Université de Neuchâtel
Institut de management

Guidelines for the master thesis

Introduction to the Master Thesis

The master thesis, which accounts for 30 credits, represents the final learning experience to achieve the master's degree. Students can either do an internship and write a master thesis linked to this professional experience (either with an "internship-based case study" or with an "internship-based research thesis") or they can engage in an academic master thesis (see section 1 for the different options). Each student is assigned to an academic supervisor who agrees to supervise the work. The subject and the type of the master thesis are determined conjointly and need to be approved by the academic supervisor.

Main steps for students (see the website for the detailed steps and documents):

- **Internship-based:** The students are responsible for finding their internship. If available, information about potential internships will be posted on the website.
- **Academic-based:** The students choosing an academic thesis need to contact the administrative assistant of the program (Sara Wenger, at R.115 - Breguet 2) who will forward the necessary documents.

- **Internship-based:** Once an internship is found, students need to submit the administrative documents to the assistant of the program with the internship description and the internship application form.
- **Academic-based:** Once the topic for an academic thesis is selected, students need to submit the administrative documents to the assistant of the program.

- **Internship/academic-based:** The aforementioned documents need to be approved by the administration. Once approved, the students have to contact the assigned academic supervisor.

- **Internship/academic-based:** At the end of the work, the thesis should be registered "as a course" in IS-Academia ("Internship with report" or "Master thesis), during the registration period for the appropriate exam session.

1. The three thesis' types:

The two first types of master theses (see A. and B. below) are based on an internship. The administrative requirements for an internship to be validated are as follow:

- The duration of the internship is at least the equivalent of 3 full-time months
- The internship needs to be sufficiently complex, require a university degree, and be related to one or several topics covered during the master program
- It must take place in a firm or organization (SME, large company, NGO, international organization or public entity).
- There must be both an internship tutor from the company and an academic supervisor from the University
- It must take place in a truly formal organizational context and not in a virtual firm or in a context ruled by personal arrangements
- The organization, the tasks and qualifications of the internship tutor are appreciated by the program committee before a final validation

The master thesis can be of three different types. The academic supervisor needs to agree about the type of thesis that the student will pursue.

A. Internship-based Case Study:
A case study is a detailed and elaborated explanation of a real managerial situation/problem. The student will identify a specific problem together with the company and validate it with the academic supervisor. The case study is accompanied by a teaching note that integrates theory and data (qualitative or quantitative) to solve the managerial situation laid out in the case study.

B. Internship-based Research Thesis:
The internship-based research thesis is not an internship report, but a project in which the student looks at a general phenomenon, reviews the literature that has been written on that topic, and then applies this literature to the case of the firm or the industry the student has been working for. From that perspective, the internship-based research thesis will explore existing theories and should create some new knowledge (which can be very narrow or specific). To respond to the specific research questions, an empirical (qualitative or quantitative) assessment will be implemented and relied on.

C. Academic Research Thesis:
The academic research thesis is an important scientific approach. It helps to detect and solve a gap and to respond to one or more research questions thoroughly and scientifically by adding new knowledge to the academic literature. The topic of the master thesis may be proposed by a professor or suggested by the student (with the agreement of a professor).

2. Main guidelines for all three types of theses:

Content & Formatting:
The reference list has to be based on academic sources, that is, books and articles from scholarly sources. Original sources should be preferred over secondary sources. For instance, when referring to Porter's five forces, please cite the original published academic source (by Michael Porter in that case). Internet references should only be used in the event that the information is not otherwise available (e.g., Wikipedia should not be cited when referring to Porter's five forces, the appropriate academic source by Michael Porter in that case should be mentioned instead). If the thesis uses secondary data (e.g., company documents, industry reports, newspaper data, or selected trade press) as empirical sources, a separate empirical reference list may be included.

For the formatting, please follow the guidelines:

- Font: 11 or 12-point
- Text alignment: Left and right justified
- Line spacing: 1.5
- Margins: 2.5 cm
- All pages should include the student's name, the title of the thesis, the page number and the total number of pages.
- Tables and figures must be numbered and titled and should be included in the body of the thesis.
- Indicative length of the thesis: in principle, around 50 pages of text. The students are required to check with their supervisor if there are additional specific guidelines/formats to follow.

Appendix: Information that is not central but valuable to the reader may be given in an appendix. This might concern background information (about the industry, the firm), details about the method (interview guide, questionnaire, analysis of non-response), additional descriptive results that do not directly answer research questions. Students must provide full disclosure of their research outputs and submit electronic appendices including entire questionnaires (if conducted with Qualtrics, use the collaborate tool to share the questionnaire), raw data files (e.g., excel, R, Stata or SPSS analyses and programming), interview recordings and / or transcripts (for qualitative work).

