

Guidelines with respect to obtaining a PhD in Geography, Geomatics and Surveying

1) Required PhD administration

1.1) Registration as PhD student

PhD students are strongly advised to subscribe on a yearly basis during the period they are working on their PhD. For more details, see:

- <http://www.ugent.be/nl/onderzoek/doctoreren/administratie/inschrijven.htm> for Belgian students
- <http://www.ugent.be/en/teaching/admission/degreestudent/application> for foreign students

It is required that students who will defend their thesis are registered as a PhD student at the UGent student administration in the academic year they will defend their thesis and that the appropriate subscription fee is paid for the Doctoral Exam. Without this, the defense cannot take place.

1.2) Composition of the Examination Committee

The promotor makes a suggestion as to the composition of the reading and Examination Committee to the Chairman of the Educational Board. Basic requirements for all members are that these must be either:

- active and/or retired ZAP at UGent or any other university within the Flemish Community;
- doctor-assistants at UGent;
- guest professors at UGent;
- postdocs at UGent or other university or research institute (both national or international);
- other people without a PhD, but with special competence in relation to the PhD topic.

The reading committee:

- must have a majority of members that were not directly involved in the research (i.e. promotors and other supervisors directly involved in the research should be in the minority);
- should consist of minimum three and maximum five members;
- both requirements imply that in case of three or more promotors and/or other supervisors directly involved in the research, maximum two of them can be part of the reading committee in case of five members or only of them in case of three or four members – the other promotors should be jury members that are not a part of the reading committee.

The Examination Committee consists of all members of the Reading Committee, promotors, and remaining members so that there is:

- a total number of members at least five members; of which
- at least three members are active ZAP of UGent or another university;
- at least one member is external to UGent;
- the majority of all members must be affiliated with UGent.

The composition of the Reading Committee and the Examination Committee needs to be approved by the Educational Board and by the Faculty Board. One important implication is

that any subsequent change to this composition, as well as any changes to the title of the PhD thesis require a re-approval by the Faculty Board.

The pre-defense must take place between 30 and 60 days after the approval by the Faculty Board. The public defense must take place maximum 60 days after the pre-defense. Any delay beyond that may require the Examination Committee to be re-appointed by the Faculty Board. As a guideline, the following time schedule can be used (bearing in mind the above-mentioned formal time constraints):

- submission of proposal for Examination Committee composition to the Chairman of the Educational Board around the time that the draft thesis will be ready;
- the pre-defense takes place about one month after the members have received the draft thesis;
- the public defense takes place about one month after the pre-defense (this may depend on the amount of work that needs to be done based on the comments raised by the Examination Committee);
- during the process, note that about four weeks are generally required to allow the administrative processing for handing over the official PhD certificate during the public defense. To expedite this process, it is important that the PhD candidate pays the doctoral examination fee as soon as possible.

Please note that there are two ways in which the above-mentioned periods may be extended: (i) academic recesses may not be taken into account, while (ii) the jury may consider extending the period between the pre-defense and the public defense if the candidate requires more time to make the necessary changes (to this end, the candidate should get in touch with the Chairman of the Examination Committee, who will in turn inform the other jury members).

All members of the Examination Committee should take part in the evaluation. During the pre-defense, the minimal ratio of attending members is one out of two. During the public defense, the minimal ratio of attending members is three out of five. In principle, the Chairman of the Educational Board acts as Chairman of the Examination Committee, while the UGent promotor acts as the Secretary. If the Chairman of the Educational Board is unable to oversee the process (e.g. because he/she is the promotor of the PhD or he/she is on leave of absence), then he/she is replaced by another ZAP member of the Educational Board.

2) Writing of the draft thesis

Given the collaborative nature of scientific research and the fact that very different topics/methodologies can require very different ways of writing up research, there are no set guidelines as to the format of the thesis. In other words: doctorates primarily based on peer-reviewed publications, more traditional monographs, and other formats are possible. However, whatever the exact format, each thesis should take into account the following general guidelines:

- Introduction: There must be a general introduction setting out the main aims/objectives, the thesis' position within the wider scientific literature, and an outline of the remainder of the thesis. This general introduction must be written by the candidate alone.
- Body of the text: Chapters in the main body of the thesis may be co-authored, and some of these may even not be written as first author. However, at least two chapters need to be written as first author, while the number of chapters not written as a first author should not exceed the number of chapters written as first author. When written in co-authorship, all authors must be mentioned. When not first author, the thesis outline

should mention the actual contribution of the candidate. It is advisable (but not compulsory, see above) that the chapters are written in a format and up to the standards of a manuscript that could be submitted to a peer-reviewed, (S)SCI-listed journal. This can include papers already published, in press, accepted, submitted or in preparation. If already submitted, accepted, in press or published, the full reference must be given (with the notification of "Modified from [full bibliographic reference]..." where relevant).

- General discussion: The integrative contribution of the research summarized in the body of the text must be shown by means of a general discussion. This part of the thesis explains the analytical, conceptual and empirical linkages between the different chapters, and shows how these collectively advance scientific knowledge. As a corollary, this must be a synthetic and comprehensive discussion of the other chapters rather than a repetition of the main points and/or an expanded summary of the chapters. Once again, this general discussion must be written by the candidate alone.
- General conclusion
- Summary (approx. 1000 words)

3) Pre-defense

3.1) Promotor

As soon as possible, the promotor should fix a date that suits the agenda of the members of the Examination Committee. Information that needs to be provided as soon as possible is:

- Date of pre-defense
- Hour of pre-defense
- Meeting room

As mentioned earlier, there should be about one month between the date the draft thesis was sent to the jury members and the pre-defense. The pre-defense must take place between 30 and 60 calendar days after the Examination Committee has been approved by the Faculty Board.

