Physics confirms the negative grade, the doctoral student loses their student status,
- Attends the *Field of research defence* and accepts the Doctoral dissertation field of research,
- Attends the *Doctoral dissertation topic defence* and the *Doctoral dissertation defence*,
- Accepts the reports of the *Doctoral Dissertation Topic Defence Committee*, *Doctoral Dissertation Evaluation Committee*, and *Doctoral Dissertation Examination Committee*, and forwards them to the Council of the Department of Physics for confirmation, with their observation,
- Communicates with the Head and Council of the Department of Physics regarding the Doctoral study in Physics,
- Once per year submits a yearly report on the doctoral study to the Council of the Department of Physics.

(14) The administrative business of the Council of the Doctoral study in Physics is managed by the Administrator of the doctoral study who is appointed by the Head of the Department of Physics to a part-time position. The Administrator collaborates with the *Centre for Studies and Students* of the University of Rijeka.

(15) The Council of the Doctoral study in Physics conducts other business regarding the organisation and implementation of the Doctoral study in Physics, as mandated by the Council of the Department of Physics.

Article 13

Mentor (co-mentor)

(1) At the beginning of the Doctoral study in Physics, the Council of the Department of Physics, following the recommendation of the Council of the Doctoral study in Physics and with the consent of the doctoral student, appoints a mentor, and if deemed necessary a co-mentor, to each doctoral student.

(2) A mentor or co-mentor may be appointed from outside of the ranks of the teaching staff of the Department of Physics.

(3) A mentor may be a person with the academic rank of assistant professor or higher, or with a scientific rank of research assistant or higher.

(4) A co-mentor may be a person who is a researcher with a PhD in physics.

(5) If a mentor (co-mentor) achieved a scientific title outside of the Republic of Croatia, they must have an academic rank in accordance with Croatian regulations.

(6) As an exception, a mentor (co-mentor) may be a professor emeritus.

(7) A mentor (co-mentor), with the consent of the Council of the Doctoral study in Physics, may continue leading the doctoral student in the preparation of their doctoral dissertation after retirement.

(8) A mentor (co-mentor) must be a scientifically active researcher and expert in the area of physics in which the doctoral student is preparing their doctoral dissertation, and must meet *the Minimal criteria for the selection of mentors at postgraduate university studies at the University of Rijeka*.

(9) If the mentor is a member of the University of Rijeka or a collaborating institution on the Doctoral study in Physics, the doctoral student does not need to have a co-mentor. If that is not the case, the Council of the Doctoral study in Physics, with the consent of the mentor, appoints a co-mentor who is a member of the University of Rijeka or a collaborating institution on the Doctoral study in Physics.

(10) The mentor's (co-mentor's) role is:

- To assist the doctoral student in shaping, selecting the topic and preparing their doctoral dissertation,
- To design a research plan together with the doctoral student, a plan of action at the Department of Physics, and a *Study Plan* for the doctoral student, which is then sent for approval to the Council of the Doctoral study in Physics,
- To introduce the doctoral student to all of the relevant regulations of the Doctoral study in Physics, ethical principles, organisation of the Department of Physics and the University of Rijeka, equipment and equipment usage regulations, and the library system,
- To build a constructive and positive relationship with the doctoral student based on the principles of partnership and scientific integrity, and in so create an environment for the efficient transfer of knowledge,
- To introduce the doctoral student to the nature of research and standards which must be met through the research, to point them to the application of appropriate research methods, to introduce them to relevant literature and access to information sources,

- To warn the doctoral student when their research progress is not satisfactory or below standard,
- To revise the research questions and hypotheses that are being researched, and to suggest alternative ideas and solutions when the doctoral student is unable to reach solutions,
- To encourage the doctoral student to write about their accomplished results, to ensure constructive criticism, and to encourage the doctoral student to publish their results,
- To introduce the doctoral student to the principles of academic integrity, and to monitor the adherence to those principles (such as avoiding plagiarism) during the preparation of the doctoral dissertation,
- To encourage the doctoral student to pursue further education and training, particularly in the development of personal competencies, as well as entrepreneurial and specialist knowledge and skills,
- To assist the doctoral student in the realisation of seminars,
- To ensure the doctoral student is involved in current worldwide scientific trend (internationalisation of research).

