

 <b>UNIVERSITEIT GENT</b>	 <b>FACULTEIT WETENSCHAPPEN</b>	 <b>geografie</b> <small>vakgroep</small> <small>Universiteit Gent</small>
<b>MASTER'S THESIS GUIDELINES</b>		<b>Master Geography – Master Geomatics &amp; Surveying</b> <b>Academic year 2017-2018</b>

## 1 IMPORTANT DATES

Monday 28/05/18	<b>DATMP1</b>	deadline (1 <sup>st</sup> exam period)
Monday 20/08/18	<b>DATMP2</b>	deadline (2 <sup>nd</sup> exam period)

## 2 GENERAL ISSUES

The Master's thesis is a very important part (a total of 30 credits: "preparation Master's thesis" (5 credits) + "Master's thesis" (25 credits)) within the Master's programme. The student must demonstrate that he or she is able to analyse a particular topic independently and systematically. The Master's thesis is a personal analysis and synthesis of collected and/or existing data. In addition, the Master's thesis may be of a purely theoretical or methodological nature.

The Master's thesis is primarily a scientific research work. The information contained within must be of precise nature, original and unambiguously communicated. In the development and writing of the Master's thesis, the methodological requirements of science also have unconditional priority over literary qualities; nevertheless correct spelling and syntax must be used in the Master's thesis. It is extremely important that the used sources are cited and listed in a correct and complete way (see below).

For any questions or comments concerning these guidelines, please contact the Secretary of the Examination Board of Master Geography – Geomatics and Surveying.

## 3 OBJECTIVES

The Master's thesis is the result of independent scientific research work and thus the student takes an active part in the scientific debate on a particular topic.

More specific objectives of the assignment include:

- To use multilingual international literature in own research critically;
- To formulate and analyse research questions independently and display the results of the research in a scientific report correctly;
- To collect and process new and existing data on the examined subject;
- To conduct, process, statistically analyse, interpret and report measurements correctly;
- To use models, concepts and research methods for complex spatial problems and to propose new research models, concepts and methods;
- To develop and test new concepts and methods in geography/geomatics/surveying;
- To apply specialized techniques so as to expand scientific knowledge and understanding;
- To handle data sources of various kinds critically (written sources, maps, images, iconographical material, databases, etc.).

Not all objectives apply at the same time for each Master's thesis.

The end result of the research is a scientific report showing that the student:

- has acquired understanding of the examined subject;
- can enrich the existing scientific research with new insights, formulations or applications on the basis of the results of his/her own investigations, theoretical or experimental research;
- has done the intellectual and scientific processing personally leading to scientifically based results.

## **4 REGULATIONS**

### **4.1 Choice of promoter, subject and title**

This choice was already made in the "Preparation of Master's thesis" (5 credits).

### **4.2 Change of promoter or subject**

Change of promoter, subject and title is not possible unless in very exceptional cases. It is the President or the Secretary of the Board of examiners who takes the final decision.

### **4.3 Submission**

For dates of submission, see <http://geoweb.ugent.be/studenten> . Time of submission is 17h.

Under 'submission' we understand: the student personally, or through hand delivery by his/her plenipotentiary, submits to the Secretary of the Board of examiners or his authorized representative, the

required number of hard copies at the Secretariat of the Department of Geography (one for archiving at the Department, one for archiving at the Central Library, one for the promoter, in case of co-promoters one for each co-promoter and one for each of the two remaining members of the reading committee). Note that all the submitted copies should contain all attachments (the hard copies hence also need to contain the digital attachments). The paper copies are delivered by the student according to the principles of sustainability: printed on both sides, possible on recycled paper. The student will receive a certificate of submission with indication of the exact time of submission. Master's theses that are submitted after the deadline will not be accepted.

In parallel, a digital version of the Master's thesis should be submitted (via Minerva). The digital version consists of a single PDF file. Text and attachments should be combined in a single document. Detailed information on how this must be done can be found at the following link: <http://icto.ugent.be/nl/handleiding/studenten/masterproef>.

The Master's thesis should be complete and bound and in accordance with the guidelines for "Structure and contents" and "Format and citations" (see below). Master's theses which do not conform will be rejected, as well as Master's theses submitted after the deadline. It is up to the student (in consultation with the supervisor) to make sure that the "Structure and contents" and "Format and citation" are correct. Cases of force majeure are individually assessed by the Examination Board.

Unlike the Bachelor thesis, the Master's thesis is to be defended orally (see below).

In case of a second submission of the Master's thesis, an additional digital file including track changes has to be submitted.

