

Master Final Thesis

**Administrative procedures, practical suggestions
And evaluation scheme**

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I. Steps and procedures

STEP ONE – Choice of the thesis topic

ATTENTION

The procedure differs according to the program you are registered in

Students registered in the 1st year of the professional Master - ECON 21 MS/G

- **ON - Line consultation of the thesis topics**

In November the professors of all ESL master programmes propose a list of topics for the final thesis.

This list is available on the website of the ESL. Once available, the students consult the topics and get in touch with the concerned professor and in order to receive more information on the suggested topics. If in the list is not present any stimulating topic, the student can freely propose a personal topic to a professor that works in the related field. If the professor accepts to supervise the thesis, the student can add this personal topic to his selection (see next point).

For practical instructions, please visit the ESL internet site: <http://www.uclouvain.be/78074.html>

- **Selection of 3 thesis topics**

Each student after the consultation of the list and after having met the professor chooses through the online procedure the three topics that are closer to his/her preferences, listing them in order of preference. Please meet the professor **before** starting with the online procedure.

Students registered in the 2nd year of the Research Master – Econ 22 MA, in the 2nd year of the Professional Master (in one year) – ECON 22MS/G (PAR) and students of Master 60 in Economics – Econ 2 M1

- **Choice of a topic and of thesis supervisor**

At the start of the new academic year, students get in touch with the teachers with who they want to work to define a thesis topic of their interest. Once the topic defined, the student fill in the form "Requête mémoire" (available at the secretariat of the ESL or on the ESL website) and has it signed by his potential director.

If in mid-November, you still haven't found your thesis topic, a list of suggested topics will be available at the secretariat.

For practical instructions, please visit the ESL internet site: <http://www.uclouvain.be/78074.html>

STEP TWO – Approval of the topic and modalities of supervision

The Attribution Committee is responsible for choosing the attributions of the topic and of the Supervisor for the thesis. The Topic attribution committee publishes the list of the attributions of the thesis topics and the name of the supervisor.

The thesis jury is composed by two professors giving courses in at least one ESL programs:

- a supervisor
- a reader

The readers are nominated by the thesis attribution committee.

ATTENTION: Every change of topic or of supervisor must be communicated to the secretary in the shortest possible delay. In case of supervisor change the student must firstly present a new paper request signed by the new supervisor and secondly he/she must notify the former supervisor.

STEP THREE – Thesis writing standards

The fundamental aspects of the thesis standards are detailed in chapters IV and V.

STEP FOUR – Authorization to print and registration of the Thesis

The students are warmly suggested to ask to their supervisors the "authorization to print their thesis" before the submission, however this is not compulsory. Once obtained it represents a warranty for the student that his thesis grade will be at least equal to ten.

The thesis must be printed in at least **four** copies and must be handed out **the day in which the exam session starts** (we intend the exam session in which the student is going to defend his thesis). The copies must be handed as follows:

- **one** copy for the Supervisor and **one** for the Reader (the student must personally give the copies to them)
- **two** copies for the library, which have to be handed at the secretary. These copies must contain a page with 5 keywords (after the cover page but before the index).
- An electronic copy must be sent to solange.dujardin@uclouvain.be

The opening date of the exam session and the schedule for the thesis defense will be posted on the "valves" of the secretary. Please keep informed!

STEP FIVE – Public defense

The public defense of the thesis will take place during the exam session; the schedule is decided by the secretary. The defense is chaired by the Supervisor, with the presence of the Reader and of any interested person. The Supervisor has the power to change the date, paying attention to inform all the concerned persons.

The defense consists in:

- a short oral presentation with PowerPoint slides in which the student illustrates the work, the methodology and the conclusions (more or less ten minutes)
- questions of the Reader and possibly by the supervisor, followed by the answers of the student (more or less 20 min).

The mark for the thesis is jointly decided by the Supervisor and the Reader.

II. Schedule

Please consult the agenda of your master program available :

- In your start day file
- On the ESL website
- At the secretariat of the students

III. Regulations

The ESL regulation concerning the studies and the exams is available at the following page:
<http://www.uclouvain.be/144723.html>

PLEASE READ IT CAREFULLY, in particular:

- Art 4. Thesis, final work or personal project
- Art 11. Cheating

We highlight the fact that the students in the second year of the master that do not present their thesis before the ending of the academic year in which they took the exams, will be remanded to September of the following year. They have to apply as “doubblers” to the following academic year paying the complete fee.