(11) The mentor reports to the Council of the Doctoral study in Physics on the doctoral student's accomplishments, and shall, once per year, submit their observations of the doctoral student's progress throughout the preceding year to the Council of the Department of Physics using the *University's Annual Mentor Report*.

(12) All active and potential mentors participate in the doctoral student's yearly presentations and public field of research, doctoral dissertation topic and doctoral dissertation defences at the Doctoral study in Physics.

Article 14

Lecturer

(1) A lecturer at the Doctoral study in Physics Study Programme may be a person holding an academic position of assistant professor or higher. If the lecturer achieved their academic title outside of the Republic of Croatia, they must be elected into an academic position in accordance with Croatian regulations.

(2) The Council of the Department of Physics may confer no more than one third of a course to lecturers, scientists or experts without concluding an employment contract and without them having an academic position (guest lecturer), with the condition of the primary part of the course being held by a person elected into an appropriate academic position.

(3) The Council of the Department of Physics, with the consent of the University Senate, may confer the realisation of a particular course to a renowned scientist or distinguished expert without them having an academic position, for a period of no longer than two consecutive academic years.

(4) Lecturers attend the yearly presentations, public field of research, doctoral dissertation topic and doctoral dissertation defences of the doctoral students whose lecturers they are or have been during the Doctoral study in Physics.

Article 15

The doctoral student

- (1) The student of the Doctoral study in Physics – the doctoral student, may be a full-time or part-time student.
- (2) The doctoral student, with the assistance of their mentor, designs a research plan, an action plan at the Department of Physics, and composes a *Study Plan* which is sent for approval to the Council of the Doctoral study in Physics.
- (3) The doctoral student does not have the right to intellectual property generated through their research at the University of Rijeka. The doctoral student may request negotiations for the protection of part of the generated intellectual property from the *University of Rijeka Technology Transfer Office*. The Office shall provide their opinion, and the final decision shall be made by the Rector of the University of Rijeka.
- (4) The doctoral student may change their mentor/co-mentor, as well as the topic of their doctoral dissertation, with a written request submitted to the Council of the Doctoral study in Physics, and a statement by the current mentor/co-mentor. The request shall be submitted using the University form *Request for the change of topic and/or mentor*.
- (5) The decision on the change of topic and/or mentor/co-mentor is made by the Council of the Department of Physics following the recommendation by the Council of the Doctoral study in Physics.

Article 16

The doctoral student's commitments

- (1) The doctoral student of the Doctoral study in Physics:
 - Consistently adheres to the rules (regulations, decisions, policies, guidelines, occupational health and safety) of the University of Rijeka and the Department of Physics, i.e. the scientific constituents in which they conduct their research,
 - Consistently upholds ethical principles and intellectual property principles,
 - Consistently adheres to the principles of academic integrity through the deliberate referencing of others' published or unpublished papers, regardless of whether it involves short citations, long citations, reshaping of others' ideas, assessments, illustrations, diagrams or software solutions,
 - Avoids self-plagiarism and uses appropriate plagiarism identification systems,
 - Resolves conflicts through academic dialogue,
 - Consults with their mentor regarding the research goals and methods, research records and workplace health and safety,
 - Regularly informs their mentor on the activities realised as part of their advancement through the doctoral study and accepts advice on improving their work,
 - Adheres to deadlines determined by the *Contract on studying and mentorship*,
 - Actively participates in seminars related to their doctoral dissertation,
 - Publicly presents their progress and accomplishments at least once per year,
 - Once per year submits a written report on their work during the preceding year to the Council of the Doctoral study in Physics using the University form *Annual Doctoral Student's Report*.

