

Note:

The following curriculum is a consolidated version. It is legally non-binding and for informational purposes only.

The legally binding versions are found in the University of Innsbruck Bulletins (in German).

Principal version published in the University of Innsbruck Bulletin of 17 March 2009, Issue 40, No 177

Modification published in the University of Innsbruck Bulletin of 17 June 2014, Issue 30, No 500

Complete version from 20 October 2014

Curriculum for the Doctor of Philosophy Programme Earth Sciences at the Faculty of Geo- and Atmospheric Sciences of the University of Innsbruck

§ 1 Qualification profile and programme objectives

- (1) The Doctor of Philosophy Programme Earth Sciences belongs to the group of studies in the natural sciences.
- (2) Graduates of the Doctor of Philosophy Programme Earth Sciences have profound theoretical and systematic understanding of their research discipline and the methods employed by research in this field. Through their submission of an original piece of scientific work in a special field of the earth sciences, graduates of the Doctor of Philosophy Programme Earth Sciences have made their own contribution to research which widens boundaries of knowledge and conforms to the evaluation standards of national and international experts. The excellent qualifications acquired during the doctoral programme qualify graduates to employ their expertise in scientific and non-scientific careers and to adapt themselves to fast-changing requirements.
- (3) The Doctor of Philosophy Programme Earth Sciences at the University of Innsbruck serves to educate and train junior scientists in the field of the earth sciences, which understand themselves as a modern "Earth System Science" and combine field and laboratory research.
- (4) Doctoral or research projects can develop into programmes which are subsidized by an acknowledged national or international research funding institution and whose project leader is the main supervisor.

§ 2 Length and scope

The Doctor of Philosophy Programme Earth Sciences takes three years (six semesters). This equals 180 ECTS-Credits.

§ 3 Admission

- (1) Valid proof of the necessary academic level for admission to the doctoral programme must be provided. This includes proof of completion of relevant diploma or master programmes, of completion of relevant diploma or master programmes at a university of applied science or completion of other equivalent studies at an accredited Austrian or non-Austrian post-secondary educational institution. If equivalency is given in principle, and only a few elements are missing

for full equivalency, the rector's office is entitled to combine the determination of equivalency with the obligation to pass certain examinations in the course of the doctoral programme.

- (2) Relevant studies are in any case
1. the Diploma Programme Earth Sciences completed at the University of Innsbruck,
 2. the Master's Programme in Earth Sciences completed at the University of Innsbruck.

§ 4 Types of courses and maximum number of participants

Seminars (SE) are courses with continuous performance assessment and serve to in-depth scientific examination with the presentation and discussion of articles by the students. Maximum number of participants: 10

§ 5 Procedure for the allotment of places in courses with a limited number of participants

Places in courses with a limited number of participants are allotted as follows: Students whose study time will be prolonged if they are not admitted are to be given priority.

§ 6 Compulsory and elective modules

- (1) The following compulsory modules with a total of 25 ECTS-Credits are to be taken:

| 1. | Compulsory Module: Development and Presentation of Doctoral Concept | h | ECTS-Credits |
|----|--|----------|--------------|
| | SE Development and Presentation of Doctoral Concept | 2 | 4 |
| | Total | 2 | 4 |
| | Learning objectives of the module: The students have developed a written plan of the dissertation after thorough research (relevant literature, discussion with the dissertation committee and experts) and present it to an audience and defend it in scientific discourse. | | |
| | Prerequisites: none | | |

| 2. | Compulsory Module: Analysis and Presentation of Own Results I | h | ECTS-Credits |
|----|---|----------|--------------|
| | SE Analysis and Presentation of Own Results I | 2 | 6 |
| | Total | 2 | 6 |
| | Learning objectives of the module: The students have developed their first own research results, present them to an audience and defend them in scientific discourse. | | |
| | Prerequisites: successful completion of compulsory module 1 | | |

| 3. | Compulsory Module: Analysis and Presentation of Own Results II | h | ECTS-Credits |
|----|--|----------|--------------|
| | Analysis and Presentation of Own Results II | - | 10 |
| | Total | - | 10 |

| | |
|--|---|
| | <p>Learning objectives of the module: The students have developed their own research results and make them available as oral or poster presentation at an international scientific conference, a workshop or a Summer / Winter School and defend them in scientific discourse. The choice of the event is coordinated with the dissertation committee.</p> |
| | <p>Prerequisites: successful completion of compulsory module 2</p> |

| 4. | Compulsory Module: Doctoral Thesis Defense | h | ECTS-Credits |
|----|---|---|--------------|
| | Final oral dissertation defense before an examination board. | - | 5 |
| | Total | - | 5 |
| | <p>Learning objectives of the module: Presentation of, reflection on, and analysis of the dissertation results in the overall context of the doctoral study programme; the focus is on summarizing and explaining results of the research project, on presenting the increase in knowledge for the discipline, on demonstrating evaluation and method competences, as well as on presenting the results.</p> | | |
| | <p>Prerequisites: successful completion of all other modules and positive evaluation of the dissertation.</p> | | |

