

Guidelines for the Education and Support of Graduate Students at Helmholtz Zentrum München

As a young scientist, your doctoral studies are an important time that will prove crucial and formative for your academic career. Here at Helmholtz Zentrum München, we recognize that we have a duty to support graduate students during their doctoral studies and to promote them to the best of our ability. For this reason, every adviser for doctoral work takes on a high level of responsibility and must be aware of this. These guidelines are intended to contribute to a successful conclusion of studies and to the completion of the doctoral thesis.

1. Education of Graduate Students at Helmholtz Zentrum München

To a considerable extent, graduate students contribute to the success of projects at the Center and make important contributions to research. The dissertation records the ability of the graduate student to do independent scientific work. The doctoral examination procedure is carried out by the universities, in accordance with the doctoral regulations in force there.

The primary duties of the Center in the education of graduate students are:

- To guarantee supervision that is intensive, academically competent and geared to the needs of the individual graduate student
- To create optimal basic conditions and a climate of academic freedom to enable students to realize their full potential and achieve top scientific performance

In addition, the Center offers graduate students the opportunity to acquire complementary abilities ("transferable skills"); these include the collaborative, and, if necessary, interdisciplinary treatment of a research subject, the publication of the results, project management skills and competence in communication for exchange with expert colleagues as well as for dialogue with an audience foreign to the field (see number 7. Graduate Program).

2. Duties of Helmholtz Zentrum München

In addition to the scientific excellence of the supervisors, clear procedures and clear, mutual responsibilities guarantee a high level of education. These include:

- Appropriate preparation of the dissertation
- Intensive support of the graduate students
- An appropriate limited time for the dissertation (normally 3 years)

- Secure funding during the time of the doctoral studies; with a positive recommendation from the Thesis Committee, financing is possible after the regular doctoral study period of three years.
- Offers for professional education and further training
- Offers for the acquisition of complementary abilities (transferable skills)

3. Appointment of Graduate Students

In order to appoint a graduate student, the Human Resources Department requires, in addition to personal data, the following documents:

- Supervision agreement
 - Contains the topic of the dissertation and the name of the supervisor at the university as well as the direct supervisor at Helmholtz Zentrum München (both functions can be assumed by one person, as long as this person is authorized according to university regulations). The confirmation of supervision is provided by the respective signature(s) of the supervisor(s).
- Brief work plan and schedule, developed by the graduate student in consultation with his/her supervisor(s) by the end of the first six weeks
- Allocation to and integration into ongoing research projects

4. Conducting the Dissertation

Working on a dissertation takes place on the basis of a written work contract between the graduate student and the Center, in which the mutual rights and obligations are set out, as well as on the basis of a written supervision agreement. The doctoral regulations of the faculties remain unaffected by arrangements made with Helmholtz Zentrum München.

An accompanying documentation by the Program Planning and Management Department (PPM) includes the individual work steps during the work on the dissertation, as well as the participation in the graduate student program. The documentation comprises the following information:

- Composition of the membership of the Thesis Committee
- Reports/statements by the Thesis Committee
- Participation in the Helmholtz Graduate School of Environmental Health (HELENA)
- Participation in scientific conferences
- Participation in advanced education and training
- Final report of the graduate student: dates of submission and examination; on a voluntary basis: copy of the doctorate certificate, employment after the completion of the doctorate and new address