(2) In order to enrol into the following study year, in addition to getting a positive evaluation on the Annual Doctoral Student's Report and the Annual Mentor's Report, the doctoral student shall submit to the Council of the Doctoral study in Physics:

- In order to enrol into the second study year:
 - a) An accepted evaluation of the defence of the Doctoral dissertation field of research,
 - b) Confirmation that the doctoral student has passed the course from the Compulsory part of the Specific Study, as prescribed by the Contract on studying and mentorship
- In order to enrol into the third study year:
 - a) An accepted evaluation of the defence of the topic of the doctoral dissertation, and the approval of the topic of the doctoral dissertation,
 - b) Confirmation that the doctoral student has passed all courses of the Study Programme, as prescribed by the Contract on studying and mentorship.

(3) In order to successfully complete the Doctoral study in Physics, the doctoral student must submit to the Council of the Doctoral study in Physics the following:

- a) A positive Report on the doctoral dissertation evaluation,
- b) A positive Decision on the result of the defence of the doctoral dissertation,
- c) Confirmation of the Council of the Doctoral study in Physics that the doctoral student has fulfilled all other requirements as prescribed by the Contract on studying and mentorship.

Article 17

The duration of the study

(1) The Doctoral study in Physics lasts four calendar years for full-time doctoral students, and six calendar years for part-time doctoral students. A full-time doctoral student commits to spend the full working hours on fulfilling their commitments towards the Doctoral study in Physics. A part-time doctoral student commits to spend part of the full working hours (no less than 50%) on fulfilling their commitments towards the Doctoral study in Physics.

(2) The doctoral student who actively participates in teaching and institutional activities not directly related to their doctoral dissertation with more than 20% of the full working hours, i.e. participates in teaching at one of the university studies with over 60 hours per year, is a part-time student as a rule; deviation from this rule is possible with the approval of the mentor and the Council of the Doctoral study in Physics.

(3) The duration of the study shall be determined at the start of the study and shall become a provision in the *Contract on studying and mentorship*.

(4) Particularly successful doctoral students at the Doctoral study in Physics may complete the study programme earlier than the expected duration of the study.

(5) Where there are reasonable grounds, the duration of the study may be extended to no more than six calendar years for full-time doctoral students, and no more than ten calendar years for part-time doctoral students.

(6) Any change in the duration of the study shall be determined by the Council of the Department of Physics following the recommendation of the Council of the Doctoral study in Physics, after the

doctoral student submits a written request to the Council of the Doctoral study in Physics accompanied by relevant documentation and the mentor's opinion.

Article 18

Suspension of the doctoral student's commitments

(1) The doctoral student's commitments may be suspended:

- During pregnancy and up to the child reaching one year of age,
- In case of a long-term illness,
- In other justified cases (for example a specialisation abroad, extended waiting period for the review of an article).

(2) The doctoral student obtains the right to suspend their commitments based on a decision by the Council of the Doctoral study in Physics, to whom the doctoral student must submit a written request and relevant supporting documentation.

Article 19

Loss of doctoral student status

(1) The student status in Doctoral study in Physics ends for doctoral students:

- Upon completion of the Doctoral study in Physics by publicly defending their doctoral dissertation,
- When they withdraw from the Doctoral study in Physics.

(2) The Doctoral study in Physics doctoral student loses the student status:

- If they did not fulfil the requirements as prescribed by the *Contract on studying and mentorship* in time,
- If the Council of the Department of Physics accepts the mentor's negative report,
- If the Council of the Department of Physics makes a decision to terminate the procedure of acquiring the doctoral degree in accordance with *the Regulation on Studies of the University of Rijeka*,
- If they are in violation of the Code of Ethics,
- If they are in violation of the commitments arising from the employment relationship.

(3) The decision on the loss of the doctoral student status of the Doctoral study in Physics shall be made by the Council of the Department of Physics following the recommendation of the Council of the Doctoral study in Physics.