Until the opening of the session the student, in case of objectives reasons, can ask for a modification or cancellation of the inscription. This demand must include the reasons why it has not been submitted before the usual deadline.

IV. Evaluation

IV.1. Master 120 “à finalité spécialisée” – ECON 22 MS /G

A master thesis is intended as an original work of research, in which the student shows his economic reasoning and comprehension and applies them in a particular topic of interest. The work must contain a scientific approach and the goal is to provide a rigorous analysis of an economic problem. This must avoid repetitions and clichés and instead it has to focus on the robustness of the argumentation, the presentation of different points of view, the justification of the argumentation proposed, etc.

The work should contain:

- The motivation: why is the topic important? Which results do we expect?
- The literature survey on the related topic, it must be the most exhaustive possible and it should show the capacity to understand the different contributions to the literature. The arguments of the literature must be presented in a structured and interesting way. The student is expected to provide a critical perspective able to highlight strengths and weaknesses of the literature.
- A theoretical and/or empirical analysis of the problem : we mean the exposition of the theoretical basis and methods used the justification of the modelisation choices, of the analysis methods.

- The presentation of the results with regards to the research question: the student is expected to develop an adequate interpretation of his results and in case of failures the reasons and the possible solutions.

The maximum length of the document is fixed **up to 70 pages**.

A thesis can get:

- a mark of **12/20** when there are not major errors in the analysis, in the methods and interpretation of the results. The exposition is clear and precise.
- a mark of **14/20** when the student shows a good expertise of the methods used, a good comprehension of the problem and a good independence and autonomy in the realization.
- A mark of **16/20** if the literature review is complete, the application of the methods is perfect and the work shows an overall excellent expertise.
- If the thesis contains also a new approach, an original contribution, or the application of sophisticated methods (not already presented in class), the mark can arrive up to **18/20**. Marks above **17,5** must allow the student to write an original scientific contribution, even if the scope can be limited.

The quality of the oral presentation represents part of the evaluation and of the mark.

In case of serious mistakes, negligence in the written documentation or substantial lacks of comprehension of the problem or in the application of methods, the thesis gets a mark below 10. The jury is responsible for fixing the mark, taking into account the scope of the mistakes. Cheating as defined in the article 4 of the regulation of studies and exams is considered a fraud and will be prosecuted following article 11 of the same regulation (practically a mark of 0/20).

IV.2. Master 120 "à finalité approfondie" – Research Master – ECON 22 MA

A MA thesis is intended as a research paper, written in the format of a scientific paper, proving prove that the student has succeeded in fully understanding some consistent set of scientific contributions that she/he has not been taught during the courses. In addition, the thesis may itself represent a contribution to the literature.

The writing of the thesis needs to be precise and concise. A length of **around 20 pages** is a statistical norm.

- The thesis should contain all major ingredients of a research paper. The motivation should be clear. Why is it important to study that topic? What can be expected from such a study?
- The results should be clear and stated at the beginning of the paper (the reader is only able to evaluate a paper if she knows in advance what the author would like to prove): which lessons should be drawn from the inquiry?
- The survey of the literature should be complete and critical. Forgetting to mention (and, sometimes, to identify) an important paper is a major shortcoming of a thesis. The survey should be critical, which means that it should not be restricted to a list of presentations of papers. What are the main achievements and the drawbacks of the papers? Why are some papers more important than others? Why did the researchers focus on this question rather than that question? etc.
- When necessary, the thesis will contain a theoretical part and/or empirical estimations. In the first case, the student needs to prove that she/he has fully understood the model, is able to defend the assumptions and definition, as well as be able to prove lemmas and theorems, etc. All formalities should be written in a rigorous way. In the second case, the student needs to provide a critical assessment and a description of the

data she/he uses, should clearly state and justify her/his estimation methods, report and interpret tests of the model specification, and assess the economic significance of the results. When computer programming of estimation methods and tests has been performed, the computer program and algorithms must be explained and its code provided as an annex.