5. General Conditions

- All work for the doctoral degree at Helmholtz Zentrum München, including writing the dissertation, shall be concluded within a supervised period of 3 years.
- As a rule, graduate students shall receive a contract of three years. Variations in this may occur due to employment in externally funded positions.
- Within the first month of beginning the dissertation, a meeting between the graduate student, the professional/direct adviser and the adviser at the university shall take place. (Here submission of a recommendation for members of the Thesis Committee is possible).
- By the end of the first six weeks the graduate student shall develop a brief work plan and schedule in consultation with his/her supervisor.
- Within three months the graduate student shall make sure he/she has obtained admission to the doctoral examination procedure at the faculty and produce evidence of this at the Graduate Student Office.
- Any dissertation started at the Center after December 31st 2008 shall be supervised by a Thesis Committee (TC).
- The Thesis Committee shall consist of at least three people and generally comprise the following:
 - The professional/direct adviser (institute director/group leader)
 - The adviser at the university (if the direct adviser is also the adviser at the university, an additional person shall be included in the Thesis Committee)
 - An independent, preferably external, specialist expert
 - An additional, fourth member may be included in the Thesis Committee.
- In the first three months after the graduate student has started work on the dissertation, the Thesis Committee shall be assembled by the graduate student – with support from the professional/direct adviser, if need be, and officially approved by the Graduate Student Office.
- The Thesis Committee has a mentoring function and is both an adviser and a point of contact for the graduate student during his/her doctoral studies. The professional/direct adviser is responsible for chairing the Thesis Committee.
- The Thesis Committee shall meet once a year. In principle, all members shall be present at these meetings. Thesis Committee meetings shall be organized by the graduate student, with support from the professional/direct adviser if need be. The graduate student shall prepare a written progress report (3-5 pages) for the meeting. The report shall be made available to the members of the Thesis Committee in good time before the meeting and contain the following points: scientific context, project aims, results, points of discussion/conclusions and an outlook on the next steps to be taken and planned experiments.

- The graduate student shall present the results of his/her work to the members of the Thesis Committee. During the meeting, the results obtained and any possible problems shall be discussed. On the basis of the progress report a comparison of targets and actual results shall be carried out and reasons for discrepancies established.
- The Thesis Committee shall issue a written report of the meeting to the Graduate Student Office. The liaison persons for graduate students shall take note of the Thesis Committee's reports on request.
- The report on the Thesis Committee's first meeting and the graduate student's progress report must be submitted to the Graduate Student Office nine months after the doctoral studies have begun, at the latest within the first year. For all graduate students who began work on their dissertation after July 1, 2010, a positive evaluation by the TC is a prerequisite for obtaining funding to support attendance at conferences and other internationalisation measures provided by the Graduate Student Office.
- The second meeting shall take place after approx. 1.5 years.
- The third meeting shall take place in the third year (after approx. 2.5 years at the latest). The Thesis Committee shall approve plans for completing the work and recommend whether it is necessary to extend the contract beyond the usual timeframe for doctoral studies.
- In cases of conflict the graduate student can consult any member of the Thesis Committee or one of the selected liaison persons for graduate students. In addition, the Graduate Student Office or the Graduate Student Representatives will offer their support.

6. Liaison Persons for Graduate Students

The liaison persons are points of contact for graduate students and shall advise and mediate in cases of conflict.

After consultation with the chairs of the Scientific-Technical Council (WTR) and the Speakers' Meeting as well as the PPM director, the graduate students or Graduate Student Initiative shall recommend liaison persons for Neuherberg and the Großhadern Campus respectively to the WTR. By resolution the WTR shall appoint the liaison persons for a term of 2 years.

7. Graduate Program

The Graduate School of Environmental Health (HELENA) offers graduate students comprehensive education and training in "Environmental Health" research.

Besides intensive education and training in one of eight thematic fields, special value is placed on the development of management and leadership competence.

The graduate program contains mandatory core elements, which must be successfully completed to obtain the graduation certificate in Environmental Health.

The following elements of the HELENA graduate program are mandatory for all doctoral students who began their dissertation at the Center after December 31, 2008 and prior to July 1, 2010:

- Participation in the lecture series "Environmental Health" (80% attendance or higher; missing lectures can be made up the following year; participation in four events)
- Annual reports to the graduate student's personal thesis committee
- Participation in events/of the graduate student's own institute/research group (seminars and journal clubs)
- Submission of an application to the Graduate Student Office for funding in an international context (congress, lab exchange... up to 500 EUR is possible).

Additional mandatory elements for all graduate students of the HELENA Graduate School who began their dissertations at the Center after July 1, 2010:

- For graduate students of Technische Universität München: Participation in the kick-off event of the TUM Graduate School
- For LMU graduate students: Participation in the welcome event of the LMU Graduate Centers
- Participation in scientific courses and seminars (amounting to 65 HELENA equivalents*) as well as 'Transferable Skills' (amounting to 10 HELENA equivalents)
- Submission of an application to the Graduate Student Office for funding in an international context (conference, lab exchange...). Grants up to 1500 EUR are possible.

* A HELENA equivalent corresponds to a workload of four hours. The values accredited to events of the Helena Graduate School are determined by the Graduate Student Office.