Article 20

Contract on studying and mentorship

(1) The mentor and the doctoral study applicant shall design a *Study Plan* for the Doctoral study in Physics which shall include:

- A plan of research activities and the tools required for their realisation,
- A plan of elective courses within the scope of the Study Programme,
- A plan of acquiring specific competencies related to the research topic, competencies which cannot be acquired through the Study Programme and direct research efforts,
- Acquiring teaching competencies, if the applicant has been selected as an assistant in physics,
- Participation in institutional activities,
- A plan regarding the regular reporting on the doctoral student's progress,
- The method of studying (full-time or part-time)

(2) The Council of the Doctoral study in Physics shall accept each individual applicant's *Study Plan* and draft it into the *Contract on studying and mentorship*, signed by the applicant, the Head of the Council of the Doctoral study in Physics, and the Head of the Department of Physics.

(3) The *Contract on studying and mentorship* prescribes the requirements the doctoral student must fulfil within the scope of the Doctoral study in Physics, including the details related to the financing of the study.

(4) The Council of the Doctoral study in Physics shall send the Contract on studying and mentorship to the Council of the Department of Physics for approval.

(5) Upon concluding the Contract on studying and mentorship with the Department of Physics, the applicant becomes a doctoral student of the Doctoral study in Physics of the Department of Physics of the University of Rijeka.

Article 21

Application for the Doctoral dissertation field of research

(1) The doctoral student shall submit to the Council of the Doctoral Study in Physics the written *Application for the Doctoral dissertation field of research*, as a requirement for enrolment into the second study year.

(2) Before submitting the written Application the Doctoral dissertation field of research, the doctoral student presents their field of research as part of the compulsory seminar towards the end of the first study year.

(3) The Application for the Doctoral dissertation field of research shall include:

- A general overview of the current status and expected development of the field of research to which the research matter belongs,
- A general purpose and research goals,
- A general overview of the scientific methods to be used in the research,
- Written consent from the mentor.

(4) The doctoral student defends their Application for the Doctoral dissertation field of research in front of the Council of the Doctoral study in Physics, mentors and lecturers, who interview the doctoral student to determine their aptitude for preparing the dissertation in the chosen field. The Council of the Doctoral study in Physics may request a revision of the Application for the Doctoral dissertation field of research and extend the deadline for the submittal of the revised Application for the Doctoral dissertation field of research for no longer than 3 more months.

(5) The Council of the Doctoral study in Physics shall evaluate the defence of the Doctoral dissertation field of research and report on it to the Council of the Department of Physics.

Article 22

Application for the approval of the Doctoral dissertation topic

(1) The doctoral student shall submit to the Council of the Doctoral study in Physics the *Application for the approval of the Doctoral dissertation topic* using the University form.

(2) Before submitting the written application, the doctoral student presents the topic of their doctoral dissertation within the scope of the compulsory seminar at the end of the second year of study.

(3) The presentation of the topic is attended by the members of the Council of the Doctoral study in Physics, mentors and lecturers, who interview the doctoral student in order to determine the quality of the topic and the doctoral student's aptitude for defending it.

(4) The Council of the Doctoral study in Physics may request an elaboration on the topic or the changing of the topic.

(5) Apart from the *Application for the approval of the doctoral dissertation topic*, the doctoral student shall submit:

- Written consent from the mentor,
- Written and elaborated consent by the Ethical Committee of the institution when research is conducted on people, animals or plants, and materials of human, animal or plant origins.

Article 23

Defence of the doctoral dissertation topic

(1) The doctoral student publicly defends the *Doctoral dissertation topic* before the Doctoral Dissertation Topic Defence Committee comprised of at least three members holding an academic or research position, typically renowned experts in the field related to the doctoral dissertation topic, in addition to the mentor, co-mentor and Head of the Doctoral study in Physics.

