
Directives for the Master Thesis

1. General considerations

1.1. Scope

The Master thesis is an individual paper that demonstrates the student's ability to use a suitable methodological toolkit to **analyse** and **deepen** a topic related to the clinic, to biomedicine, to computational science and/or to human sciences.

1.2. Delivery

1. The Master thesis must be delivered by the end of May of the sixth semester of the Master, as a mandatory requirement to be able to register for the federal exams.
2. Students may submit their Master's thesis not before having obtained at least 60 credits in the Master of Medicine.
3. The Master thesis must be written in Italian, German, French or English, with the prior agreement of the thesis director.

1.3. Director and co-Director

1. In carrying out the data collection and the drafting of the thesis, the student will be guided by the Director, a freelance Lecturer, a Professor of the Faculty or a Group Leader of an Institute that collaborates with the Faculty or of another university in Switzerland.
2. In this function, the Director may be assisted by a co-Director appointed by him. The co-Director must be competent on the subject and active at the Faculty, at an Institute or body that collaborates with the Faculty or at another university, including universities abroad.
3. The Director and co-Director may be supported by an external expert with a university education.
4. The Director of the Master thesis is responsible for evaluating the need to obtain the authorisation of the Swiss ethical authorities (see <https://submissions.swissethics.ch/en/>).
5. The Director of a Master thesis can follow a maximum of 6 thesis, 2 per academic year.

1.4. List of possible topics

1. To facilitate the student's choice, the Faculty disposes of a list of topics in the fields related to the clinic, to biomedicine, to computational science and to human sciences.
2. The choice of topics takes into account the educational potential, the relevance and the feasibility within the time limits provided for a Master thesis.
3. The student, in agreement with the thesis Director, may propose a topic not included in the list, as long as it is consistent with the general criteria.
4. The Master thesis can then be extended into a research project that is the subject of a thesis to obtain the title of Dr. med.

1.5. Choice of topic

1. The topic of the Master thesis is chosen in agreement with the thesis Director, in one of his areas of specialisation.
2. The choice of the topic and the Director must be made by the end of the seventh semester (end of the first semester of the Master). The Dean's Office has the right to extend the deposit deadline of the title of the thesis in specific and justified cases.
3. With the agreement of the thesis Director, the student can replace the Master thesis with his own published article (already published or accepted for publication), in which he is first, second or last author.
4. If the student actively participated to a publication in which he is co-author but not first, second or last author, the student may submit this publication (already published or accepted for publication) together with a short paper (1000 words) presenting the results obtained. Such a paper should be structured as a thesis (introduction, methods, etc.). It should be accompanied by a letter written by the thesis Director, which describes the role of the student in the collaborative work and in the writing of the publication.

1.6. Temporal commitment of the thesis

1. The Master thesis counts for 15 ECTS (1 ECTS/25-30 hours) = 375-450 hours of work. The hours of work that the student needs for writing the Master thesis equal about 10 weeks working 40 hours/week, or 3 years working either 11 hours/month or 3 hours/week.
2. During the last semester (sixth semester of the Master) the study plan foresees 4 weeks time for the completion of the thesis.
3. In exceptional cases, the Director of the Master thesis may agree to entrust a topic to two students. Contributions must be clearly distinguishable, and written work and work performance must be assessable separately.

1.7. Resources

1. For the coordination of the activities, the student can refer to the Dean's Office of the Faculty.
2. The student, the Director and co-Director may refer to the scientific methodology skills consistent with the chosen topic, present in the Faculty, in other USI faculties and in the institutes that collaborate with USI.

1.8. Evaluation

1. The Master thesis is accepted by the thesis Director (possibly supported by the co-Director and the external expert). A defense of the Master thesis is not foreseen.
2. The evaluation will be expressed without a grade, but with the indication "accepted" or "not accepted".
3. The student must submit the evaluation of the Master thesis to the Dean's Office using the appropriate form signed by the Director (and, if applicable, by the co-Director) and by the student himself (Annex 4).
4. The candidate whose thesis is not accepted may be authorised to present a new Master thesis, choosing a different topic.

2. Form and content of the master thesis

2.1. Form

The Faculty recommends between 3'000 and 12'000 words (abstracts, index, bibliography and appendices are excluded from the word count).

2.2. Structure of the thesis

The Master thesis includes the following mandatory sections: abstract, introduction, materials and methods, results, discussion or conclusion and recommendations. Other elements may be added to this structure in agreement with the Director.

