

Regulation

made on the 21st September 2015 (adapted on the 17th December 2018)

for the award of the doctoral degree degree in science or humanities at the Faculty of Science and Medicine of the University of Fribourg

Note: This English version is published for informational purpose only. Solely the French and German versions have legal value.

The Faculty of Science of the University of Fribourg

In accordance with article 43, subparagraph 3§2 of the legislation concerning the University, approved on the 19th November 1997;

In accordance with article 12 of the Regulations concerning admission to the University, approved on the 3rd April 2006;

In accordance with articles 64 subparagraph 1, letter a and article 88, of the Statutes of the University of Fribourg, approved on the 31st March 2000;

In accordance with articles 9, 40 and 46, of the Statutes of the Faculty of Science and Medicine, approved on the 25th September 2017

Decides:

I: PRINCIPLE

Article 1. Academic grades

¹ Based on this current regulation, the Faculty confers the academic grades of *Doctor of Philosophy* (PhD) in its the domains of competence. The detailed list of the titles accorded by the Faculty constitutes an integral part of the current regulation. These grades attest the capacity of the awardee to carry out scientific research of high quality based on the presentation of original and personal work (thesis), an oral examination (defence), and a public presentation.

² The Faculty can also confer the academic grade of Doctor *honoris causa* (Dr h.c.) in recognition of outstanding contributions to science.

II. DOCTORAL STUDIES

Article 2. Study structure

Doctoral studies consist of:

- a) doctoral research;
- b) continuous training
- c) a doctoral thesis;
- d) a doctoral examination (defence);
- e) a public presentation

a. Admission requirements and registration**Article 3. Admission**

¹ Admission to doctoral studies is governed by the regulations in force concerning admission to the University

² In order to be admitted as a doctoral candidate, a candidate shall:

- a. possess a Diploma or a Master of Science awarded by the Faculty or a similar qualification recognised to be equivalent by the Faculty, and
- b. attest, using the appropriate form obtainable from the Dean's office (Annex I), the agreement of the supervisor to supervise the research work.

Article 4. Derogation

If the requirement in art. 3§a is not satisfied; the Faculty may accord a derogation. The candidate, however, may be required to pass an admission examination or to successfully follow a pre-doctoral programme.

Article 5. Registration at the University

¹ Doctoral students shall be registered, as such, at the University throughout all of the studies, i.e. until the end of the semester during which the doctoral examination takes place.

² He/she shall be registered for a minimum of four semesters before being permitted to sit the doctoral examination.

³ He/she cannot be registered simultaneously in a doctoral programme at another University, unless a convention of joint supervision has been established.

b. Doctoral work**Article 6. Normal period of study**

In general, the normal period of study for the doctorate should not exceed four years.

Article 7. Aim

The aim of the doctoral work is research in one of the scientific disciplines of the Faculty.

Article 8. Study outcomes

¹ The candidate will be initiated in a scientific domain and shall carry out personal research permitting him/her to develop scientific curiosity, critical thinking and a spirit of integrity. He or she shall learn to plan and carry out practical and theoretical work, be able to critically assess the results obtained, and reinforce his/her ability to communicate those results both orally and in the form of a scientific publication. The candidate shall also deepen his/her general scientific knowledge in the chosen discipline. In general, his/her decision-making, efficiency, capacity of innovation, flexibility and scientific responsibility shall be developed.

² The doctoral candidate shall agree to respect the principles of scientific integrity all along the course of his/her doctoral studies. He/she shall accept this condition, from the start of the studies, by signing the *declaration of honour*.

Article 9. Supervision

¹ The doctoral research work shall be supervised by:

- a. a professor of the Faculty or
- b. after the consent of the Faculty, a privat-docent, lecturer or senior lecturer. Should this be the case, a professor of the Faculty must sponsor the former person
- c. external professors, as well as titular professors and emeriti must also be sponsored by a professor of the Faculty.

² A co-supervisor can be designated if the responsibility for supervision is to be shared (a domain spanning two disciplines, cotutelle, work to be carried out at two sites, etc.).

