

EGS-ABG rules for supervision and awarding the doctoral candidates

The rules have been jointly defined by the consortium to meet the criteria of each national Graduate School. Each Partner Institution has agreed to these rules. The purpose here is to provide a homogeneous and efficient management of individual doctoral programs and to ensure a high quality level of PhD studies. The system enables all parties involved to create transparency on the progress of doctoral candidates in EGS-ABG and to make sure that supervisors and doctoral candidates will discuss and tackle problems in an early stage and hence prevent major delays. The monitoring of the doctoral programs, from the enrolment of doctoral candidates until their awarding, is managed by the EGS-ABG Education Committee. These rules are described in detail hereafter.

1. Duration of the programme and mobility periods

- EGS-ABG doctoral programs last 4 years, including scientific exposure and a minimum of 30 ECTS devoted to courses and training.
- The cumulative period at the “first” institution is equal or longer than at the “second” institution (from 2+2 to max 3+1 years, resp.). The cumulative period at the “second” institution cannot be less than one year.
- Each stay at a given institution cannot be less than 6 months.
- An internship period of 3 to 6 months at one associated partner or in industry is encouraged.
- Doctoral candidates must complete their doctoral program (including the thesis defense) at the latest at the end of the fourth year.

2. Supervision

a) Supervisors

- The supervision is jointly conducted by two supervisors, one from each host institution.
- The position of a supervisor is in accordance with the rules of his/her Institution. According to national rules, a distinction can be made between an “official” supervisor and a “daily” supervisor.
- The two supervisors are responsible vis-à-vis host institutions and EGS-ABG. They are committed to providing favorable conditions of supervision to the doctoral candidate during the whole duration of his/her program and are responsible for the scientific quality of the thesis.
- The supervision may be extended with other scientists. If such external inputs are supposed to be more than incidental, the two supervisors establish a Supervision Committee at the beginning of the program and manage it during the total duration of the program. Additional supervisors must be entitled (according to national regulations) to co-supervise research.
- The doctoral candidate, together with the supervisors, is in charge of producing a documented update after two years of his/her progress and a mid-term individual training plan (see § 3) for the EGS-ABG Education Committee to validate the program. On the basis of this update, the Education Committee formulates recommendations to the doctoral candidate and his/her supervisors for the remaining 2 years.

b) Thesis Advisory Board

- In addition to the supervision organization, a Thesis Advisory Board (TAB) is established for each doctoral candidate at the beginning of his/her program.
- The TAB comprises at least both supervisors, two scientists outside the two host institutions and one representative of the animal breeding industry. Its composition is under the responsibility of both supervisors and must be communicated to the EGS-ABG Executive Board within the first three months of the program.
- It is planned to have a yearly meeting with the candidate and the members of the TAB. The meetings are devoted to evaluate the progress of the research activities in accordance with the project descriptors (milestones, deliverables). After each meeting the TAB will formulate recommendations for further research and professional training activities (i.e. internships). A copy of the TAB recommendations will be included in the mid-term report to the education committee.

c) Validation of the progress and continuation of the program

- The implementation of a “go/no go” procedure during the program depends on the rules at the “first” host institution, as defined in the employment contract.
 - At APT, AU and SLU, the employment contract is signed for the whole duration of the program and no intermediate “go/no go” procedure is planned.
 - At WU, the doctoral candidate is firstly appointed for a 18-month period. At the end of this period, his/her progress is evaluated by the supervisors. The decision “no go” is taken only in cases of serious neglect by the candidate, and needs to be confirmed by the EGS-ABG Executive Board. In case of a “go” decision (99% of cases at WU the last ten years), the doctoral candidate is appointed for an additional 30-month period.
- In case where a doctoral candidate, at any time during the course of the program, shows a serious breach of his/her obligations, as defined in the Doctoral Candidate Agreement, the supervisors must alert the EGS-ABG Executive Board. The Board appoints a mediator who meets the different involved parties (doctoral candidate, supervisors, head of the hosting lab, etc.). Within one month after his/her appointment, the mediator will send to the Executive Board a detailed written report including recommendations. On the basis of this report, the Executive Board takes a decision: (i) continuation of the program without taking further actions, (ii) continuation of the program after implementation of changes in its organization and/or supervision, or (iii) stop program. The delay between the alert by the supervisors and the decision by the Board cannot be more than 2 months.
- In case of personal communication problems between doctorate candidate and supervisor(s), the doctoral candidate has the right to ask for a confidential external mediator who will, within one month after his/her appointment, send to the Executive Board a detailed written report including recommendations. On the basis of this report, the Executive Board takes a decision on the continuation of the program (same three possibilities as above). The delay between the alert by the doctoral candidate and the decision by the Board cannot be more than 2 months
- The EGS-ABG Executive Board will inform the European Agency for Education in any case of serious problems or “no go” decisions.