About grades, the grade of **12/20** can only be obtained if there is no gap in the literature review, no misunderstanding of the reviewed material and if the writing is clear. The grade of **14/20** is the typical grade if the student shows that she/he has a sound understanding of the problem she/he studies and if the thesis is written according to the standards of a research paper. If the thesis does not contain any new result, but offers a high level survey that brings new insights on the literature, the grade can go up to **16/20**. If, in addition, the thesis contains some new results, even if these results are clearly not sufficient for the paper to be a PhD chapter, the grade can go up to **18/20**. The jury will also adjust the grade by taking account of the difficulty of the reviewed literature, the amount of time that was needed to compose the bibliography, etc.

IV.3. Master 60 – Final work – ECON 2M1

The final thesis of the Master 60 is conceived as an original research analysis in which the student shows his economic reasoning, comprehension skills and his ability to apply them to a particular topic. The analysis must avoid repetitions and clichés and instead it has to focus on the robustness of the argumentation, the presentation of different points of view, the justification of the argumentation proposed, etc.

The work has to start with the description of the motivations: why is the topic important? What do we expect from this analysis?

Then the work should continue with the literature review or a theoretical and/or empirical analysis of the topic in question.

La démarche se poursuit soit par une revue de la littérature, soit par une analyse théorique et/ou empirique du problème étudié.

- the literature review on the related topic must be the most exhaustive possible and it should show the capacity to understand the different contributions to the literature. The arguments of the literature must be presented in a structured and interesting way. The student is expected to provide a critical perspective able to highlight strengths and weaknesses of the literature.
- a theoretical or empirical analysis of the problem studied: we mean the exposition of the theoretical basis and methods used, the justification of the modelisation choices, of the analysis methods.

The work ends with the presentation of the results and the conclusions with regards to the research question: the student is asked to interpret the results obtained and to provide justifications and possible solutions to eventual problems.

The length is fixed **up to 40 pages.**

A final thesis can get:

- a mark of **12/20** if it is free from major errors in the analysis, in the methods and interpretation of the results and the exposition is clear and precise;
- a mark of **14/20** if the student expresses a good expertise of the concepts and methods used, a good comprehension of the economic problem and shows a certain degree of independence during the realization.

- a mark of **16/20** if the expertise described above is perfect, the literature survey is complete and sophisticated methods are used.
- A mark of **18/20** if in addition to the previous requirements the student develop an original theoretical approach and/or he/she is able to use sophisticated methods not seen in class. A mark above **17.5** can be obtained if the original elements of the thesis can provide a scientific contribution even if limited in scope.

The quality of the oral presentation represents part of the evaluation and of the mark.

In case of serious mistakes, negligence in the written documentation or substantial lacks of comprehension of the problem or in the application of methods, the thesis gets a mark below 10. The jury is responsible for fixing the mark taking into account the scope of the mistakes. Cheating as defined in the article 4 of the regulation of studies and exams is considered a fraud and will be prosecuted following article 11 of the same regulation.

V. Organization and layout

a) V.1. Organization of the work

The thesis redaction is the most important activity of the final year and represents the output of the research work performed during more than one year. The physical realization of the text represents a considerable effort that is sometimes underestimated by students.

In fact a first version of the thesis must be provided to the Supervisor in a reasonable time, he decides the corrections, modification and eventual complementary researches that must be performed. Moreover it must be taken into account also the time needed to set the correct layout of the final version, the reproduction and the assembly.

It is no possible to schedule these steps, the student is asked to personally determine its own, taking into account his/her characteristics, of the research and of the Supervisor.

We remind you that the day in which the exam session starts:

- a copy of the final version of the thesis must be given to the Supervisor and to the Reader
- two copies must be handed out at the secretary
- an electronic copy must be sent to: solange.dujardin@uclouvain.be .

V.2. Layout

A good research work may be seriously undermined by defaults in the layout. The general rules are that the layout must be clear and easy to read and that the presentation must be the less convoluted possible.

Concerning the structure we do not have a predetermined configuration, however we expect to find a succession similar to:

1. cover page
2. acknowledgments
3. table of contents
4. introduction
5. body, chapters from 1 to N
6. conclusions
7. bibliography
8. annexes

In particular:

a. Cover page:

- It must be in carton paper and of the same format of the thesis body (standard A4 format: 215x275mm). The layout must be equivalent to that provided in the annex.

b. Acknowledgments

The student in this part acknowledges the persons that helped him in the realization of his work, in particular the Supervisor and the Reader. In case of CEO, directors of private companies or functionaries of public organisms that asked for anonymity a global and general acknowledgment is suitable (in case only the name of the company is cited). Otherwise the citation of the name is recommended.