Article 10. Location of the research work

¹ In principle, the research work shall be conducted in the department or institute of the Faculty where the supervisor is engaged.

² The Faculty may permit the candidate to carry out the research work in other universities, national or international research centres, university hospitals, industrial concerns or any other appropriate institution. In such a case, the thesis supervisor must present written arguments showing that a competent person is available on site in order to oversee the work, and that the candidate will be embedded in a scientific environment (presence of researchers in a related field, access to scientific conferences, possibility to regularly participate in internal colloquia, etc.).

Article 11. Confirmation

¹ At the latest 18 months after the beginning of the doctoral study, the supervisor or the **accompanying jury** shall decide, on the basis of the candidate's capacity, the work performed so far, and an interview, whether the doctoral research work shall be continued or interrupted. The supervisor shall then submit a short written report to the Dean's office.

² If the student's doctoral work is interrupted, the student can be re-admitted, under the conditions given in Art. 3, as long as another qualified person agrees to supervise the research work.

Article 12. Monitoring progress

¹ The supervisor or the candidate can request the nomination of an *accompanying jury* at the latest one year into the doctoral studies.

² The jury consists of:

- a. The thesis supervisor
- b. One or two members, internal or external to the Faculty.

³ Every year, the candidate will present a written report to the members of the accompanying jury concerning the progress made and any problems encountered. The accompanying jury helps the supervisor concerning any scientific question. The accompanying jury also supports the candidate.

Article 13. Continuing education

The doctoral candidate shall develop his/her scientific knowledge by attending appropriate courses in his/her scientific domain. The thesis supervisor shall decide, in accordance with the guidelines set by the department, the choice and extent of continuing education and the way in which the student shall report this.

*c. Doctoral thesis***Article 14. Publication**

¹ The results of the research work shall be presented in a doctoral thesis. This thesis shall show the capacity of the doctoral candidate to clearly demonstrate the results obtained and their relationships not only scientifically but also through appropriate writing and graphic presentation.

² The doctoral candidate and the thesis supervisor shall publish the results of the research work in recognized scientific journals.

Article 15. Fraudulent scientific behaviour

¹ A thesis that contains elements that are contrary to scientific integrity, e.g. the presentation of invented or falsified results, or where a part of the text is plagiarized, shall be definitively refused.

² The procedure concerning any disciplinary sanctions remains possible.

Article 16. Language and summaries

¹ In agreement with the thesis supervisor, the thesis shall be written in German, French, or English. It shall contain a summary of one to two pages in English and in at least one of the other two languages (Annex II).

² The publications and accepted manuscripts can be included in the thesis, as long as they are accompanied by a text related to the topic. The individual contribution of the candidate shall however be clearly indicated.

*d. Doctoral examination***Article 17. Jury**

¹ At the end of the research work the Faculty shall choose, upon the recommendation of the thesis supervisor, an *examination jury*. The Faculty shall ensure that the fields of the scientific domains treated by the doctoral studies, particularly if the studies are interdisciplinary, are covered by the jury that shall comprise:

1. a president designated by the Dean's Office and who is, in principle, the president or his/her deputy of the department concerned.
2. the thesis supervisor acting as examiner and
3. at least two co-examiners, of which at least one must be external to the University of Fribourg, chosen with agreement of the candidate.

The independence – judged by the absence of work in collaboration with the candidate – must be guaranteed for at least one of the co-examiners

² In the case of co-supervision, the co-supervisor shall act as co-examiner

³ In the case of sponsorship of the supervisor, the sponsor shall also be a member of the jury

Article 18. Registration for the examination

¹ A doctoral candidate who has been registered for the minimum number of semesters may, at any time, register for the doctoral examination. He/she shall announce him/herself at the Dean's office and submit (at least 30 days before the planned date of the examination) the following documents:

- a) the thesis accompanied by the title page ready for printing (see Annex II)

- b) a *curriculum vitae*,
- c) a written declaration of honour certifying that the candidate composed the thesis him/herself and that the thesis contains personal research carried out without illicit help,
- d) proof of payment of the examination fees

² The Dean shall control that the conditions given in art. 5 have been satisfied.