References: All works that are quoted or cited in the text should be collected in a list of references and all references listed should be cited in the text. A separate list with web sources may be compiled. Referencing standards are to be defined by the academic supervisor. Common standards used in the academia are the AMA9 and APA10 standards.

Any master thesis should have a standardized format and bibliography as well as correct spelling, grammar, and citations. Figures and tables should be selfexplanatory (i.e., they should be easy to understand with the included descriptions, titles and notes without having to read the written main text). They need to include a title and a reference if applicable.

Avoiding Plagiarism: The University of Neuchatel fights against plagiarism. Please get informed about the guidelines. You should cite appropriately all articles, books and internet sources used to obtain information used in the report. Any formulation, idea, research, reasoning, or analysis that is borrowed from another author has to be correctly and accurately indicated as such, with the original source cited. Direct quotes need to be identified as such using quotation marks (and indentation). Note that Wikipedia and other online sources can be particularly problematic: as a rule, finding and citing the original source shows you have verified the information and helps you avoid plagiarism. You also need to properly cite the usage of AI in your work.

You will need to sign a pledge of honor and submit it with your report. In case of plagiarism, the student fails the report and administrative sanctions and disciplinary consequences may apply.

A. Internship-based Case Study

An internship-based case study can consist of writing a teaching case motivated by the internship - preferably about a specific topic experienced during the internship. It is important to highlight that the case study is not a descriptive work but an analytical effort connecting theories with the experience gained during the internship. The case study is a thick description of a real managerial situation. The aim of this description is to generate specific learnings from the students, based on a judgement and critical sense.

The case study is structured as followed:

- Cover page of the master thesis
- Table of contents
- Introduction: presentation of the internship
  - Short presentation of the company and the industry
  - Tasks performed during the internship
- Chapter 2: teaching case (detailed structure below)
- Chapter 3: teaching notes (detailed structure below)
- Conclusion
  - Problems/challenges faced during the internship
  - Solutions found by the student to face these issues
  - Learnings (can be structured according the Bloom's taxonomy)

Case Study:
A case study is designed to provide the students with practice in assessing a complex situation and making decisions. The students must move beyond a simple analysis, to make predictions about what will happen. The decision point itself may be unclear, allowing students to ponder with various issues and ways to build one or several solutions. One difficult task is to choose between alternatives. Students must consider what factors are most important. Students will propose a series of actions that will affect the outcome. No answer is necessarily correct or wrong. Students may see the issues and the decisions differently.

Case studies help students:

- To assess managerial issues.
- To learn how to learn.
- To analyze which is important/useful information, and which is nonsignificant/trivial information.

Content and structure:
A case study thesis should consist of two distinctive parts: 1) the teaching case (*énoncé* in French) and 2) the teaching notes (*notes pédagogiques* in French). The teaching case mainly consists in presenting the company, the main actors involved (which could be persons and organizations), the managerial situation and the point of question, and the related decision(s) to take.

→ The teaching case includes a story about the company and the protagonist(s) (see 1 below).
→ The teaching notes consists mainly in the answers to the questions from the teaching case (i.e., the solutions of the teaching case) (see 2 below).

1. Teaching Case:
Title and Introduction (1/2-2 pages):

- For the title, in fewer than 10 words, make clear what is special about this particular case.
- Within the first paragraph, identify the case's central person and business or organization, and provide a sense of the situation the person is in.
- Within the first two paragraphs, present, from her or his point of view, what the central person sees as the decision point or dilemma. Identify other major players if relevant.
- This section should also provide the context for the situation which includes the situation's time frame (at least the year), the location and purpose of the company or organization, relevant important business factors, and the goal or aim of the protagonist.

Background on the Company, Industry and Competitors (3-7 pages): Begin this section with the first subhead. If the section is long or relatively complex, use more than one subhead within the section to organize separate aspects.

- Often the best method for writing this section is to organize the information chronologically, with a very brief history of the organization.
- Provide the essential company, organization, competitor, and/or industry information that the central person had at the time of the case. What and where are the major products or services and their customers?
- Include enough background information for the reader to analyze the dilemma or decision point presented in the introduction. Revenues, profits and losses, and other financial valuations may be crucial.
- Do not simplify or weight the background section to lead readers to an easy decision.
- Include, as appropriate, historical information, trends, direct quotations from participants and analysts, and simple and/or essential tables and figures. The section can also include references to exhibits placed in the appendix, though the references should be clear and complete enough that the reader can continue without having to turn immediately to the exhibits.
- Consider depicting the culture of the company or organization if relevant.
- What are the important challenges and responsibilities of the central person?
- Are certain portions of the person's career particularly important to the current situation?
- Connect the background in this section to the current situation, including underlying causes and current results.