3) Individual Training Plan

- The Individual Training Plan (ITP) is an agreement on supervision and training between the doctoral candidate and EGS-ABG, to which both parties owe rights and duties.
- The ITP is constructed on the basis of the knowledge and skills that the doctoral candidate must develop during his/her doctoral programme, according to his/her initial background and the thesis topic needs/requirements. It comprises, at least, the following points:
 - An analysis of the requirements and the goals of the planned training.
 - A list of courses to be taken by the doctoral candidate during his/her programme.

- A list of scientific meetings where the candidate intends to present his/her results (poster or oral).
- A tentative schedule for 4 years.
- The implementation of the plan takes place after consultation between the doctoral candidate and his/her supervisors (see § 2.a). During the first 6 months of the programme, the ITP is submitted by the doctoral candidate to the Education Committee. In given cases, the Education Committee can provide motivated recommendations to improve the plan. Upon validation by the national graduate schools involved and the EGS-ABG, the Education Committee sends an approval to the doctoral candidate and his/her supervisors, on one hand, and the Executive Board, on the other hand.
- The progress by the doctoral candidate is evaluated yearly by the Education Committee. The implementation of the ITP is evaluated and, if required, the plan is updated. It is possible for the TAB to formulate amendments in the ITP which subsequently need to be validated by the Education committee before implementation.

4) Courses and scientific exposure

a) Different categories of courses and ECTS credits

- A total of 30 ECTS credits for courses taken by the doctoral candidate must be completed.
- Common activities are compulsory and account for a total of 6 credits. They consist of an introductory course (2 credits) in September during the first year of the programme, and two Summer Schools (2 credits each) in June during the second and third years.
- A total of 18 credits of advanced scientific courses must be completed.
- A total of 6 credits of transferable skills courses must be completed.
- During the stay at a given host institution, taking a course in the local language is strongly encouraged, except for doctoral candidates whose native tongue is the local language. Upon request by the candidate and with the agreement of his/her supervisors, advanced courses in English may be taken. No credits are given for language courses.

b) Who is in charge of offering courses

- All courses are proposed by the education committee of the EGS-ABG.
- Skills and language courses are offered by the Partner institutions.
- Scientific courses are jointly organized by the Partner institutions. Also, the Associated partners are invited to offer scientific courses. According to the needs, scientific courses may be taken elsewhere, the decision being made on a case by case basis.

c) Scientific exposure

- The doctoral candidate must be exposed to the national and international scientific communities.
- During his/her PhD programme, each doctoral candidate must attend at least 3 scientific conferences, of which one he/she will have an oral presentation (the other posters). At least one of these conferences must be international.
- Exposure to pluridisciplinary and professional environments is strongly recommended.

5) Thesis

a) Language and structure of the thesis

- The thesis is written in English.
- The thesis comprises three abstracts, one written in English and two in the languages of the two host institutions, respectively. Abstracts must be concise (1 page max) and informative, and are used for databases.
- The structure of the thesis is as follows:
 - Acknowledgements, including the list of financial sources.
 - Abstracts

- General Introduction. The general introduction must be as informative as possible: it must comprise the stakes of the research which was undertaken, the scientific questions addressed and a brief description of the state of the art supported by a recent literature review.
- A series of 4 or more papers from the research undertaken (see § 5.b).
- A general discussion. The general discussion is more than a summary of the papers. Here, the doctoral candidate is asked to make links between the different papers, put the findings into perspective and have a critical look at the whole work. Perspectives of application in animal breeding and for further research must be clearly presented.
- Conclusion, which must highlight the main findings and perspectives of the work.
- Popular summary. The popular summary is to be written as an information note for a large audience (maximum 2 pages). The context and the stakes underlying the research must be described. The potential applications of the results should be highlighted. Language must be simple and as didactic as possible. Complex terms should be avoided and jargon is prohibited.
- Realized Individual Training Plan, as validated by the Education Committee.

