Doctoral School of Geosciences
Subject to the Curricula for the Doctoral Programmes in Natural Sciences and in Engineering Sciences of Graz University of Technology

Statutes

in accordance with the Universities Organisation and Studies Act 2002 (UG 2002) and the study regulations of Graz University of Technology of 5th November, 2008

Legal validity remains restricted to the German original

Preamble

The Doctoral School of Geosciences is a joint scientific project of the Institute of Applied Geosciences and the Geodetic Institutes of Graz University of Technology and is structured into the classes *Earth Sciences* and *Geodesy.*

The doctoral school is based on the regulations contained in § 3 of the curricula for the Doctoral Programmes in Natural Sciences and in Engineering Sciences, of Graz University of Technology.

These statutes were drawn up jointly by the above named institutes and are intended to regulate the consistent and joint supervision of doctoral candidates at this doctoral school. The Doctoral School of Geosciences aspires to be a doctoral school with a strong international orientation. All lectures are available in English upon request.

The school is open to existing and future co-operation initiatives that exist between TU Graz and Karl-Franzens-Universität Graz, in particular with regard to integration in one of the doctoral schools run by the School of Natural Sciences (“NAWI”), namely “Geosciences” or “Earth Sciences”.

Statutes

The following regulations refer to the respective sections of the *Curricula of the Doctoral Programmes of Natural Sciences and of Engineering Sciences at Graz University of Technology*. Only those aspects of the curricula which allow for or require a separate regulation to be issued by the doctoral school will be discussed.

Ad § 3 (1) Member Institutes

Class of Earth Sciences:
• Institute of Applied Geosciences

Class of Geodesy:

- Institute of Navigation
- Institute of Remote Sensing and Photogrammetry
- Institute of Geoinformation
- Institute of Engineering Geodesy and Measurement Systems
- Institute of Theoretical Geodesy and Satellite Geodesy

All members agree to comply with the confidentiality requirements that exist for the Doctoral School of Geosciences.

Ad § 3 (3) (4) Coordinating Team

The Coordinating Team consists of a tripartite body (professors, mid-level faculty members, students = 2:2:2). It must be ensured that all groups are represented equally.

Ad § 6 (1) Curricular Workload

The curricular workload for the *Class of Earth Sciences* and the *Class of Geodesy* comprises 14 semester hours and consists of the following courses:

- *Scientific Methods and Communication*
  - Doctoral seminar I *(2 x 1 semester hours)*
    Two doctoral seminars of 1 semester hour each must be completed.

  - Doctoral seminar II *(2 x 1 semester hours)*
    Two doctoral seminars of 1 semester hour each must be completed.

- *Workshop and Colloquium*
  - *Class of Earth Sciences*: *Earth Sciences Workshop (2 semester hours)*
    An *Earth Sciences Workshop* comprising 2 semester hours must be completed.

  - *Class of Geodesy: Colloquium of the Doctoral School Geosciences - Geodesy (2 x 1 semester hours)*
    This is a joint event of all the above named Geodesy institutes. As part of the colloquium, guest lecturers are invited on a regular basis (4-6 times per semester) for talks on current topics related to the scientific environment of the doctoral school. The doctoral candidates are required to discuss and evaluate selected subjects of the colloquium in oral and written form. The organization of these lectures is the duty of the Coordinating Team.

- Tutorial for postgraduate students *(2 semester hours)*

- *Subject-Specific Basic Modules (6 semester hours)*
  Every doctoral candidate must complete at least two courses from the following categories:
  - *Class of Earth Sciences*:
    - Geology-Petrology
    - Geobiology and Paleoecology

- Hydrogeology and Hydrogeochemistry
- Engineering Geology

- *Class of Geodesy*:
  - Geospatial Technologies (Remote Sensing, Geoinformatics, Photogrammetry)
  - Sensor Integration
  - Monitoring Systems
  - Navigation
  - Satellite Geodesy
  - Engineering Geodesy
  - Space Sciences
  - Physical Geodesy and Geophysics
  - Mathematical and Numerical Geodesy

  These subject areas are offered on an alternating basis in a two-year rhythm with a maximum of four doctoral programme courses per year.

For the *Class of Earth Sciences a*nd the *Class of Geodesy,* the selection of basic modules must be agreed on in advance with the Coordinating Team, the doctoral candidate and his/her supervisor. In agreement with the supervisor and subject to notification of the members of the Doctoral School of Geosciences, courses from other curricula may also be chosen (doctoral or master's programmes), as long as these have not been completed as part of a lower degree.

Examinations completed at recognised post-secondary educational institutions, universities or scientific work in companies may also be approved by the coordinating team, in conjunction with the governing body responsible for study regulations, if the criterion of equivalence to the examinations listed in the subject catalogue is met and this is warranted by the scientific orientation of the doctoral thesis. The annex contains separate examination regulations for the *Class of Earth Sciences* and the *Class of Geodesy*.