(2) The Committee shall submit a report to the Council of the Doctoral study in Physics which shall contain a grade of the applied doctoral dissertation topic and an elaboration on why they recommend such a grade, no longer than two months from the day when the doctoral student submits the *Application for the approval of the doctoral dissertation topic*.

(3) The Council of the Doctoral study in Physics, with confirmation from the Council of the Department of Physics, and following the recommendation from the Doctoral Dissertation Topic Defence Committee, may request that the doctoral student revises their Application for the doctoral dissertation topic. If the Doctoral Dissertation Topic Defence Committee negatively evaluates the revised Application, the Council of the Doctoral study in Physics shall propose the termination of the process for obtaining the doctoral degree.

(4) The Council of the Doctoral Study in Physics shall submit the final report of the Doctoral Dissertation Topic Defence Committee and their own recommendation to the Council of the

Department of Physics no later than four months since the day the doctoral student submits the Application for the approval of the doctoral dissertation topic.

(5) The Council of the Department of Physics shall render a decision on the Application for the approval of the doctoral dissertation topic and inform the doctoral student no later than six months since the day the doctoral student submits the Application.

(6) A positive decision of the Council of the Department of Physics shall be submitted using the University form *Approval of doctoral dissertation topic*.

(7) A negative decision of the Council of the Department of Physics is typically followed by the termination of the process of obtaining a doctoral degree.

(8) The approval of the doctoral dissertation topic is a requirement for enrolment into the third year of study of the Doctoral study in Physics.

Article 24

The doctoral dissertation

(1) The doctoral dissertation represents an original and independent scientific work and, in terms of its methodology and scientific contribution, is suitable for the assessment of the doctoral student's ability to act as an independent scientific researcher.

(2) The doctoral student shall prepare the doctoral dissertation under the supervision of the mentor. This research shall be public, written in English, and may be published subsequently.

(3) The doctoral dissertation may be submitted for assessment and accepted for public defence in the form of the traditional doctoral dissertation (monograph) or a doctoral dissertation based on published scientific research papers (the Scandinavian model).

(4) The doctoral dissertation shall clearly indicate what the doctoral student's original contribution involves regarding the research and papers on which the dissertation is based.

(5) In order to fulfil the requirements for the doctoral dissertation defence, the doctoral students shall include the following proof of their scientific research:

- a) At least one scientific paper on which the doctoral student has primary contribution, published or accepted for publishing in a Natural sciences journal, field of Physics, indexed as a Q1 or Q2 journal in the WoS database, or

At least two scientific papers published or accepted for publishing in journals of Natural sciences, field of Physics, indexed in the WoS database, and in which the doctoral student has primary contribution on at least one paper (Q1-Q4), and at least one paper is published in journals (Q1-Q3).

- The quartile ranking of a journal shall be determined at the moment when the paper is published.
- The evaluation of the doctoral student's scientific contribution shall be conducted by the Council of the Doctoral study in Physics, which may request additional opinions from the mentor/co-mentor, co-authors of papers, and, in the case of larger groups or collaborations, the opinions of the group leaders or high ranking members of the collaboration. The

additional opinions shall include a detailed elaboration on the doctoral student's contribution.

- b) At least one communication at an international scientific conference.
- c) The fulfilment of the minimal requirements of all units of the Doctoral study in Physics as prescribed by Article 8 of this Regulation.

(6) The composing and furnishing of the doctoral dissertation is prescribed the *University of Rijeka Regulation on composing and furnishing of doctoral dissertations*.

Article 25

Application for the evaluation of the doctoral dissertation

(1) A doctoral student who fulfils all commitments of the Doctoral study in Physics shall submit a written *Application for the evaluation of the doctoral dissertation* to the Council of the Doctoral study in Physics.

(2) Before submitting the Application for the evaluation of the doctoral dissertation, the doctoral student shall present a short overview of their dissertation within the scope of a compulsory seminar.

(3) The presentation shall typically be attended by the members of the Council of the Doctoral study in Physics, mentors and lecturers, who shall interview the doctoral student regarding the quality of their doctoral dissertation and their aptitude to defend it.

