Rules for doctoral programmes at the Agricultural University of Iceland

Article 1. Principles and scope

These Rules apply to doctoral programmes at the Agricultural University of Iceland in collaboration with the University of Iceland and are based on the criteria and requirements for doctoral studies at the University of Iceland, see: *Viðmiðum og kröfum um gæði doktorsnáms við Háskóla Íslands* (http://www.hi.is/sites/default/files/bgisla/ny vidmid og krofur um gaedi d oktorsnams 03 05 2012.pdf) and Regulation for the University of Iceland no. 569/2009.

The Agricultural University of Iceland has conditional permission from the Ministry of Education, Science and Culture to offer doctoral programmes in specified subcategories within the disciplines of Environmental Sciences and Natural Resources and Agricultural Sciences, cf. letter from the Ministry, 23 September 2015. Permission is subject to the condition that the programmes will be developed in collaboration with the University of Iceland. A special agreement was completed between the Agricultural University of Iceland and the University of Iceland regarding doctoral programmes on 9 February 2019, and, among other things, it includes the Agricultural University of Iceland's membership of the University of Iceland.

Article 2. The programme and its aims

At the Agricultural University of Iceland it is possible to pursue doctoral studies in the fields of Environmental Sciences (subcategories: natural and environmental sciences; forest science; landscape planning and architecture; and restoration ecology) and Natural Resources and Agricultural Sciences (subcategories: agricultural science and equine science), where the Graduate Studies Committee (see Article 3) evaluates that necessary facilities and specialised knowledge are available.

The aim of the doctoral programme at the Agricultural University of Iceland is to provide doctoral students with training and insight into research methods in environmental sciences, natural resources and agricultural sciences, and related subjects, and that the student acquires a thorough knowledge of the field to which his/her doctoral project belongs. The programme includes training in the preparation and implementation of research, processing and interpretation of research results, and presentation and debate of his/her research in the context of an understanding of the field of study, in addition to publication in international peer-reviewed journals. Thus the doctoral candidate will be well prepared to work independently in science.

The University of Iceland Graduate School oversees and monitors compliance with established standards and requirements for the quality of postgraduate studies at the Agricultural University of Iceland; cf. Article 18 of these Rules and Article 6 of the Regulation for the University of Iceland, no. 569/2009. Information and data requested by the University of Iceland Graduate School must be provided.

Article 3. Graduate Studies Committee of the Agricultural University of Iceland

The Graduate Studies Committee, appointed by the Faculty for two years at a time, consists of the coordinator of graduate studies, who is also the chair, the head of research, the head of teaching, a representative for the coordinators of master's courses and student representatives from the master's and doctoral programmes. One representative from the University of Iceland also sits on the Committee, nominated by the University of Iceland Graduate School for two years at a time. Representatives for the coordinators of master's courses and the master's students only attend meetings on matters pertaining to the University's master's programme.

The Graduate Studies Committee conducts matters concerning doctoral programmes, on behalf of the Faculty, in compliance with a formal statement of duties. Its role is to formulate and influence policy and the objectives of the programme, and manage the process of applications to the doctoral programme. In addition the Committee has the role of monitoring that a reasonable degree of consistency is achieved in doctoral programmes in the University's academic disciplines and is responsible for communicating with the University of Iceland Graduate School. The chair of the Graduate Studies Committee is the liaison officer for the Agricultural University of Iceland, liaising with the University of Iceland Graduate School and having a seat on its board.

The Graduate Studies Committee also discusses major issues pertaining to individual doctoral students and disputes that may arise in the implementation of the doctoral programme. Minor issues are dealt with jointly by the coordinator of postgraduate studies, the academic coordinator and the head of teaching and quality management. Their rulings may be appealed to the Graduate Studies Committee (with the involvement of representatives of the University of Iceland Graduate School), and the decisions of the Committee may be appealed to the Faculty Council.

Article 4. Application deadline

The application deadline for a doctoral programme is usually 15 April and 15 October. It is permitted to receive applications to a doctoral programme at other times.