b) Submission of the thesis

- The submitted thesis must have at least two accepted papers plus two submitted papers, including 3 papers with the candidate as first author. Here, only papers accepted or submitted in international peer review journals are considered.
- Before submission, the thesis must be approved by both supervisors.
- The thesis cannot be submitted without the final validation of the ITP by the Education Committee. In case where the realized plan is considered incomplete, the education committee can ask the doctoral candidate for additional training.

c) Evaluation of the thesis

- The thesis is evaluated by 4 independent referees, among whom 3 have a position of full or associate Professor or Senior Scientist (or equivalent). The list of the referees is proposed by the supervisors of the doctoral candidate in consultation with the TAB and is submitted to the approval of the EGS-ABG Executive Board and to the board of Deans of each of the two host institutions.
- Each referee must write a report in English, which comprises a critical analysis of the work in its various aspects: how the candidate introduces the scientific issues and underlying stakes, the protocol for data collection and the methods used for their analysis, how the candidate presents the results and discuss the relevant findings. The report must indicate in its conclusion if the work really corresponds to a doctoral project and if the thesis deserves to be defended.
- The report must be sent to the EGS-ABG Executive Board no later than one month after receipt of the thesis and at least six weeks before the planned date for the thesis defense.

6) Thesis defense

a) Green light for the thesis defense

- On the basis of the 4 reports by the referees, the EGS-ABG Executive Board will write a recommendation about the thesis defense. This recommendation is sent with the reports to the competent authorities of each host institution, who take the final decision.
- In case of no green light for the defense, the Executive Board send to the doctoral candidate and his/her supervisors all the elements (referees' reports, etc.) on which the decision was based. A work plan to improve the thesis is written by the doctoral candidate, in association with his/her supervisors. This work plan is submitted to the Executive Board and a realistic timetable for the submission of a revised copy of the thesis is established.

b) Assessment Committee

- An Assessment Committee (Thesis Jury) for the oral defense is appointed by the EGS-ABG Executive Board and the competent authorities of each host institution. The Assessment Committee will be in charge of making the final decision to award (or not) the doctoral candidate and the qualification of the diploma (if any).
- The Assessment Committee comprises 3 to 8 people and all the members except one must have a position of associate or full Professor, Senior scientist or equivalent.
- The gender balance is encouraged in all Assessment Committees and the number of people of a given gender cannot be less than 1 over a total of 3 or 4 people, or 2 over 5 to 8 people (i.e. the proportion cannot be less than one quarter).
- The presence of the following persons is compulsory, whatever the host institutions:
 - One scientist from another country than the two host countries.
 - One representative of the animal breeding industry (in most cases this will be the same person as the industrial member of the TAB).
- The presence or not of the following persons depends on the own rules of each host institution:
 - At least 2 among the 4 external referees who have reviewed the thesis.
 - The “main” supervisor.
 - One Professor from the institution which will deliver the degree.
- The composition of the Assessment Committee is proposed by the supervisors of the doctoral candidate and is submitted for approval by the Executive Board and the competent authorities at each of the two host institutions.

c) Place, language and organization of the thesis defense

- There is a single thesis defense, which is to be held at the “first” institution.
- The language of the defense is English.
- The thesis defense is a public event.
- The thesis defense is organized according to the rules and usages of the “first” institution. Among the organizational aspects that may depend on local rules, are the total length of the defense, the time devoted to the presentation by the applicant and questions from the committee, respectively, the management by a chairperson, the appointment of an opponent, etc.
- In a situation where a vote by the Assessment Committee is required, if one or both supervisors are members of the Committee, they are not allowed to vote.

7) Diploma

- Within two weeks after the defense, the Assessment Committee sends a motivated report including its formal decision, to the EGS-ABG Executive Board and to the competent authorities of each host institution.
- As far as possible, the successful doctoral candidate receives a joint degree. If not possible, two degrees will be awarded, i.e. by each of the host institutions of the candidate.
- The diploma from a given institution may include a qualification (e.g., “with honours”, “cum laude”, etc.), according to the rules of the institution.
- The EGS-ABG Executive Board produces a diploma supplement, which includes the detailed description of the training activities of the doctoral candidate. This diploma supplement is signed by the representative persons of each of the four Partner institutions and the coordinator of EGS-ABG.