

**Ausführungsbestimmung: Structured study program for Dr sc hum students
according to § 5 para. 1 (b) Doctoral Regulations**

§1 Framework for the study program

(1) In addition to their research project, the doctoral students must complete a study program that provides a structured graduate education with theoretical and practical learning content (cf. State University Act §38 and PromoO, Annex 2). This study program should include scientific teaching content as well as training in soft skills and core competences.

(2) The study program has to be defined in the Doctoral Agreement (Promotionsvereinbarung) and must be approved by the Doctoral Committee. The study program should generally cover a total of 240 hours.

(3) Doctoral students who are involved in subject-specific (externally funded) Research Training Groups (Graduiertenkollegs) or Graduate Schools usually participate in the structured study programs offered these organizations. These doctoral candidates must indicate in the Doctoral Agreement that they will participate in the structured study program of their Research Training Group. In addition, they must indicate the content and time requirements of the program to document that the requirements of §1(2) and §2(2) are being fulfilled. If necessary, the doctoral committee can require additional components to be added in order to fulfill the requirements for a Dr. sc. hum study program.

(4) Doctoral students who are not integrated into a Research Training Group or a Graduate School use the courses available at the respective institution as well as at the University of Heidelberg (in particular at the Graduate Academy). In consultation with their doctoral supervisor, they select courses to put together a study program that corresponds to their field of research, interests and needs. The doctoral candidates also state in the doctoral agreement that they will participate in an individual study program.

§2 Structure and scope of the study program

(1) The study program is divided into compulsory courses and compulsory elective courses.

(2) The compulsory courses include the following elements:

- I. Courses on Good Scientific Practice (approx. 6 hours).
- II. Journal clubs and research seminars of at least 1-2 semester hours each, preferably within the student's own research group (approx. 30-60 hours / year, max. 180 hours total).
- III. Protocolled sessions with the Thesis Advisory Committee (TAC, see §3, 10 hours per TAC session incl. preparation, max. 30 hrs. total)

(3) At least one of the following three elective required courses should be completed: (max. 10 hours per elective).

- I. Methodology courses or internships
- II. Lab-trainings, fieldwork lessons
- III. Participation in scientific exchange activities outside the own research group (scientific symposia, retreats, doctoral congresses) to present own work (poster presentation or oral presentation)

(4) Other optional elective courses: (max. 20 hours per elective course).

- I. Lecture series of the scientific institutions representing the doctoral fields of study
- II. Participation in scientific exchange activities outside of the own research group (e.g., seminars with external guests, grand rounds, science day, participation in conferences and retreats)
- III. Key skills and soft skills training (e.g., presentation, scientific writing, management skills, project planning, career counseling, training in writing proposals for specific science funders such as EU/EC, NIH, DFG, Wellcome, etc., FELASA course, Good Clinical Research Practice (GCP), National Institutes of Health Research Ethics Training, National Institutes of Health Anti-discrimination and Bias Awareness Training).
- IV. Genetic Engineering Course
- V. Other methodology courses or internships such as statistics courses, software courses.

§3 Thesis Advisory Committee (TAC)

(1) A TAC must be established as part of the degree program. TACs have two main functions:

- (i) monitoring progress, providing feedback and advice, supplementing the role of the primary supervisor; and
- (ii) assisting in resolving conflicts when the doctoral student and the primary supervisor disagree on significant aspects of the project or the supervision.

(2) Each TAC consists of the doctoral supervisor and at least two other independent members. These are not from the same department or research group, but have expertise in scientific topics related to the doctoral research. TAC members are usually habilitated university teachers, but can also be scientists with several years of experience after their doctorate (e.g. heads of young investigators groups).

(3) The doctoral supervisor is co-responsible for the recruitment of the members of the TAC. The proposed composition of the TAC has to be submitted as part of the application for acceptance as a doctoral candidate and has to be approved by the Doctoral Committee.

(4) The TAC should normally meet three times during the term of the dissertation. The first TAC meeting should take place within 8 months after the start of the doctoral thesis. The goal of this TAC meeting is to ensure that the doctoral student understands the goals and the scientific background of the project and has already made initial progress in the experimental work. The extent, the feasibility, the potential impact, and the possible risks should also be discussed. The second TAC

meeting should be held approximately 12-24 months after the start of the doctoral project. The purpose of this meeting is to ensure that the dissertation project is on schedule and that there is a good chance that publications and a dissertation will be produced on time. If necessary, the TAC will recommend adjustments to the dissertation project. The third TAC meeting should be held 24-36 months after the dissertation project has begun. At this meeting, progress toward completion of the project and deadlines for submission of the dissertation and manuscripts should be discussed. Additional TAC meetings may be scheduled as needed. The doctoral students may also contact members of the TAC for guidance at any time, and may request additional TAC meetings as needed.

(5) The doctoral student sends a written Progress Report, one week before the TAC session, to the members of the TAC, which should normally not be longer than 5 pages.

(6) At the TAC meeting, the doctoral student should give an oral presentation of about 20 minutes length, outlining the project and the progress made, the problems that have been faced, and the future experimental plans and schedule for the next period of work on the dissertation. The written report and oral presentation will then be discussed by the TAC and suggestions and advice will be given. If necessary, the TAC can recommend changes to the doctoral candidate's proposal and also suggest actions to assure punctual completion of the dissertation.

(7) After the oral presentation and discussion, the TAC should ask the doctoral candidate to leave the room so that progress can be discussed directly with the doctoral supervisor. Afterwards, the doctoral advisor briefly leaves the room so that the TAC can meet alone with the doctoral candidate to ensure that adequate supervision and resources are available and to discuss any concerns the doctoral candidate may have. At this point, the TAC asks both the doctoral student(s) and the doctoral supervisor(s) to leave the room and consults alone to discuss and summarize its views and formulate recommendations. These observations and suggestions are then shared and recorded as part of the TAC report.

(8) The TAC prepares mutually a written report using the TAC evaluation form, which includes an assessment of the quality of the written progress report, the oral presentation, and the discussion. A critical evaluation, and suggestions for improvement, should be made. The suggested future plans should be evaluated and suggestions regarding priorities should be expressed. Possible problems that need to be solved should also be mentioned. The written report must be signed by the TAC members and the doctoral student. The doctoral student is responsible for submitting a copy of his/her written progress reports (§3 (5)) and completed TAC evaluation forms to the Office for Doctoral Affairs shortly after each TAC meeting.

§4 Accreditation and Certification of Study Achievements

(1) With the application to initiate the doctoral procedure (PromO §8), the doctoral candidate must provide evidence that the study program specified in the PV has been successfully completed (PromO §8 (2g)).

(2) For doctoral students who are part of externally funded programs or graduate schools (§1 (3)), they determine how the participation in the study program is to be

documented and hand out a Transcript of Records to the doctoral students, which certifies the successful completion of the structural study program. For the other doctoral candidates, the documentation of the successful completion of the study program is done via a so-called Blue Sheet.

(3) The successfully completed participation in the doctoral program will be certified in the doctoral certificate.