The Decision Point in More Detail (1-5 pages):

- Begin this section with a subhead. Within it, use more subheads if appropriate.
- Go more deeply into the context and possible consequences of the decision point, dilemma or central angle. Include the consequences for the career of the central person as well as for the person's company or organization.
- Show, if true, how the decision point or dilemma differs from the one initially perceived.
- Include the degree of urgency involved in the decision-making, or the timeline for the decision to be made.
- Conclude the text with alternatives available to the central person.

Exhibits and Endnotes (4-10 pages):

- Use a subhead before any exhibits and before any listing of endnotes. Use a small title with each exhibit, beginning "**Exhibit 1**:"
- Exhibits can include financial statements, timelines, diagrams, charts, tables, pictures, and graphs. In some cases, it is possible to include or link to multimedia supplements such as an interview video with the case's central person.
- An endnote is needed for anything mentioned in the text for which a reasonable reader would want to know the source of the assertion, quotation, or apparent fact. The endnotes are referred to by number in the text and the notes themselves appear in order, all together, after the exhibits. An exhibit can have an endnote, or its sourcing can appear as part of the exhibit.

2. Teaching notes:
Synopsis of the case:
Provide a brief description of what the case is about, and the context in which it is set.

Target group:
Indicate the target learning group, for example, undergraduates, postgraduates, executive.

Learning objectives and key issues:
Set out the learning objectives and identify the key issues in the case that will help achieve them.

Teaching strategy:
Describe how the case may be used in class. For example, suggest trigger questions to open the case discussion; offer ideas for group work; suggest how learning can be consolidated at the end of the case session, and so on.

Methodology:
Describe the data collection and analysis methods and process. As such, describe the primary and secondary source of data (indicate the interview date/location/person and justify the choice of the interviewees).

Case study questions:
The questions relate to the managerial decisions and define the boundary of the case. The questions should unravel the managerial issue in an accurate and exhaustive way. These questions are identified through a problematization process of the managerial issue.

Answers to the questions:
This section provides answers to the questions identified before. The answers are scientifically referenced and address the managerial decisions of the case study. As such, the answers link the managerial realities within the organization under study with the scientific literature.

Background reading:
Provide references to relevant supplementary material on the case or related issues. You may also provide information on 'what happened next', something students are usually keen to know.

Multimedia:
Include links to video and audio clips that are relevant to the case.

Appendices:
Interview transcripts, figures, ppt slides, etc.

B. Internship-based Research Thesis

An internship-based research thesis consists in understanding, analyzing and providing recommendations for a specific topic preferably motivated by the internship experience. It is important to highlight that the internship thesis is not a descriptive work but an analytical effort connecting theories with the experience gained during the internship.

The internship thesis is an empirical inquiry that investigates a research question in depth and within its real-world context, especially when the boundaries between phenomenon and context may not be clearly evident.

The Internship-based research thesis is structured as followed:

- Executive Summary/Abstract
- Table of contents
- Introduction/Background
  - Context (e.g., company, industry)
  - Purpose / interest of the thesis
  - Research question(s) and identification of the gap
- Literature Review / Conceptual framework with specific propositions or hypotheses (if applicable)
- Methodology
- Results/Analyses
- Discussion (summary of results, practical and theoretical implications)
- Conclusion (recommendations, limitations, suggestions for future research)
- List of references
- Appendix

Executive Summary/Abstract:
The thesis should start with an executive abstract (summary) of about half a page. The summary should give a clear image of the subject matter of the thesis, the methodology, the main results, and their implications. The abstract precedes the Table of Contents.

Table of Contents:
A Table of Contents must be included. All numbered section headings and sub-section headings should appear with the associated page number. Following the Table of Contents, separate lists of tables and figures, with their associated headings, numbers, and page number, may also be included.

Introduction/Background:
Context: This part introduces the broader context of the researched problem or gap. Via a “funnel approach”, the author takes the reader from this broader context

to the narrower issue that will be outlined in the problem discussion. This part includes a short description of the company/industry.

Purpose/interest of the thesis: The purpose should be stated clearly and concisely. The purpose denotes what are the specific aspects of the problem that the author aims at treating in the investigation.