Article 5. Processing of applications and research plan

Applications are submitted on the Agricultural University of Iceland's electronic forms, available on the University's website, or to the Office of Academic Affairs. Processing of an application should normally be completed and answered within six weeks of receipt. An application may be written in English or Icelandic. It shall be accompanied by an abstract in English and Icelandic, a study plan, a description of the research project and a research plan according to item c below; cf. the application form. If the Faculty refuses a student admission, it shall justify its decision. The processing of an application shall in all cases be notified to the Office of Academic Affairs.

Application process and evaluation of research plan:

- a. A student applies for admission to a doctoral programme on a special form available on the homepage or at the Office of Academic Affairs. An application must be accompanied by copies of diplomas, as well as the CV of the applicant and the prospective tutor, and the names of two referees.
- b. The application is registered with the Office of Academic Affairs, and it is ensured that it is satisfactory regarding the items mentioned in item a, and that the applicant meets the general admission requirements, in accordance with Article 6 of these Rules. When appropriate, the Office of Academic Affairs has the original documentation of an application assessed by the University of Iceland's ENIC/NARIC Office, to confirm their origin, evaluate the value of diplomas and degrees and confirm that the applicant's data meet the procedural requirements.
- c. The application includes details of the study plan, research project and research plan, as well as reporting how the programme will be financed. Such an application shall specify a request for a prospective doctoral committee. The study plan and research proposal are evaluated and an applicant, together with a tutor/principal supervisor, is invited to an interview with a representative of the Graduate Studies Committee. A decision is made on the application, with reasoned comment.

- d. The Graduate Studies Committee reviews applications and rejects an application if it does not meet quality requirements, or approves the application and announces its conclusion to the Faculty.
- e. Following the decision of the Graduate Studies Committee, the Faculty is responsible for notifying the applicant, the Office of Academic Affairs and the University of Iceland Graduate School whether the application has been approved or rejected.
- f. A student approved by the University for the doctoral programme shall contact the Office of Academic Affairs and complete his/her registration for the programme and payment of the registration fee for the coming academic year.

Article 6. Entrance requirements

In order to enrol in a doctoral programme at the Agricultural University of Iceland, a student must have completed a recognised master's degree in the field of study in which the doctoral programme is based, or have a master's degree in a related field of study. A master's degree, or other equivalent degree which is the basis for doctoral studies, must have been awarded by a recognised university.

With the approval of the Graduate Studies Committee, a student may be advanced from a master's programme in the relevant field of study, into a doctoral programme, if the student has not defended his/her master's thesis and if no more than two years have passed since his/her enrolment in the master's programme, based on full-time studies. The student shall, in consultation with his/her supervisor, apply for such advancement in the same way as for a conventional doctoral programme in accordance with Article 5. Further details on the number of credit units and preparation are provided in Article 7.

It is not permitted to use a master's thesis again as the basis for a doctoral thesis.

It is not permitted to admit an academic employee of the University into a doctoral programme.

If a doctoral student is recruited on the strength of a temporary grant, then the recruitment period shall be temporary.

Article 7. Number of credits, length of study and course progress

A doctoral programme after completing a master's degree shall, as a rule, be equivalent to a minimum of three years of full-time study. The doctoral programme is divided into a 150-credit research project and at least 30 credits of course work. For students who have enrolled in a doctoral programme on the basis of the advancement clause in Article 6, the doctoral programme shall be equivalent to 240 credit units, i.e. equivalent to a minimum of four years of full-time study. In this case, 60 credits are added to the course part of the doctoral programme.

A doctoral student may be registered for part-time studies from the beginning. If a student anticipates that he/she cannot complete his/her studies within four years of their commencement, he/she shall apply to the Graduate Studies Committee for permission to remain in the programme for up to one additional year. If further extensions are needed, such an application shall be repeated, but such that the total period of study will never be longer than six years, unless it has been agreed that the student is allowed to pursue studies as part-time work.

A tutor submits a progress report at least once in each year of study, to the coordinator of graduate studies (see Article 13). Satisfactory progress is a condition for registration for the next year of study.

Upon graduation, the student must demonstrate that he/she has been enrolled in studies and paid registration fees for the entire study period or in accordance with agreements made for a joint degree with another university. If a registration fee has not been paid during the study period, the student shall discharge his/her debt to the University before graduation is confirmed.