2.3. Style sheet

Rigorous attention must be paid to the style of presentation, the bibliography and the bibliographical references. A style sheet is attached to this document (Annex 2).

3. Notification and delivery methods

3.1. Master thesis agreement

1. A convention is drawn up between the student and the Director of the master thesis, which defines the topic, the extent of the expected in-depth study, the deadlines for the various stages and the language (Annex 2).
2. Other formats of the Master thesis agreement are also accepted. They must contain all the relevant information (student's name, thesis Director and possibly co-Director, topic, scope of the study, deadlines and language).
3. A scan of the signed Master thesis agreement has to be sent to the Faculty.

3.2. Deposit of the thesis

1. The final version of the thesis in PDF format must be delivered to the Dean's office by the end of May of the sixth semester of the Master in Medicine, together with the "Declaration against plagiarism" (Annex 3) and the evaluation form referred to in point 1.8.3 (Annex 4).
2. The Dean shall deposit a copy of the thesis in USI's library.
3. In case that the thesis contains confidential information, the student is invited to indicate this by attaching a letter in which he asks that the deposited copy cannot be consulted.

4. Unlawful acts

1. The student who delivers a Master thesis that has not been developed and written by himself, in which the student passes off as his own the results of third-parties or uses sources which are not permitted, commits plagiarism. Each part of the text taken from another source must be followed by the precise quotation of that source, in accordance with the procedures set out in the style sheet.
2. The Dean's Office submits the Master thesis to the electronic tool for the prevention of plagiarism.
3. Plagiarism makes the sanctions provided by the Faculty's Study Regulations applicable.

5. Evaluation and quality

1. Each year the Faculty carries out a general evaluation of the quality of the Master thesis based on the various parameters of relevance, educational potential and feasibility.
2. If necessary, it shall propose amendments to these directives or to the organisational structure.

6. Effective date

This directive was approved by the Council of Professors on 09.09.2019 and comes into force immediately. The last emendments were approved by the Council of Professors on 08.03.2021.

Lugano, 09.09.2019

Annex 1: Style sheet

Annex 2: Master thesis agreement

Annex 3: Anti-Plagiarism declaration

Annex 4: Evaluation of the Master thesis

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Style sheet

For the writing of the Master thesis

The following notes are intended as a brief, non-exhaustive guide to the preparation or compilation of the bibliography and bibliographical references in the text. The style of presentation of a bibliography varies from one publishing house to another, from one scientific journal to another. The proposed style is the result of a synthesis of some of the best known practices, and has the merit, we believe, of simplicity. Whether this style is adopted or modified, the principle of coherence remains valid: any mix of practices within a bibliographic list must be avoided.

1. General settings

1. The choice of font is left to the author, as far as it is reasonable. The most commonly used characters are: Times New Roman, Garamond, Helvetica, Bookman Old Style and Arial.
2. Recommended font size: 11 pt. Line spacing: 1.5, 2 cm margins (above, below, left and right).
3. Each new chapter starts on a new page.
4. The basic sections of the text are the following:
 - The abstract, with a length of about one or two pages, summarises the content of the Master thesis.
 - The index lists the elements that make up the thesis: parts, chapters and sections, numbered consecutively.
 - In the preliminary part, the following can be inserted: a dedication, thanks, a premise and a list of abbreviations or acronyms used in the text.
 - Graphs, tables and images each bear an individual title and an indication of the source, and must be numbered consecutively (and presented at the end of the work).
 - The introduction usually consists of the objectives of the thesis, the description of the topic addressed, the methodology used and the plan of the thesis.
 - The final chapter generally includes the results of the research, the personal re-evaluation of the applied methodology and the author's suggestions for possible developments in future research.
5. The order of the various parts making up the Master thesis is as follows:
 - Frontispiece
 - Abstract
 - Index
 - Dedication (eventual)
 - Thanks (eventual)
 - List of abbreviations (eventual)
 - List of Charts and Tables
 - Foreword (eventual)
 - Introduction

- Chapter 1
- Chapter 2, etc.
- Conclusions
- Bibliographic references

2. References

1. Any quotation or reference to an author or work within the text must be indicated immediately, in the text itself, with a number in brackets.