(4) The Council of the Doctoral study in Physics may recommend additional elaboration on the doctoral dissertation. The decision on including this shall be made by the doctoral student and their mentor.

(5) The *Application for the evaluation of the doctoral dissertation* shall include:

- The Application,
- Written consent from the mentor that the thesis fulfils the requirements for a doctoral dissertation,
- Non-bound copies of the doctoral dissertation,
- Curriculum Vitae of the doctoral student using the Europass CV format,
- Confirmation that the doctoral student passed all exams and achieved ECTS credits,
- Abstract of the doctoral dissertation (20-30 lines).

Article 26

Evaluation of the doctoral dissertation

(1) The Doctoral Dissertation Evaluation Committee consists of no less than three members holding an academic or research position, typically renowned experts in the field of the doctoral dissertation topic, of which at least one member is from the ranks of a university or scientific institution outside of the University of Rijeka.

(2) The Committee shall decide the grade of the doctoral dissertation by a majority vote. The Committee shall submit their report on the grade of the doctoral dissertation to the Council of the

Department of Physics via the Council of the Doctoral study in Physics no later than three months from the day on which they receive the doctoral dissertation. The Committee's report shall be submitted using the University form *Report on the evaluation of the doctoral dissertation*.

(3) The Committee's Report shall include a conclusion in which the original scientific contribution of the doctoral dissertation is clearly stated.

(4) In the case that the Council of the Doctoral study in Physics shall conclude that the Doctoral Dissertation Evaluation Committee's Report does not offer reasonable grounds for rendering a decision on the grade of the doctoral dissertation, they shall, no longer than within one month, recommend to the Council of the Department of Physics:

- The appointment of new members to the Doctoral Dissertation Evaluation Committee requesting that they submit separate reports, or
- Appoint a new Doctoral Dissertation Evaluation Committee requesting that they re-evaluate and grade the doctoral dissertation and submit a new report.

(5) Upon receiving the final Report on the evaluation of the doctoral dissertation from the Doctoral Dissertation Evaluation Committee, the Council of the Doctoral study in Physics shall within one month submit their recommendation and the Doctoral Dissertation Evaluation Committee's Report to the Council of the Department of Physics:

- In the case of a positive grade of the doctoral dissertation, the Council of the Doctoral study in Physics shall recommend members of the Doctoral Dissertation Examination Committee,
- In the case of a negative grade of the doctoral dissertation, the Council of the Doctoral study in Physics shall recommend the termination of the process of obtaining the doctoral degree.

(6) At the session of the Council of the Department of Physics held within two months from the day on which they receive the final report from the Council of the Doctoral study in Physics, the President of the Doctoral Dissertation Evaluation Committee shall submit a brief oral report elaborating on the accomplished original scientific contribution of the doctoral dissertation, after which the Head of the Doctoral study in Physics shall elaborate on the Council of the Doctoral study in Physics' recommendation.

(7) In the case of the Council of the Department of Physics accepting the positive evaluation of the doctoral dissertation, they shall, typically at the same session, confirm the appointment of the Doctoral Dissertation Examination Committee following the recommendation of the Council of the Doctoral study in Physics.

(8) In the case of the Council of the Department Physics negatively evaluating the doctoral dissertation, they shall render a decision on the termination of the process of obtaining the doctoral degree and inform the doctoral student.

Article 27

Doctoral dissertation defence

(1) A doctoral student who fulfils all the requirements of the Doctoral study in Physics shall be eligible to defend their doctoral dissertation.

(2) The doctoral dissertation shall be written in English and shall be made publicly available no less than 15 days before the day of the defence.