Furthermore, although the formal admission to the public defense depends on the outcome of the pre-defense, it is advisable that the promotor already searches for a tentative date for the public defense. The latter facilitates the practical organization involved in a public defense.

3.2) Process

The pre-defense starts with a 15 minute presentation by the PhD candidate in which he/she succinctly summarizes the research. This will be followed by a discussion in which all major comments raised by the jury members are taken up with the candidate. Minor corrections (linguistic, references, etc.) will not be dealt with during the meeting, but need to be adjusted in the final version of the thesis based on written suggestions that will be provided by the individual jury members after the pre-defense (preferably by e-mail).

Given the importance of the pre-defense, all reasonable measures must be taken to allow jury members that cannot be present to take part in the discussion (especially international experts in the reading committee). For instance, one straightforward approach to allow foreign reading committee members to be 'present' is via Skype-like software, which allows them to follow the overall discussion, ask questions, and have discussions with the candidate. The necessary equipment needs to be provided, and this process will be discussed with jury members before the pre-defense.

Immediately after this pre-defense, the Examination Committee discusses the next steps to be taken. Based on the overall discussion, a decision needs to be made regarding the following points:

- Will the candidate be allowed to the public defense?
- If yes, can this public defense be based on the current draft of the thesis, or is the candidate encouraged to make changes to the thesis?
- If not, then the process needs to start from scratch, but is obviously advisable that – based on the discussion – an overview is compiled of the areas that need further research/scrutiny.
- If the jury cannot reach a consensus on the decision, then the jury can vote on the next steps to be made.

If the PhD candidate is encouraged to modify his/her thesis, then he/she will be provided with a succinct summary of the suggested changes. This document will be compiled on the basis of the discussion of the Examination Committee, and will be delivered maximum one week after the pre-defense; the Secretary is responsible for assembling the different suggestions, and will run this by the Chairman for approval before passing it on to the PhD candidate.

In sum, after the pre-defense, the candidate will receive (i) a written overview of the major changes he/she is encouraged to make based on the discussion of the Examination Committee (if any), to be compiled by the Secretary after crosschecking with the Chairman; and (ii) an overview of the minor corrections proposed (if any), to be sent individually by e-mail by the different jury members.

4) Public defense

4.1) Promotor

After the pre-defense, the following information needs to be provided to the Chairman in order to obtain the formal documents from the Dean's office:

- date of the public defense (potentially depending on the amount of work that needs to be done based on comments at pre-defense);
- hour of the public defense;
- auditorium where the public defense takes place;
- and the meeting room where jury members can convene 30 minutes before the public defense

Furthermore, this information is also disseminated to all Department Chairs of the Faculty of Sciences.

It is important to stress that the public defense should take place within maximum 120 calendar days after the composition of the Examination Committee has been approved by the Faculty Board.

4.2) Process

An electronic and a hardcopy version of the final thesis must be submitted to all jury members at least one week before the public defense. Also, in case of major changes proposed in the context of the pre-defense, this must be accompanied by an overview of the most important changes in a separate document.

The entire process (i.e. from the formal entrance of the Examination Committee to the proclamation of the Doctorate) should be finished within two hours. The public defense is

formally opened by the Chairman, who briefly introduces the jury members, after which the promotor invites the candidate to present his/her work; this presentation should maximum take 30 minutes. Unless the candidate does not speak Dutch himself/herself, the presentation is given in Dutch. In case one or more members of the Examination Committee are non-Dutch speaking, the slides must be in English. After the presentation, a discussion will start between the candidate and the jury members. Unless the candidate does not speak Dutch himself/herself, Dutch-speaking jury members speak in Dutch, while non-Dutch-speaking jury members speak in English. The entire discussion phase should last max. 75 minutes, which leaves 15 minutes for the jury deliberation and the proclamation.

Some practical guidelines:

- Although formally members of the Examination Committee, it is desirable that the Chairman and the promotor refrain from asking questions, and leave the floor to the other jury members. (Obviously, both the Chairman and the promotor can engage in the discussion if they want to.)
- The order in which jury members ask their questions is in principle not set, but usually follows a twofold distance decay function: (i) we begin with non-UGent members, whereby the order is set by the distance of their host institution to UGent; (ii) we end with UGent members, whereby the order is set by the functional distance (members from other Faculties, then members from the same Faculty but another Department, members from the same Department but another research group etc.).
- To emphasize the importance of a doctorate, jury members are dressed in toga. The promotor checks with the different jury members if they have a toga, and makes the necessary arrangements to provide one if necessary. There is no formal dress code for the PhD candidate, but is expected that his/her attire appropriately reflects the significance of obtaining the highest academic qualification.
- After the proclamation, the promotor presents a laudation.

5) Miscellaneous

- The financing of the costs associated with the whole PhD examination process (printing of the thesis, reception, etc.) is a matter of agreement between PhD student and the promotor. There is, however, one major exception in that travel and accommodation costs of the jury members need to be covered by the promotor.
- The guidelines set out in this document are a combination of some administrative principles set out by the university administration, some key rules in UGent's 'Onderwijs- en Examenreglement' (OER), and a consensus discussion in the Educational Board. This overview is intended as a practical outline of some of the key practical issues involved in obtaining a PhD. However, and as a consequence, this overview does by no means replace the OER in and by itself. In the case of a dispute, the OER serves as the one and only guiding principle.