Article 19. Examination reports

¹ The examiner and the co-examiners shall each submit a written report on the thesis for the attention of the Dean. The report shall be accompanied by a recommendation to accept or refuse the thesis, using an *Examiner's report form*. The thesis supervisor shall be responsible for handing over the examiners' reports to the Dean's office, at least 30 days before the envisaged date of the examination.

² If one of the members of the examination jury concludes that the thesis should be refused, the examination procedure shall be interrupted.

Article 20. Circulation of the thesis

For a period of two weeks, the Dean shall circulate amongst the professors of the department concerned, the thesis, the examiners' reports and the documents mentioned in art. 18. If reservations are expressed, in particular about the scientific quality of the work, by either the examiners or professors of the department concerned, the Dean shall announce that the thesis and the reports can be consulted by all of the professors of the Faculty Council at the Dean's office.

Article 21. Acceptation or repetition

¹ The jury shall accept or refuse the thesis taking into account any remarks made by the professors of the Faculty Council.

² If a thesis is refused, the doctoral candidate can rewrite the thesis and re-submit it for a second evaluation.

Article 22. Convocation

If the thesis is accepted, the Dean shall convoke the candidate to a thesis defence (oral examination). In general, the oral examination shall take place a minimum of 30 days after receipt at the Dean's office of the thesis and related reports.

Article 23. Thesis defence

¹ The defence shall take place *in camera* in the presence of the president and at least two members of the examination jury. It normally lasts at least one hour and begins with a short presentation by the candidate of his/her scientific results. The oral examination is conceived as a discussion pertaining to the relevant scientific domain and its context.

Article 24. Decision

¹ Immediately after the oral examination, the jury shall decide whether the defence was passed or failed. Should the defence be failed, it may be repeated once more, but at least three months later.

² The jury shall immediately inform the candidate of its decision and communicate it to the Dean's office.

Article 25. Public presentation

¹ The public presentation consists of a conference where the doctoral candidate presents the scientific results obtained during the research work and places them in their correct context. The conference shall be followed by a discussion. The candidate shall take the audience into account when preparing the conference.

² The public presentation shall take place, in principle, at least one week and at most one month after the defence. The thesis supervisor, in agreement with the candidate, can request a derogation (a shorter or longer interval). The Dean is competent to make the decision.

Article 26. Communication

After the public presentation, the Dean shall confirm in writing to the candidate the acceptance of the thesis and the success of the defence. The Dean informs the Faculty Council.

Article 27. Printing

¹ After the thesis defence the candidate shall give the Dean the original version of the thesis, if necessary modified according to the recommendations of the jury, in a form ready for printing. If the thesis conforms to the directives given in annexe II (Directives concerning the preparation and lodging of the obligatory copies of the thesis), the Dean shall confirm the status « Ready for printing ». Within the following six months, the candidate shall hand over to the Dean's office the original version of the thesis and the required number of obligatory copies. It is only then that the candidate shall have the right to use the title « Doctor » as indicated in an attestation provided by the Dean.

² If the delay of 6 months can not be respected, the candidate must present a justified request for prolongation to the Dean. If no such request is made, or if the request is refused, then the candidate shall lose the right to the title of Doctor.

III. DOCTORATE HONORIS CAUSA**Article 28. Procedure**

¹ Upon recommendation of one or several members, the Faculty can confer the title of Doctor *honoris causa* to persons of outstanding scientific merit.

² The title of doctor honoris causa (Dr.h.c.) granted by secret ballot, requires a two-thirds majority of the voting faculty members present during the Faculty Council.

Article 29. Communication

The Dean shall award the title of Doctor *honoris causa* at the *Dies academicus* of the University.

IV. TRANSITORY AND FINAL DISPOSITIONS**Article 30. Authority**

The Faculty council shall be responsible for any decision concerning circumstances not governed by this regulation.