Article 8. Composition of programme

The doctoral programme is primarily training in scientific methods and work on a continuous research project.

Courses shall be at doctoral or master's level within the University or with other recognised research universities. If the doctoral student has not already completed courses in statistics and scientific methodology, he/she is required to take such courses. All courses shall be completed by appropriate assessment in accordance with a defined curriculum. The minimum grade for courses taken at the University, which may be assessed for a doctoral degree, is 6.0. Courses taken at other recognised universities shall be completed in accordance with the requirements of that school.

In general, undergraduate courses (BSc) cannot be used as part of doctoral studies. Interdisciplinary research can, however, lead to a basic course from another discipline being considered a necessary part of the programme. A

maximum of 8 credits from such essential basic courses can contribute to a doctoral degree. The maximum number of credits for reading courses supervised by the supervisor is 12 credits.

If a student is changing scientific fields in order to commence doctoral studies, cf. Article 2, important elements of undergraduate study may be lacking. The necessary prerequisites are then added to the programme's courses. The tutor proposes the scope and content of prerequisites, which must be approved by the Graduate Studies Committee. Prerequisites shall be described in the study plan, cf. Article 5.

It is expected that a doctoral student participates in conferences in the relevant field of study, as permitted by the financial framework. As far as possible, doctoral students should be given the opportunity to participate in teaching.

Article 9. Changes to the study plan

Major changes to the study plan for doctoral study are subject to the approval of the Graduate Studies Committee.

Article 10. Connections with other universities

A doctoral programme may be in connection with another university in Iceland or abroad, e.g. so that the student completes part of the programme at the other school or its representative sits on the doctoral committee. A doctoral degree may be awarded jointly with another university. Such matters shall be referred to the Graduate Studies Committee, and the University of Iceland Graduate School and the University of Iceland's Division of Academic Affairs shall be consulted regarding agreements about joint doctoral programmes and degrees.

Article 11. Tutor and supervisors

Each doctoral student shall from the start of the programme have a tutor who is a tenured member of teaching staff in the Faculty, in the relevant field of study, with whom he/she consults regarding the organisation of the study programme, the selection of courses and other matters to related to the programme. The tutor is usually also the principal supervisor. In addition to the tutor, the doctoral student shall have at least two other supervisors, cf. Article 13. It is generally assumed that at least one supervisor is from a foreign collaborative institution, provided that he/she meets the requirements made in Article 12 of these Rules. The role of each supervisor shall be defined separately.

Article 12. Requirements for tutors and supervisors

A tutor shall either be a tenured member of teaching staff or guest lecturer in the respective subject at the Agricultural University of Iceland, who has been assessed as appropriately qualified. A doctoral student's principal supervisor can only be one who has completed a doctoral degree or earned a professorship, and who normally meets all the requirements made for supervisors in doctoral programmes in *Viômiôum og kröfum um gæði doktorsnáms við Háskóla Íslands* (see section 4.2). Care must be taken to ensure that the student's project is in a supervisor's field of expertise. Supervisors of doctoral students, whether they are tenured teachers at the University or not, must be recognised specialists in the field in question and have published papers related to the student's project in a forum that has high academic standards.

Article 13. Doctoral committee

A doctoral committee shall be comprised of at least three persons with special expertise, i.e. a tutor and supervisors. The student and supervisors are permitted to suggest up to two others, if necessary, to be approved by the Graduate Studies Committee. When the consent of committee members to serve on the committee is available, not later than before the end of the first semester, the chair of the Graduate Studies Committee sends them letters of appointment and preserves a copy.

A tutor summons a doctoral committee within 6 months of the approval of the research proposal. A tutor later summons the committee to meet at least annually while the programme is active, to monitor progress of the programme (cf. Article 7), and supervises the writing of minutes and the distribution of them to the coordinator of postgraduate studies, the doctoral student and the doctoral committee, as well as delivering the doctoral committee's opinion regarding a doctoral thesis' readiness for defence (cf. Article 15). The doctoral committee is responsible for ensuring that the doctoral programme complies with the criteria and requirements of the University of Iceland for the quality of doctoral programmes. Doctoral candidates can summon a doctoral committee on their own initiative.