#### 4.4 Plagiarism

The digital version of the Master's thesis will be checked by means of plagiarism-detection software (see <http://icto.ugent.be/en/handleiding/lesgevers/plagiaatdetectie>)

Within the programme of Geography – Geomatics and Surveying, plagiarism is considered as a very serious infringement and punished as set out in article 79 of the education and examination regulations.

Plagiarism refers to retaking parts, thoughts and lines of reasoning of others and passing this off as one's own work. This includes, but is not limited to:

- verbatim quotations, even with correct and complete citation, that are not enclosed in quotation marks;
- paraphrasing, (fully or partly retrieved or edited) tables, figures, maps without attribution.

The amendment of a few words or phrases in a retrieved text does not imply that there is no plagiarism. A translation without referencing is also plagiarism. Citations should be mentioned immediately after the concerned concept or sentence.

## 5 STRUCTURE AND CONTENTS

The structure and contents of the Master's thesis must comply with specific guidelines. This comprises a title, a preface, a table of contents, the actual text, a list of references and appendices (if any). Note that there is no abstract required.

Note that, since AY1718, the Master's thesis has to contain a Dutch and English scientific summary, as well as a more popularized text (about 10 lines) which can be used as communication to the broader public.

### 5.1 Title

The choice of title is not insignificant:

- A title is a label, not a full sentence.
- Avoid subtitles if not necessary.
- Formulate the title specifically, not in general terms. A title like "Report exercise GPS" is too general.
- Looking at the title, the reader should be able to understand the subject of the thesis immediately.
- Avoid unnecessary words such as "Study of" or "Research on". Also abbreviations, formulas, jargon or brand names should be avoided.

The best title is a title capturing the contents of the work with as few words as possible and in an appropriate manner (exact and complete).

### 5.2 Preface

The preface consists of acknowledgements to individuals and institutions that were instrumental in the preparation of the Master's thesis. It can also cover other themes, such as the personal circumstances or experiences which led to the writing of the Master thesis or the framework within which the Master's thesis was written.

### 5.3 Table of contents

The table of contents shows the logical structure of the Master thesis. This may, in addition to the chapter titles, sections and further subdivisions, also include lists of abbreviations, tables, figures and/or maps; tables must comprise corresponding page numbers.

## 5.4 Thesis text

### 5.4.1 Introduction

The aim of the introduction is to give the reader a preliminary understanding of the problem and the performed work, and to invite further reading. Typically, an introduction includes: general positioning within the scientific literature, an indication of the scientific (and, if applicable, also economic and/or societal) relevance, and the more concrete research question or hypotheses. At the end of the introduction, a short description of the structure of the entire argument is provided, emphasizing the logic of the consecutive steps leading towards the conclusion.

### 5.4.2 Data, methods and study area

In this section, you describe the data acquisition and processing in detail, as well as the materials, methods, techniques and parameters that were used to conduct the research. All information necessary to ensure that somebody else could repeat the research should be specified: it is important that you provide the necessary information to ensure the reproducibility of your research. If some materials, methods or techniques are similar to those used by other authors, it is sufficient to present a brief explanation + reference to the work of these authors. In such circumstances, you should keep in mind to refer to the used sources correctly and you should evaluate them critically.

As a trained geo-scientist, you should take great care when defining, describing and situating your study area. A Master's thesis is the culmination of a Master's programme, and this implies the skilful application of all study programme-related competencies you should have acquired: it is for a geographer, geomatician, or surveyor unacceptable (also during the public defense to make use of maps that do not conform to the state-of-the-art, while statements such as 'Haiti is located at the left-hand side of the Dominican Republic' are insupportable).

### 5.4.3 Results

The results constitute the core of your thesis. This part does not only contain the overview of results in the strict sense, but also how these aid in answering your research question(s). This implies that line of reasoning leading to the interpretation of your results in the context of the research questions should be clear. The use of figures, tables and maps is encouraged, but keep in mind that these should support the line of reasoning: it is not up to the reader to figure out what can be seen and how this fits into your narrative, and therefore explain in the body of the text what the main insights are that can be taken away from figures, tables, and maps. In addition, ensure that figures, tables, and maps need to be self-standing in the sense that there is a clear title, a key, etc. that allows 'reading' it without needing to go back to the text.

#### 5.4.4 Discussion

The discussion positions your findings in the context of previous research; what are the similarities and/or the differences between your findings and those presented in related and/or parallel research? The discussion presents the principles, (actual) relations and possible generalization that may arise from the results. Here, the theoretical impact and the possible practical applications are discussed in more detail. In the discussion, it is permitted to take a personal but reasoned standpoint on the examined problem fits perfectly. In addition, ensure that you critically evaluate the meaning and implications of your work. For example: does your method or approach imply that there are shortcomings when you substantiate your ideas or hypotheses? Point out exceptions, lack of (expected) relationships and unresolved aspects. In other words, do not try to cover up results that do not fit in your argument but self-critically discuss these.