- (3) The doctoral dissertation defence shall take place no later than two months from the day on which the Council of the Department of Physics accepts the doctoral dissertation.
- (4) The Doctoral Dissertation Examination Committee shall determine the date and location of the doctoral dissertation defence, keeping in mind the proposal from the mentor and the doctoral student.
- (5) The name and last name of the doctoral student, the title of their doctoral dissertation, the composition of the Doctoral Dissertation Examination Committee, and the day, time and place of the doctoral dissertation defence shall be announced on the information board of the Department of Physics no later than 8 days before the day on which the defence shall take place.
- (6) If the doctoral student fails to attend the doctoral dissertation defence within the time slot stated in the previous Paragraph and without a justified reason, the Head of the Department of Physics shall, following the recommendation by the Doctoral Dissertation Examination Committee, terminate the process for obtaining the doctoral degree.
- (7) The doctoral dissertation may be defended only once.
- (8) If the research results of the doctoral dissertation shall include innovation eligible for the protection of intellectual property rights, the doctoral student and the mentor may inform the University of Rijeka Technology Transfer Office. In this case, prior to the submission of the doctoral dissertation for evaluation, the doctoral student may, with the consent of the mentor, request that the content of the doctoral dissertation be held secret until the moment of the public doctoral dissertation defence.
- (9) The University of Rijeka Technology Transfer Office shall conduct the *Procedure for legal protection and commercialisation of research results* in accordance with the Regulations of the Technology Transfer Office. In this case the public doctoral dissertation defence may upon the approval of the doctoral student be postponed for a maximum of one year following the submission of the doctoral dissertation for evaluation. The request for the postponement of the public doctoral dissertation defence shall be submitted by means of the University form *Request for postponement of public defence*. The confirmation of the Technology Transfer Office shall be attached to the request.

Article 28

Doctoral dissertation defence protocol

- (1) The doctoral dissertation defence protocol is regulated by the University form *Doctoral dissertation defence protocol*.
- (2) The President of the Doctoral Dissertation Examination Committee shall open the defence procedure, state the general information about the student, the results of their study and research papers, and read the elaboration on the evaluation of the doctoral dissertation.
- (3) Upon the report of the President of the Doctoral Dissertation Examination Committee, the student shall present the content of their doctoral dissertation and explain the conclusions made in the dissertation.

(4) Upon the presentation of the dissertation's content, the members of the Doctoral Dissertation Examination Committee shall ask questions and remarks on the dissertation, and they may also request explanations with respect to the dissertation and the defence.

(5) The doctoral student shall respond to the questions of the Doctoral Dissertation Examination Committee and provide the requested explanations.

(6) When the Doctoral Dissertation Examination Committee deems that sufficient discussions has been devoted to the object of the defence, the President of the Doctoral Dissertation Examination Committee shall announce the end of the defence, upon which the Doctoral Dissertation Examination Committee shall retreat in order to discuss and render a decision by voting.

(7) The minutes of the doctoral dissertation defence shall be recorded by the minutes-taker. The minutes-taker shall be appointed by the Council of the Department of Physics.

(8) The doctoral dissertation defence is public.

Article 29

Results of the defence

(1) After the completion of the doctoral dissertation defence, the Doctoral Dissertation Examination Committee shall render a Decision on the result of the defence, which may read:

- Defended the doctoral dissertation by unanimous vote,
- Defended the doctoral dissertation by majority vote,
- Did not defend the doctoral dissertation.

(2) If the doctoral dissertation and its defence are of particularly high quality, the Doctoral Dissertation Examination Committee may grade the dissertation defence as "*cum laude*", if the defence is of exceptionally high quality, the Doctoral Dissertation Examination Committee may grade it as "*magna cum laude*", or grade it with the highest possible grade "*summa cum laude*".

(3) The President of the Doctoral Dissertation Examination Committee shall publicly announce the decision of the Doctoral Dissertation Examination Committee.

(4) The Decision on the successfully defended shall be entered into the *University of Rijeka Book of Doctoral Degrees*.