Article 14. Assessment of study

The student shall publicly present his/her research project to the Agricultural University of Iceland, in the presence of the doctoral committee, at least three times. The first presentation (I) is held when the student has completed the doctoral contract, and this is usually in the second semester of the programme.

In the presentation a brief account of the research project shall be made, the preparation for it, objectives and key methods. If any results are available, they can be briefly mentioned. Similarly, the anticipated courses shall be described and any courses which have already been completed shall be accounted for. The second presentation (II) is held when the student is well on his/her way and has collected a large portion of the data. A brief account of the project and the results obtained shall be made. The third presentation (III) is held when the student has started writing up and completion is in sight. The entire project shall be described and the main findings expounded. The student shall also list the courses completed and state if any courses remain uncompleted. Finally, it shall be explained which published articles will accompany the thesis, and what their status is.

When more than half of the doctoral programme has been completed, a detailed assessment of the status of the project is made (mid-stage assessment). The doctoral student writes a short summary of the project, including the main results, submits it to the doctoral committee and invites the committee members to a public presentation of the project (public presentation II). On the basis of this and discussions, the general knowledge of the doctoral student and the status of the project are evaluated, with regard to whether the material is sufficient and adequate for a doctoral thesis, and a decision is taken on whether the student is authorised to continue in the programme. No later than six months before the scheduled end of the programme (public presentation III), it is then assessed whether the student is authorised to committee for formal assessment. Such formal assessment is a prerequisite for a doctoral defence.

Finally, the doctoral committee evaluates the thesis before it is submitted for defence, and it returns a carefully reasoned opinion to the Graduate Studies Committee, on whether the doctoral thesis is eligible for defence and the doctoral candidate prepared for doctoral defence. It shall contain information on previous education and university degrees, the name of the project/thesis, the doctoral committee, the project partners, information on where the work took place, a list of and a brief description of the scientific articles on which the work is based, as well as an overview describing the student's professional development during the doctoral programme (such as teaching, lectures, posters, reports). The opinion shall be signed by all the committee members. At the same time as a thesis is submitted to the Graduate Studies Committee, a student's certified education history and a record of the payment of registration fees shall also be submitted.

Article 15. Opponents and doctoral defence

The Graduate Studies Committee assesses whether a submitted doctoral thesis satisfies the general requirements. The Committee discusses the conclusion of the doctoral committee regarding completion of the programme and proposals for two opponents for the prospective doctoral defence: they shall be independent parties who do not have a seat on the doctoral committee. Opponents shall be acknowledged specialists in the subject of the doctoral thesis. Opponents must not have any professional or personal connection with a doctoral student, supervisor or doctoral committee which might call into doubt their suitability. Once the Graduate Studies Committee has approved the proposals for opponents, the proposals are submitted to the University of Iceland Graduate School for approval. Both opponents shall come from other universities or research institutions, and one of them shall be from a foreign university or research institute. The Graduate Studies Committee formally nominates the opponents after receiving the opinion of the University of Iceland Graduate School. Once the opponents have agreed to take on the task, the head of teaching and quality management sends them a letter of appointment and preserves copies. Opponents should receive a final copy of the doctoral thesis at least six weeks before the doctoral defence. It is expected that a doctoral defence will normally take place no later than four months after the thesis is submitted.

A thesis shall be judged and defended according to the criteria of the Agricultural University of Iceland on the holding of doctoral defences, and with reference to the rules of the University of Iceland. The doctoral candidate shall defend his/her thesis in public at the University. The Dean presides over the doctoral defence. At the end of an oral defence, the Dean, together with the opponents, decides whether to confer the title of Doctor. In the event of a dispute, the matter shall be referred to a faculty meeting. Student representatives at a faculty meeting do not have the right to vote on matters concerning the granting of doctoral titles. No grades are awarded for doctoral degrees, but after the student's defence, opponents shall submit an opinion of the thesis, which the student receives.