#### 5.4.5 Conclusions

The conclusions contain the set of inferences on the basis of the data presented in the corpus (findings and discussion). It must be adapted to fit the problem statement set out in the introduction. It should be possible to read the conclusions as a stand-alone text. Conclusions are typically to the point (short and clear) and do not mention new issues (unless pointing to further research based on the performed work). Usually, conclusions do not contain references.

### 5.5 Reference list

With the exception of internet sources, interviews, maps, software programs, etc. the reference list includes one alphabetically ordered list of the consulted works to which reference was made in the text. This list contains among others books, manuals, book chapters, journal articles and (research) reports. The consulted websites (and possibly interviews or used software) are listed separately. There are very specific rules concerning the preparation of a correct reference list. Various systems exist (Harvard, Oxford, Cambridge, etc.). In the Geography – Geomatics and Surveying programmes, it has been decided to prepare references in accordance with the APA system ([http://library.flcc.edu/APA\\_FLCC.pdf](http://library.flcc.edu/APA_FLCC.pdf)).

Some golden suggestions when preparing references:

- Follow the reference style strictly;
- Cross-check again and again even if you are using bibliographic software;
- Be consistent!

## 5.6 Annexes

The annexes may comprise additional figures, tables or documents that enhance the explanation but are not essential to grasp the argument. Each attachment must be referred to in the text.

The following material can be included in the annexes:

- information of illustrative (e.g. certain maps) and secondary nature, which does not support the line of argument directly;
- detailed explanations which, when included, would disturb the fluency of the ideas;
- data, questionnaires, interviews, reports from field work (e.g. augering profiles), ... which are a necessary addition to the text to enable the research to be checked for its value and veracity and/or possibly replicate it.

The annexes can be provided in various formats: printed text, DVD, cd rom, website, printed plans or maps, (ortho)photographs, ... All submitted hard copies must contain all attachments.

## 6 FORMAT

### 6.1 Length and format

The Master's thesis should be a sound scientific report, which possibly may give rise to a scientific article. The length of this report can vary but as a general rule, we expect a thesis of around 20 000 words (or about 60 pages) (plus additional attachments). The student is strongly encouraged to limit himself/herself to the most essential figures, tables and maps, as well as to articulate the findings in a scientifically sound and clear way. Please note that quality takes precedence over quantity.

### 6.2 Title page

The title page should contain at least:

- Ghent University, Faculty of Sciences, Geography/ Geomatics and Surveying Programme;
- Academic year;
- Title and possible subtitle;
- First and second name of the student;
- Mention "Master's thesis submitted to obtain the degree of Master in Geography / in Geomatics and Surveying";
- Name of the promoter, Department to which the promoter belongs;
- (If applicable, name of the co-promoter and/or tutor, Department to which the co-promoter and/or tutor belongs).

A standard title page can be found by logging at [geoweb.ugent.be/studenten](http://geoweb.ugent.be/studenten). Alterations are not allowed.

## 7 EVALUATION CRITERIA

The evaluation of the Master's thesis takes place in two consecutive steps.

In a first step, the promoter, possible co-promoter, and evaluators independently prepare a written report on the submitted thesis. The promoter and possible co-promoter(s) prepare a single joint report. In this written report, the Master's thesis is evaluated in terms of its format, contents and referencing; other comments of various kinds can also be made. This report is summarized by a proposal for a quotation mark.

In a second step, the Master's thesis is orally presented to the Board of Examiners during a public defence. The oral defence includes a presentation of up to 15 minutes, followed by questions. In the presentation, the objectives and the conclusions of the Master's thesis should be presented. The remaining time can be used for the presentation of one or more aspects of the corpus of the Master's thesis. Note that the allowed time of 15 minutes will be strictly observed. For the oral defence, a beamer for PowerPoint or PDF presentations will be provided. The student may also use an overhead or slide projector if requested well ahead of time. Taking into account the limited time allocated for the presentation, it is recommended to test the equipment in advance of your presentation – this can be done upon appointment with the technical staff. Make sure to be ready 15 minutes before the scheduled hour of your defense, and to get ready for your presentation while the Examination Board is convening to discuss the defence of the previous student.

After the defense, the members of the Board of examiners have an internal discussion and attribute a common global score, on the basis of the written reports and the quality of the oral presentation and defence. The total duration per student is limited to a maximum of 45 minutes.