Ad § 7 (3) Viva Voce

The viva voce consists of two parts:

- A 30-45-minute presentation by the doctoral candidate on his/her scientific work. All members of the Doctoral School of Geosciences have to be invited to attend this presentation. Following the presentation, the audience is given the opportunity to ask questions. Answers to questions from the audience shall not be taken into account for the grading of the viva voce.

- An oral examination conducted by two expert examiners; 20-25 minutes duration each.

Graduates shall be awarded the degree of "Doctor of Engineering Sciences", abbreviated "Dr. techn", or the degree of "Doctor of Natural Sciences", abbreviated "Dr. rer. nat." The Coordinating Team will decide at the start of the student's doctoral course which degree the graduate will receive, in agreement with the supervisor and the doctoral candidate.

Appendix A to the Statutes of the Doctoral School of Geosciences:

Overview of the curricular workload ***Class of Earth Sciences*** in relation to the current course catalogue

Curriculum Requirements acc. to § 6	**Statutes Earth Sciences acc. to § 6**	**Available Courses Content, Attendance Criteria, Examination Mode**
Minimum of 14 semester hours (SH) in total	14 (SH) in total	
§ 6 (2): Subject-Specific Basic Modules (6-8 SH)	**Subject-Specific Basic Modules** (6 SH)	As previously, all courses of the master's degree programme F066 815 Earth Sciences are electable as long as they haven't been completed during the master's degree programme. In line with the subject of the dissertation and subject to approval by the supervisor and the Dean of Studies, courses from other subject areas may also be chosen.
§ 6 (3): Scientific Methods and Communication		
§ 6 (3), Part 1: Approach to Scientific Work (2 SH)	**Earth Sciences Workshop** (2x1 SH)	**Content:** scientific lectures and workshops **Schedule:** each semester **Attendance:** mandatory in **two** seminars of student's choice **Grading:** conventional
§ 6 (3), Part 2: Doctoral Seminar (2x1 SH)	**Doctoral Seminar I** (2x1 SH)	**Content:** The progress of the individual doctoral projects is monitored in the interest of the scientific community. **Schedule:** held each semester **Attendance:** mandatory during **two** semesters of the student's choice during the first part of his/her studies **Grading:** certificate of attendance
	Doctoral Seminar II (2x1 SH)	**Attendance:** mandatory during **two** semesters of the student's choice during the second part of his/her studies **Grading:** conventional
§ 6 (3), Part 3: Soft Skills (optional; up to 2 SH)	(not included in statutes)	Covered by the doctoral candidate seminars (these cover 4 SH instead of 2 as specified in the curriculum).
§ 6 (4): Tutorial for postgraduate students (2 SH)	**Tutorial for postgraduate students** (2 SH)	**Content:** dissertation-specific **Schedule**: once a year per habilitated lecturer within the venia; alternating subject to agreement **Grading:** conventional

Author: M. Dietzel, 3.10.2008

Appendix B to the Statutes of the Doctoral School of Geosciences:

Overview of the curricular workload ***Class of Geodesy*** in relation to the current course catalogue

Curriculum Requirements acc. to § 6	**Statutes of Doctoral School acc. to § 6**	**Available courses Content, Attendance Criteria, Examination Mode**
Minimum of 14 semester hours (SH) in total	14 SH in total	
§ 6 (2):Subject-Specific Basic Modules (6-8 SH)	**Subject-Specific Basic Modules** (6 SH)	As previously, all courses of the master's degree programme F421 Geomatics Science are electable as long as they have not been completed during the master's degree programme. In line with the subject of the dissertation and subject to approval by the supervisor and the Dean of Studies, courses from other subject areas may also be chosen.
§ 6 (3):Scientific Methods and Communication		
§ 6 (3), Part 1: Scientific Work (2 SH)	**Colloquium of the Doctoral School Geosciences - Geodesy** (2x1 SH)	**Content:** Scientific lectures and workshops. **Schedule:** held each semester **Attendance:** mandatory during **two** semesters of student's choice **Grading:** conventional
§ 6 (3), Part 2: Doctoral Seminar (2x1 SH)	**Seminar I for Doctoral Students of Geosciences - Geodesy** (2x1 SH) **Seminar II for Doctoral Students of Geosciences - Geodesy** (2x1 SH)	**Content:** The progress of the individual doctoral projects is monitored in the interest of the scientific community. **Schedule:** held each semester **Attendance:** mandatory during **two** semesters of the student's choice during the first part of his/her studies **Grading:** certificate of attendance **Attendance:** mandatory during **two** semesters of the student's choice during the second part of his/her studies **Grading:** conventional
§ 6 (3), Part 3: Soft Skills (optional; up to 2 SH)	(not included in Statutes)	Covered by the doctoral seminars (these cover 4 SH instead of 2 as specified in the curricula).
§ 6 (4): Tutorial for post-graduate students (2 semester hours)	**Tutorial for post-graduate students** (2 SH)	**Content:** dissertation-specific **Schedule**: once a year per habilitated lecturer within the venia; alternating subject to agreement **Grading:** conventional

Author: N. Bartelme, 9.10.2008