Article 16. Submission and format of a doctoral thesis

A doctoral dissertation may be in the form of a comprehensive thesis or a collection of articles that have been published or submitted for publication in peer-reviewed international journals. A doctoral thesis shall be written in English. It shall include a detailed introduction where the status of knowledge in the field of study is traced, a description of methods, an explanation of findings

and, finally, a detailed discussion section which deals with the project as a whole. In a thesis there must be a statement about the contribution of the doctoral student, whether others have been involved in the project and what their contribution was. Institutions or companies where the research was conducted shall be named, and it shall be stated who the supervisors were. It should be clearly indicated that the project has been carried out on behalf of the Agricultural University of Iceland, and the names of those bodies who supported the project shall be given. For the format of the thesis in other respects, reference is made to the University's guidelines. A doctoral thesis shall be submitted in twelve copies to the Office of Academic Affairs, and an electronic copy must be submitted to the electronic database Skemman.is, which is housed at the National and University Library of Iceland in a format that the Library decides. The thesis shall be kept open to everyone for reading and printing. The Faculty may, however, grant permission for a thesis to be temporarily closed due to sensitive content. Each thesis must contain an abstract in Icelandic and English, which shall be submitted in digital format for publication on the University's homepage.

Format of the thesis:

- a. A thesis based on published material or material accepted for publication: such a thesis shall usually be based on at least three scientific articles, of which at least one has been published in a recognised peer-reviewed journal, a second approved or submitted for publication and a third is in manuscript form. The term "scientific article" is usually used to mean an article based on the author's own data/results, processing and interpretation. Consistency with accepted conventions in each field of study shall be observed. The doctoral candidate shall be first author for at least two such articles, and usually all three. The role of the doctoral student in the relevant project shall always be clear, and the Graduate Studies Committee shall be responsible for verifying with the doctoral committee that the role of the doctoral student is satisfactory in accordance with the above provisions.
- b. In exceptional cases, the Graduate Studies Committee may authorise a more specialised dissertation (monograph), for which it is not required that the thesis, its subject matter or part of it, has been published or accepted for publication. Such a thesis undergoes a more rigorous evaluation process within the Faculty than a thesis based on published material. The doctoral committee and the Graduate Studies Committee are jointly responsible for ensuring that the scope of the project, the doctoral student's share in the project and the scope and formal

completion of the thesis are of an equal quality as otherwise required. In these instances, an evaluation committee comprised of three external and independent individuals shall always be appointed. The appointment of the evaluation committee is subject to the same rules as for the appointment of opponents for a doctoral defence. The evaluation committee may, however, call for a representative of the doctoral committee for consultation. The evaluation committee shall deliver a very thorough report with a detailed and critical review.

Article 17. Academic title

On completion of the doctoral programme, the student attains the academic title of *Philosophiae Doctor* (PhD).

Article 18. University of Iceland Graduate School

The University of Iceland Graduate School oversees and monitors compliance with the established standards and requirements for the quality of postgraduate studies at the University of Iceland and the Agricultural University of Iceland. The Graduate School shall have a comprehensive oversight of the postgraduate programme and works closely with faculties, the University Council Quality Committee and the joint administration of the universities. The Graduate School is a platform for consultation and cooperation in matters concerning postgraduate studies within the universities, and acts as a contact for partners both in Iceland and abroad.

Article 19. Entry into force

These Rules are set by the University Council of the Agricultural University of Iceland, with reference to Chapter III of the Higher Education Institutions Act no. 63/2006 and the Act on Public Higher Education Institutions no. 85/2008. The Rules have been approved by the Graduate Studies Committee of the Agricultural University of Iceland and the University of Iceland Graduate School, cf. Article 1 of these Rules, and confirmed by the Faculty Meeting on 5 January 2017. These Rules shall enter into force xx. xx 2017, and the Agricultural University of Iceland's Rules on Doctoral Studies which were approved by the University Council on 19 January 2012 and entered into force on 1 February 2012 will be repealed at the same time.

Temporary provisions

Those students who are already in doctoral programmes when these Rules enter

into force shall complete their programme according to the older Rules on Doctoral Studies at the Agricultural University of Iceland, dated 1 February 2012.

Confirmed by the University Council xx. xx 2017.

Enters into force xx. xx 2017