The importance of the acknowledgments must not be underestimated. In fact they represent the first contact with the reader before the introduction and so they are able to impress him/her. Simplicity and sobriety must be used rigorously in this part.

c. Table of contents and numbering

The function of the table of contents is that of presenting the plan of the whole thesis. Placed at the beginning it permits to the reader the understanding of the work structure. The introduction will explain successively its most salient points.

The table of contents must be simple and easy to read, so that it will be easy for the reader to understand the structure of the work.

The use of the decimal scale for numbering the chapters (chapter one, paragraph 1.1, section 1.1.1) can facilitate the reader in jumping from one paragraph to the other without using the number of the page.

We highlight two facts:

1. do not exceed three digits, a paragraph number like 3.1.2.4.5 is simply impossible to read, understand and remember. Adapt the structure consequently
2. in order to facilitate the cross-reference is better to adopt a continuous numeration system of the chapters, even if the work is divided in only two or more parts.

Examples :

First part: XXX

- Ch. 1
- Ch. 2
- Ch. 3
- Ch. 4

Second part: XXX

- Ch. 5
- Ch. 6
- Ch. 7

The suggestion for the page number is also to number them continuously, the alternative of put numbers referred to the chapters (1.1, 1.2, ... 1.25) is more convenient for texts that must be refreshed frequently.

d. Introduction

The introduction should not be too long: three pages are more than enough. This must contain:

- the definition of the topic and of the research question;
- the contextualization and justification of the question;
- the specification of the methods, sources and instruments used;
- the presentation of the work structure (a comment of the main points of the table of contents)

- a precise, clear and short summary of the results obtained.

Due to its nature the introduction must be written only once that the structure and the content of the work are ultimate.

e. **Body (chapters from 1 to N)**

Please avoid an excessive fragmentation of the body, because it can confuse the reader. The usual succession is given by:

Parts

Chapters

Paragraphs (sections eventually)

The body usually contains also:

- tables;
- figures (graphs, diagrams, etc.);
- algebraic expressions.

In order to facilitate the cross-reference it is preferable to define tables and figures with respect to the chapter. For instance the first chapter would include tables 1.1, 1.2 ... 1.9... etc. figures 1.1, 1.2 ... 1.9... etc. and fonctions or expressions 1.1 ... 1.15 etc.

Please maintain uniformity in presenting tables and figures.

1) Tables

Please point out at the top of the columns or at the beginning of the rows the meaning of the data, the units of measures (m³, t, kWh, etc.)

In order to avoid problems with the decimal English point, we avoid dividing the groups of three digits with points. For instance: 1 383 735 and not 1.383.735.

At the bottom of the table please clarify the general content (the reader should be able to understand the content without reading the whole passage).

Example :

Table 8.3: three months euro-dollar exchange rate (LIBOR) from the 6th to the 27th October 1978

Date	Rate (in % per year)
06.10.78	7,50
13.10.78	7,75
20.10.78	8,00
27.10.78	8,25

2) Figures and graphs

For the graphs it is compulsory to clearly indicate what are the variables on the axis (names and units of measure). Please orient the axes using a flash. As for the tables, please state clearly on the bottom the general content.

3) Algebraic expressions

Please number the algebraic expressions, so that it will be easier to find them.

Example Expression 13 of chapter 3:

$$\mathbf{Y = C + G + I + (X - M)} \quad \mathbf{(3.13)}$$

2) Conclusions

The conclusions, as the introduction should be short. They are essentially a summary of the main point of the analysis, which highlight the original contributions of the work. Please do not

try to exaggerate, instead indicate which research paths can be followed in order to extend the borders of the research in the domain you analyzed.

a. Bibliography

Please remember that cheating is a considered a fraud, take inspiration from an author without citing him/her is an intellectual theft. If the citation is literal, even if translated, it is mandatory to place it between commas. Every citation, literal or not must be followed in the text by the correct reference.

Taking into account that the number of citations is high, it is more convenient to place them in a list, at the end of the document, just after the conclusions.

The reference must be complete and accurate (please do not hesitate to verify, if necessary, incomplete or wrong references represent important errors)

⇒for the **books** the standard is:

- name(s) of the author(s);
- date;
- title of the book (without inverted commas, in italics or underlined);
- name of the editor;
- place of edition.