Research question(s) and identification of the gap: The research questions can follow as further specification of the purpose of the thesis. Specific research questions should be mirrored by specific conclusions towards the end of the thesis. The problem/gap discussion should make clear what the *subject matter of the thesis* is, and why this topic deserves to be studied. A clear statement of the problem is an important ingredient in successful thesis writing. If the author is not very clear about what problem the thesis treats, no other strengths of the thesis will make up for that deficiency. The problem statement should land on a clear research question and guide everything that follows.

Literature review/ conceptual framework:
First, the problem statement of the thesis builds on key concepts that are derived from the prior literature. For instance, a problem statement may focus on the question of how Company X may continuously stimulate intrapreneurship despite high employee turnover. The concepts that are central to the thesis may need explicit definitions (i.e. intrapreneurship and employee turnover). Then, the author should study previous research and theories on the subject and create from that their own conceptual framework, which will guide both design and analysis of the empirical part.
The literature review should not be a chronological presentation of past research. It should group the articles based on their content and contrasts them. The purpose of the literature review is to link and integrate the various articles and explain how this cumulative past knowledge can help to study/understand/expand the topic of the thesis. It is required that the author takes into consideration previously published research within the problem area, and that the main findings are organized and summarized. The author should show a firm and extensive grasp of the relevant research. A figure providing a summary overview of the key findings may be included in the text. A table providing a summary overview of the key literature may be included in the Appendix. The value of the thesis and the credibility of its conclusions are leveraged when related and compared to the results of previous studies.
Relevant previous studies might be found by:

- Searching library databases, using relevant (combinations of) keywords.
- Studying references included in the first encountered articles
- Asking the academic supervisor. This may be a good source early in the process. However, writing a master thesis is independent work.

Besides theory and previous research, the framework may also comprise industry, firm, or region-specific information if such information is not satisfactorily covered in the introduction.

Based on this understanding of the past research, a research question should be formulated and a conceptual framework that addresses the research question can then be developed. A conceptual framework shows and explains the relationships between the various variables that the author wants to study. It is important to state how the own research focus extends the past research or how it addresses thus-far unaddressed research questions.

Methodology:
A method is the tool used for fulfilling the purpose in a scientifically satisfactory manner. The author should be able to explain to the reader that meaningful knowledge about the problem in question can be gained with the chosen method(s). The systematic application of methods to collect and analyze data makes it possible for authors to achieve (a) comparability, (b) generalizability, (c) objectivity, (d) depth, and (e) originality of their research.
Different methods have different strengths and weaknesses regarding the previous mentioned elements. These are also relevant for different purposes. Please do not hesitate to discuss with your academic supervisor, which method is the most appropriate one to choose for your study.

The methodology section in the thesis should describe how the work has been carried out (e.g., how qualitative/quantitative data was collected, including potential data cleaning procedure), and why a specific method was chosen to fulfil the purpose of the study.

The description should be detailed enough to allow the replication of the study if needed. In order to avoid that the method section becomes too long, some of the illustrative materials unnecessary for the overall understanding may be put in appendices (e.g., questionnaire, interview guide).

Results/analyses:
The reporting form will depend on the chosen approach and data collection method. If the study consists of hypotheses testing, this section would report the statistical tests developed to test the stated hypotheses. In investigations with a qualitative orientation, the closest equivalent would be narrative case descriptions or interview summaries.

The distinction between results and analysis is particularly common in quantitative research, where statistical results are often reported before they are interpreted in a separate section. In qualitative research, results like case descriptions may be presented under the name of the case. Here the distinction between “pure” results and analysis is more difficult as the telling of a case story itself might be colored by the authors' interpretations.

Achieving a good analysis requires also the ability to see beyond what is evident. Such ability is very much a matter of time and inspired effort not to accept the first possible interpretation. What do the results *really* imply? How *else* can they be understood?

Discussion

The discussion section details the author's own findings in relation to the purpose and research questions. It is often suitable to summarize and discuss the output from the analyses in terms of a number of conclusions (theoretical or practical). If a number of research questions or hypotheses have been specified, it is advisable that one conclusion mirrors each research question/hypothesis.

Conclusion

The author may feel they have learned more during the process than can be communicated through the reporting and interpretation. In order to separate the more systematic (and/or empirical) from the more speculative thoughts, the latter kind of "findings" should be included in this section.
This last section may include implications from the results for different types parties who have some interest in the studied problem (firms, policymakers, unions, or consumers) as well as suggestions for future research, or thoughts concerning the applicability of the conclusions in other countries, industries, etc. The authors should further show awareness of methodological issues and of strengths and weaknesses of their own investigation.