3. Bibliographic sources

1. For each book, article, report, author cited, it is necessary to provide the precise and complete source in the Bibliography.
2. Quote only scientific journals and not books (excluding also UpToDate).
3. All authors of the article must be quoted.
4. The title of the journal should be shortened in line with international recommendations.
5. The title of the article must be in the original language (and not translated into English; see nr. 7. example c).
6. The number of references should be no less than 20 and no more than 50 (except for systematic reviews).
7. Example of quotes:
 - a. You CH, Lee KY, Chey RY, Menguy R, Rossi A, Bianchi AGL. Electrogastrographic study of patients with unexplained nausea, bloating and vomiting. *Gastroenterology* 1980 ; 79:311-4.
 - b. Jacquemont S, Reymond A, Zufferey F, Harewood L, Walters RG, Kutalik Z, Martinet D, Shen Y, Valsesia A, Beckmann ND, Thorleifsson G, Belfiore M, Bouquillon S, Campion D, de Leeuw N, de Vries BB, Esko T, Fernandez BA, Fernández-Aranda F, Fernández-Real JM, Gratacòs M, Guilmatre A, Hoyer J, Jarvelin MR, Kooy RF, Kurg A, Le Caignec C, Männik K, Platt OS, Sanlaville D, Van Haelst MM, Villatoro Gomez S, Walha F, Wu BL, Yu Y, Aboura A, Addor MC, Alembik Y, Antonarakis SE, Arveiler B, Barth M, Bednarek N, Béna F, Bergmann S, Beri M, Bernardini L, Blaumeiser B, Bonneau D, Bottani A, Boute O, Brunner HG, Cailley D, Callier P, Chiesa J, Chrast J, Coin L, Coutton C, Cuisset JM, Cuvellier JC, David A, de Freminville B, Delobel B, Delrue MA, Demeer B, Descamps D, Didelot G, Dieterich K, Disciglio V, Doco-Fenzy M, Drunat S, Duban-Bedu B, Dubourg C, El-Sayed Moustafa JS, Elliott P, Faas BH, Faivre L, Faudet A, Fellmann F, Ferrarini A, Fisher R, Flori E, Forer L, Gaillard D, Gerard M, Gieger C, Gimelli S, Gimelli G, Grabe HJ, Guichet A, Guillin O, Hartikainen AL, Heron D, Hippolyte L, Holder M, Homuth G, Isidor B, Jaillard S, Jaros Z, Jiménez-Murcia S, Helas GJ, Jonveaux P, Mirror extreme BMI phenotypes associated with gene dosage at the chromosome 16p11.2 locus. *Nature*. 2011;478:97-102.
 - c. Massone L, Borghi S, Pestarino A, Piccini R, Gambini C. Localisations palmaires purpuriques de la dermatite herpétiforme. *Ann Dermatol Venereol* 1987;114:1545-1547.

Annex 2

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Master thesis agreement

Agreement with the Director of the Master thesis for the Master of Medicine

Candidate

Name and surname

Date of birth

Place of birth and nationality

Private address

Email

Phone number

AHV number

Enrollment number

Thesis Director

Name and surname

University

Institute

Co-Director (if applicable)

Name and surname

University

Institute

Title of the Master thesis

**Brief description of the thesis
(100-150 words)**

Estimated duration

Planning steps

- 1.
 - 2.
 - 3.
 - 4.
 - 5.
 - 6.
 - 7.
 - 8.
 - 9.
 - 10.
-

Place and date of submission

Student's signature

Director

Co-Director

Annex 3

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Anti-Plagiarism Statement

I declare on my honour that what has been written in this work has been written by me and that, with the exception of quotations, no part has been copied from scientific publications, the Internet or from research works already presented in the academic field by me or by other students.

In the case of parts taken from scientific publications, from the Internet or from other documents, I have expressly and directly indicated the source at the end of the quotation or at the foot of the page.

I also declare that I have taken note of the sanctions provided for in case of plagiarism by the current Study Regulations.

Candidate

Name and surname

Date of birth

Enrollment number

Date and place

Student's signature

Annex 4

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Master thesis evaluation

Evaluation and discussion with the Director and co-Director of the Master thesis for the Master of Medicine

Candidate

Name and surname

Date of birth

Enrollment number

Thesis Director

Name and surname

University

Institute

Co-Director (if applicable)

Name and surname

University

Institute

Decision

Accepted

Not accepted

Comments

Date and place

Student's signature

Director

Co-Director