(2) One of the following elective modules with a total of 5 ECTS-Credits is to be taken:

| 1. | Elective Module: Generic Skill | h | ECTS-Credits |
|----|---|---|--------------|
| | Courses, as defined in the dissertation agreement, equal to 5 ECTS-Credits have to be completed. Courses are offered which provide didactic skills and competences for subsequent knowledge transfer of the field. Completing one course in the area of "Equality and Gender" is recommended. | - | 5 |
| | Total | - | 5 |
| | <p>Learning objectives of the module: After successful completion of the module students have advanced knowledge, skills and competences in selected disciplines that go beyond the immediate dissertation topic and subject area.</p> | | |
| | <p>Prerequisites: none</p> | | |

| 2. | Elective Module: Scientific Basics/Core Skills of the Thesis Topic | h | ECTS-Credits |
|----|--|---|--------------|
| | Courses, as defined in the dissertation agreement, equal to 5 ECTS-Credits have to be completed to develop the scientific basis/core skills for the dissertation topic. | - | 5 |
| | Total | - | 5 |
| | <p>Learning objectives of the module: After the successful completion of this module, students possess the high level of interdisciplinary knowledge necessary for working on the dissertation.</p> | | |
| | <p>Prerequisites: none</p> | | |

§ 7 Dissertation

- (1) In the course of the doctoral programme, a dissertation has to be written, which equals 150 ECTS-Credits. The dissertation is a scientific piece of work in a special field of the earth sciences which serves to prove the student's ability to cope with scientific questions in an independent way.
- (2) The dissertation can also consist of articles that are related in terms of subject matter or methods. The following quality criteria apply:
 1. The dissertation has to consist of a minimum of three articles which must have been accepted for publication by acknowledged scientific journals.
 2. The students must be the first author of a minimum of two of these articles.
 3. These articles have to be embedded in a comprehensive presentation of the research question and the current state of knowledge in the field; extensive critical assessment of the results and a summary are required.
 4. If the articles were written by several authors, the student's own contribution must be shown clearly.
- (3) The student has to propose a team of supervisors, consisting of at least two supervisors (dissertation committee) and to nominate one of them as the supervisor mainly responsible (with a *venia docendi*).
- (4) Prior to beginning the work, the student has to communicate the dissertation topic and the names of the supervisors in writing to the Director of Studies. Topic and supervisors are considered as accepted if the Director of Studies does not veto them by means of a decree within one month after the of the proposal.

§ 8 Examination regulations

- (1) The evaluation of the compulsory modules 1 and 2 as well as the elective modules 1 and 2 is based on course examinations. The evaluation of courses with continuous performance assessment is based on the student's regular written and/or oral and/or practical-experimental contributions. The lecturer is required to communicate evaluation methods and criteria before the course starts.
- (2) Compulsory module 3 is evaluated by the main supervisor on the basis of a performance report written by the student.
- (3) The evaluation of the compulsory module "Doctoral Thesis Defense" is based on an oral exam taken before an examination board consisting of three examiners.

§ 9 Academic degree

Graduates of the Doctor of Philosophy Programme in Earth Sciences are awarded the academic degree of "Doctor of Philosophy" or "PhD", in brief.

§ 10 Implementation

- (1) This curriculum comes into force on 1 October 2009.
- (2) The modification of the curriculum published in the University of Innsbruck Bulletin of 17 June 2014, Issue 30, No 500 comes into force on 1 October 2014 and applies to all students.

Equivalence list – Doctor of Philosophy programme Earth Sciences

Positively assessed exams, taken as part of the Doctor of Philosophy programme Earth Science at the University of Innsbruck (curriculum published in the version of the University of Innsbruck Bulletin from

17 March 2009, Issue 40, No 177) will be recognised as equal towards the exams of the curriculum published in the version of the University of Innsbruck Bulletin from 17 June 2014, Issue 30, No 500 as follows:

| Curriculum published in the version of the University of Innsbruck Bulletin from 17 March 2009, Issue 40, No 177 | | Curriculum published in the version of the University of Innsbruck Bulletin from 17 June 2014, Issue 30, No 500 | |
|---|--|--|---|
| §6 no. 1 | Compulsory module Generic Skills (5 ECTS-Credits) | §6 (2) no.1 | Elective module Generic Skills (5 ECTS-Credits) |
| §6 no. 2 | Compulsory module Scientific Basics/Core Skills of the Thesis Topic (.,5 ECTS-Credits) | §6 (2) no.2 | Elective module Scientific Basics/Core Skills of the Thesis Topic (5 ECTS-Credits) |
| §6 no.3 | Compulsory module Development and Presentation of Doctoral Concept (12.5 ECTS-Credits) | §6 (1) no.1 | Compulsory module Development and Presentation of Doctoral Concept (4 ECTS-Credits) |
| §6 no.4 | Compulsory module Analysis and Presentation of Own Results I (15 ECTS-Credits) | §6 (1) no.1 | Compulsory module Analysis and Presentation of Own Results I (6 ECTS-Credits) |
| §6 no.5 | Compulsory module Analysis and Presentation of Own Results II (15 ECTS-Credits) | §6 (1) no.3 | Compulsory module Analysis and Presentation of Own Results II (10 ECTS-Credits) |