Article 31. Abrogation

The entry into force of the present regulation shall abrogate and replace the regulation of the 12 May 2003 governing the award of a doctorate at the Faculty of Science of the University of Fribourg.

Article 32. Transitory measures

¹ Doctoral studies may be carried out and completed under the former regulation until the 31st July 2018.

² Students having already started their research work before the entry into force of the present regulation can elect, by way of a transition contract, to continue their studies governed by the present regulation.

Article 33. Entry into force

The present regulation shall enter into force after its ratification by the State Department for Education, Culture and Sport.

Approved on the 23rd November 2015 by the Rectorate of the University.

Ratified on the 11th December 2015 by the State Department for Education, Culture and Sport.

The present translation into English is for information only. Only the French version «Règlement pour l'obtention du doctorat à la Faculté des sciences de l'Université de Fribourg» or the German version «Reglement über die Erlangung der Doktorwürde an der Mathematisch-Naturwissenschaftlichen Fakultät der Universität Freiburg» are valid.

Supplementary clause to the Regulation of the 21st September 2015 (version of the 17th December 2018) for the award of a doctorate at the Faculty of Science at the University of Fribourg

The Faculty Council of the Faculty of Science and Medicine

In accordance with article 1 of the Regulation made on the 21st September 2015 for the award of a doctorate at the Faculty of Science and Medicine at the University of Fribourg

Decides:

Art. 1 The Faculty of Science awards the following titles:

Docteur ès sciences en mathématiques	Doktor der Wissenschaft in Mathematik	Doctor of Philosophy in Mathematics	Scientiarum doctor in mathematicae
Docteur ès sciences en informatique	Doktor der Wissenschaft in Informatik	Doctor of Philosophy in Computer Science	Scientiarum doctor in computatoria
Docteur ès sciences en physique	Doktor der Wissenschaft in Physik	Doctor of Philosophy in Physics	Scientiarum doctor in physica
Docteur ès sciences en chimie	Doktor der Wissenschaft in Chemie	Doctor of Philosophy in Chemistry	Scientiarum doctor in chemica
Docteur ès sciences en science des matériaux	Doktor der Wissenschaft in Materialwissenschaften	Doctor of Philosophy in Materials Science	Scientiarum doctor in scientia materiarum
Docteur ès sciences en sciences de la Terre	Doktor der Wissenschaft in Erdwissenschaften	Doctor of Philosophy in Earth Sciences	Scientiarum doctor in scientiis terrarum
Docteur ès sciences en géographie	Doktor der Wissenschaft in Geographie	Doctor of Philosophy in Geography	Scientiarum doctor in geographia
Docteur ès sciences en biologie	Doktor der Wissenschaft in Biologie	Doctor of Philosophy in Biology	Scientiarum doctor in biologia
Docteur ès sciences en géosciences	Doktor der Philosophie in Geowissenschaften	Doctor of Philosophy in Geosciences	Scientiarum doctor in geoscientia
Docteur ès sciences en biochimie	Doktor der Wissenschaft in Biochemie	Doctor of Philosophy in Biochemistry	Scientiarum doctor in biochemia
Docteur ès sciences en bioinformatique	Doktor der Wissenschaft in Bioinformatik	Doctor of Philosophy in Bioinformatics	Scientiarum doctor in bioinformatica
Docteur ès sciences en sciences médicales	Doktor der Wissenschaft in medizinischen Wissenschaften	Doctor of Philosophy in Medical Sciences	Scientiarum doctor in scientiis medicinae
Docteur ès lettres humaines et sociales en médecine	Doktor der Philosophie in Sozial- und Geisteswissenschaften in der Medizin	Doctor of Philosophy in Medical Humanities	Philosophiae doctor in scientiis humanis et socialibus medicinae
Docteur ès lettres en humanités environnementales	Doktor der Philosophie in Umweltgeisteswissenschaften	Doctor of Philosophy in Environmental Humanities	Philosophiae doctor in scientiis humanis oecologiae