C. Academic Research Thesis

The purpose of an academic research thesis is to identify/formulate a well-defined research question aiming to solve a problem or to fill a gap in the literature (the idea may come from the student's own interests or mutually agreed with the academic supervisor).

The student's commitment, creativity, independence, proactivity and ability to integrate feedback are crucial for the completion of an academic research thesis. The overall difficulty of an academic research thesis (e.g., type of research gap, extensive data work, integration of primary and secondary data, well-thought of connections in the discussion, deeply linking one's research to prior research) and the originality in approaching the topic (research questions, methods of research) will be integrated in the evaluation.

Writing style:
The structure and exposition of the arguments are extremely important for an academic research thesis. The sections and paragraphs should follow a logical order and build on each other. Generally, the first sentence of a paragraph should give or introduce the main idea of the paragraph. The academic research thesis should stay tightly focused on the chosen issue/topic and be presented logically. It is usually a good practice to use the same general structure and writing style as published academic articles.

The academic research thesis is structured as followed:

- Summary/Abstract
- Introduction/Background
    - Problem/gap discussion
    - Purpose of the thesis
    - Research question(s)
- Literature review /Conceptual framework / hypothesis (if applicable)
- Methodology
- Results/Analysis
- Discussion
- Conclusion
- List of references
- Appendix

Introduction
The introduction should justify and lay out briefly why the studied topic is interesting, relevant and worthy of further research. This justification should be based on theoretical and practical arguments. It can be useful to start with a real-

world example to show the relevance. At the end of the introduction, the domain of study, the research objectives and the research questions should be clearly identified and delimitated.

Literature review / Conceptual framework

The purpose of the literature review is to expose what past research has demonstrated about the studied topic(s) and what the shortcomings or gaps are in the existing literature. The literature review should use a funnel approach. It might start with relatively broad topics, but it should quickly focus on the tightly defined research topic(s). The core concepts should be properly defined. The literature review should not simply present articles in a chronological fashion. The purpose of the literature review is to link and integrate the various articles and explain how this cumulative past knowledge can help to study/understand/expand the topic of the thesis. The author should show a firm and extensive grasp of the relevant research. A figure providing a summary overview of the key findings may be included in the text. A table providing a summary overview of the key literature may be included in the Appendix.

The author should articulate a clear research question at the end of the literature review. The research question should be based on selected concepts that have been properly introduced and defined. If the approach is hypothetico-deductive, the author may add a theory development section, in which a set of hypotheses (which should then be answered/tested by the end of the thesis) are developed.

Methodology

The author should apply the appropriate method(s) to answer the research questions/hypotheses. The academic research thesis should explain the methods' important aspects and argue why it is adequate for answering the research questions or hypotheses. The methods have to be executed correctly. If the research contains multiple hypotheses, then it should be stated clearly which analysis is aimed at addressing which hypothesis, as well as stating clearly the outcome for each hypothesis.

Results/Analysis

The reporting form will depend on the chosen approach and data collection method. If the study consists of hypotheses testing, this section would report the statistical tests developed to test the stated hypotheses. In investigations with a qualitative orientation, the closest equivalent would be narrative case descriptions or interview summaries.

The distinction between results and analysis is particularly common in quantitative research, where statistical results are often reported before they are interpreted in a separate section. In qualitative research, results like case descriptions may be presented under the name of the case. Here the distinction between "pure" results and analysis is more difficult as the telling of a case story itself might be colored by the authors' interpretations.

The concepts and models introduced in the conceptual framework and the results found should be clearly presented. A high-quality analysis is characterized by a) links to established theory, and b) a systematic approach. "Systematic" often refers to systematic *comparison* between groups or cases, between theory and empirical "facts", between interpretations from the perspective of different theories.
Achieving a good analysis requires also the ability to see beyond what is evident. Such ability is very much a matter of time and inspired effort not to accept the first possible interpretation. What do the results *really* imply? How *else* can they be understood?

Discussion
The results and their interpretation should be detailed and then linked to past research, in particular, to the core literature from which the shortcoming is identified. The discussion should explain what this core literature would learn thanks to this study, how it responds to the research questions or hypotheses and what new knowledge was gained.

Conclusion
The conclusion takes a step back and integrates the research that was accomplished in the bigger picture (e.g., What did we learn? Why was it useful? How could it be generalized? What were the mistakes and what could be the next steps? What may be managerial/ policy implications of these research findings?).

Specificity per research domain:
It is important to note that the different academic research domains (e.g., strategy, marketing, HR) have their own idiosyncratic rules. The students have to consult with their academic supervisor to implement the proper research/presentation modes.