All these information separated by commas.

Example

WESTON, J.F. and E.F. BRIGHAM (1978), *Managerial Finance*, 6th edit., The Dryden Press, Eastbourne (U.K.).

⇒for the **articles** we mention in this order:

- name(s) of the author(s);
- date;
- title of the article (between commas);
- the name of the review (in italics or underlined);
- the number of the volume
- the number of the beginning and ending pages of the article divided by a dash.

All these information separated by commas.

Example

DONALDSON, G. (1963), « Financial Goals: Management versus Stockholders », *Harvard Business Review*, 41, 116-129.

⇒**All the references** must be placed in **alphabetical order** using the authors' names.

The reference is made by mentioning the name of the author and the year of publication, and in case of literal citation also the page of reference.

Example

DONALDSON (1963) insists on the fact that the objectives of the management and of the shareholders do no coincide

OR

The objectives of the management and of the shareholders do no coincide DONALDSON (1963, p. 67).

Since different papers published on the same year and of the same author can be cited, we identify them by following the year with a minuscule alphabetical letter.

Example

ARROW, K.J. (1971 a), « Equality in public expenditure », *Quarterly Journal of Economics*, 85, 409-415.

ARROW, K.J. (1971 b), « Political and economic evaluation of social effects and externalities », in *Frontiers of Quantitative Economics*, M.D. Intriligator (ed.), North Holland, Amsterdam.

This system of reference for bibliography is actually generalized for all the books and papers in economics. It is more flexible and easy than other two system described below (that we recommend to do not use):

The second system consists in giving a number to each reference and to mention in the text the name of the author and number of the related paper or book.

Example

The objectives of the management and of the shareholders do no coincide, (DONALDSON, 23, p. 67).

The paper cited has therefore the number 23 in the bibliographical list.

This system presents the inconvenient that a further reference changes all or part of the numbers related to the papers.

The third system consists in placing the complete reference in the page in which is used. Once that the complete reference is written, then the successive times in which is used it suffices to write the author name and the acronym "op. cit."

This last solution can generate confusion in the reader.

⇒ References directly found on the **Internet** we mention in this order:

- Author (or ORGANISME)
- Title of home page followed by the mention "on-line" between square brackets
- The URL preceded by the mention "Available at :"
- Consultation date between brackets

Example :

NADJI F., BOUDIA D. *Guide de rédaction des références bibliographiques [en ligne]*. Villeurbanne : Doc'INSA, 2001. Disponible sur : <<http://docinsa.insa-lyon.fr/docs/refbibli.html>> (consulté le 14.03.2002)

b. ⇒The **Annexes**

In an attempt of keeping order it is preferable to place in annex all those complementary information that are not essential for the comprehension and the development of the reasoning. We mean: tables, demonstrations, questionnaires, etc.

Each annex has got a reference number, such as A1, A2, in order to identify the tables as fig. A 3.1, etc.

V.3. Editing

The thesis has the goal of analyzing an economic problem. Therefore the argumentation presented has to reflect this goal, it has not to be exhaustive, however it should provide different points of view on the problem in order to find new results or possible solutions. All this can be done in 60-80 pages. Please do not exceed this limit (annexes excluded).

Some other suggestions:

- use a concise and clear style, avoid long sentences;
- structure your thoughts inside the chapter paragraph should contain a single idea and not more;
- do not overcrowd the text with long citations;
- avoid judgments and personal beliefs;
- all the statements should be justified;
- pay attention to the use of verbs in the same chapter, do not change your choice within;
- pay attention to the punctuation, commas, points, etc. have different meanings and functions;
- pay attention to technical terms and to repetitions which are often the signs of a misunderstanding.

c) V.4. Page setting

An accurate and equilibrated page setting help undoubtedly the reader in his task.

The choice of the interline space determines the text appearance: too close may seem dense and impenetrable, too distant may seem dilute and the global vision may lose. We suggest the simple interline and a double interline for separating paragraphs.

Please read the text several times and if possible ask someone else to do the same.

ANNEX – COVER PAGE ESL



TITLE

Supervisor: Prof.

Reader: Prof.

Thesis presented by (name)
in order to obtain the title of
Master 120 en Sciences Economiques
Orientation Générale - Finalité Spécialisée

ACADEMIC YEAR 2008-2009



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