Article 30

Hard-bound doctoral dissertation

(1) Upon the successful doctoral dissertation defence, the doctoral student shall attach in the doctoral dissertation the sheet containing the information on the author of the dissertation, the compositions of the Doctoral Dissertation Evaluation Committee and the Doctoral Dissertation Examination Committee, the signatures of the committee members, and the date.

(2) The composing and furnishing of the doctoral dissertation are regulated by the University of Rijeka *Regulation on composing and furnishing of doctoral dissertations*.

(3) The doctoral student shall submit 9 hard-bound copies of the doctoral dissertation to the Department of Physics no later than ten days after the doctoral dissertation defence.

(4) The Department of Physics shall deliver one copy of the doctoral dissertation to the relevant institutions in the Republic of Croatia.

(5) The relevant department, the mentor, the co-mentor and the University Departments Library shall each be given one copy of the doctoral dissertation.

(6) In addition to the hard-bound copy of the doctoral dissertation, the University Departments Library shall be given the electronic version of the dissertation in the form and on the medium prescribed by the Senate of the University of Rijeka, except when this is not possible due to objective reasons.

Article 31

Doctoral dissertation with postponed publication

(1) When a research within the scope of the Doctoral study in Physics is conducted for the purposes of the economy or in collaboration with an economy research centre, the Council of the Doctoral study in Physics may exclude the public from the doctoral dissertation defence and postpone its publication in order to protect intellectual property, in accordance with the *Regulation on Studies of the University of Rijeka*.

(2) The doctoral dissertation with postponed publication shall be defended in accordance with the Regulation on Studies.

Article 32

Obtaining the academic title of doctor of science

(1) The doctoral student who completes the Doctoral study in Physics shall obtain the academic title of Doctor of Science (dr. sc.) in the scientific area – Natural sciences, field – Physics.

Article 33

Doctoral degree

(1) Pursuant to the Decision of the Doctoral Dissertation Examination Committee, the University shall award the doctoral degree.

(2) The degree shall be awarded by the Rector at a promotion ceremony.

Article 34

Revocation of the doctoral degree

(1) The doctoral degree shall be revoked if it is determined that it was acquired contrary to the prescribed conditions, gross violation of the rules of the study programme, or if the doctoral

dissertation was plagiarised or counterfeited or acquired through criminal offence committed by the doctoral student.

(2) The revocation of the doctoral degree shall also include the loss of the research position for which the doctoral degree is one of the requirements.

Article 35

Procedure for the revocation of the doctoral degree

(1) The Senate of the University of Rijeka shall conduct the procedure for the revocation of the doctoral degree.

(2) The procedure shall be initiated upon the request of the Council of the Department of Physics.

(3) The Senate shall appoint a committee consisting of five members who shall consider and assess the request for the revocation of the doctoral degree. The members of the committee shall consist of renowned experts in the area of the topic of the doctoral dissertation, and at least one of the members shall be from a university or scientific institution outside of the University of Rijeka. The mentor shall not be a member of the committee.

(4) The report of the committee shall include the conclusion clearly stating that the doctoral dissertation represents plagiarised scientific work or that it is counterfeit, or that it has been acquired through a criminal offence committed by the doctoral student.

(5) The Senate shall render a decision following the report of the committee.

Article 36

Invalidation of the doctoral degree

(1) If the Senate renders a decision on the revocation of the doctoral degree, the Rector shall invalidate the doctoral degree.

(2) The person whose degree was revoked shall return the doctoral degree to the University of Rijeka.

(3) The doctoral degree shall be invalidated by means of attaching the invalidation clause thereto.

(4) The decision on the revocation of the doctoral degree shall be registered into the *University of Rijeka Book of Doctoral Degrees*.

Article 37

Final provisions

This Regulation comes into power on the eighth day from the day on which it is published on the information board of the Department of Physics.

Head of the Department of Physics

dr.sc. Rajka Jurdana-Šepić, Associate Professor

This Regulation was published on the information board of the Department of Physics on 15 November 2017 and comes into power on the eighth day from the day on which it was published, on 23 November 2017.