ETHzürich

MSc Thesis Guide (2022/23)

Chair of Entrepreneurship

POTENTIAL TOPICS

The chair of entrepreneurship supervises MSc theses in the broad domain of (technology) entrepreneurship. We are, in particular, interested in the following empirical contexts:

- New Technology Paradigms (e.g., blockchain, AI, ML): with emphasis on implications for organizing economic activity, i.e. how to coordinate new economic activity, the emergence of novel organizational forms, or design of organization
- Science-based Ventures with an emphasis on strategy formation, resource mobilization, and the impact of different professional logics on typical growth and development trajectories of deep tech ventures
- **Corporate Entrepreneurship** with an emphasis on the design of successful acceleration programs in corporate context and their impact on corporate renewal.
- Grand Challenges & Sustainability with an emphasis on food challenges and related innovative activity with respect to novel business opportunities and the design of business ecosystems to build more sustainable social structures.

The MSc thesis has the objective of exposing Master degree candidates to the typical process scientists undergo when producing an academic paper. Typically, the thesis is based on independent scientific work but may, under certain conditions also be written in collaboration with a company, for example through the Corporate Master Thesis Program (CMTP). Either way, the **Master thesis is a full-time commitment of at least six months** and requires solid scientific grounding from both a methodological and theoretical perspectives. As such, there has to be a clear theoretical or empirical gap, which you are addressing through an appropriate scientific method.

APPLICATION & FINDING A THESIS MENTOR

Timing & Capacity

Due to capacity restrictions, we can only supervise and mentor a limited number of theses per year. Please apply early and with complete information to increase your chances to find a thesis mentor at our chair.

While Prof. Clarysse is always the official thesis supervisor, you will typically be guided by an assigned thesis mentor—a researcher from our chair. You may propose a specific thesis mentor when applying for a thesis with us. The easiest way to identify a potential thesis mentor from our chair is to look at our **website**. However, due to capacity limitations, we cannot guarantee a mentor of your choice.

The typical cycle for assigning supervisors starts in November/December each year, up until the beginning of the following spring term. We may be able to also add you at other times of the Academic year but do not rely on it. Generally, we can only supervise a limited number of theses per year. **Early contact is advised**.

Option A: Applying for a pre-defined thesis topics

We may advertise calls for specific thesis projects on our webpage for which you can apply. Please, always direct your application to the contact person mentioned in the advertisement, and send the following details:

- Your background and **what motivates you** for this topic and for writing the thesis at our chair and why you believe to be a good fit.
- A recent CV and your current standing in the MSc program (best, include a current transcript); also mention any additional skills that may exceptionally qualify you for the research project (e.g., quantitative or programming skills)
- Your expectations in terms of timing

Option B: Applying with your own thesis topic

We are also open to research topics of your choice, should they fit in with particular current research streams at our chair. Please check our website **entgroup.ethz.ch** to look at our current research and overall portfolio to identify fit. You may suggest a specific researcher from our chair. However, due to capacity restrictions, we cannot guarantee your preferred choice.

In order to apply, please send an email to our thesis coordinator **Constanze Coelsch-Foisner** (coelschc@ethz.ch) with the following information:

- Your **Motivation:** If you propose your own topic, please outline your envisioned research problem (ca. 200-300 words), clearly developing the research context and question as well as a proposed method.
 - In this case, please also state how your project fits into the research areas of our chair and how it contributes to the knowledge in that domain
- A recent CV and your standing in the MSc program (please include a current transcript); also mention any additional skills that may exceptionally qualify you for the research project (e.g., quantitative or programming skills)
- **Current status**: In case, a company is involved, please state the partner clearly and what the current status and expectations at the involved partner are; also state if you have done any pre-work on your thesis topic
- Clearly state your expectations in terms of timing
- Optional: propose a specific researcher from the chair as mentor

The thesis coordinator will facilitate and coordinate the review process of your application within our chair. While we aim to be timely, this process can still take up to 4 weeks before you know whether or not you can be supervised at out chair and by whom. **Again, early contact is advised!**

STYLIZED THESIS PROCESS

Note: There will be at least three official meetings with your thesis mentor. Beyond that you or your mentor may request a feedback loop in between. This is typically done on written material and conducted either in-person or via email as deemed necessary. Below we highlight the typical meeting rhythm (3 mandatory plus 2 optional) for a MSc thesis:

- Kick-off stage (mandatory meeting): After you have expressed interest in conducting your thesis work with our chair and have redacted the research proposal, you will have a kick-off meeting with your supervisor. In this meeting, you will discuss the overarching research question and the research design.
- Literature review and method selection stage (optional meeting): Your thesis work should start with an in-depth study of the literature, which you should conduct independently. In parallel, you should also start collecting data in accordance to the research design you have discussed in the kick-off meeting. You may request a meeting and/or engage with your supervisor in an e-email loop to refine the topics covered in the literature review.

- Mid-term stage (mandatory meeting): Once you have concluded the literature review and have almost completed data collection there will be a mandatory meeting with your mentor to gain feedback and establish next steps forward. Optionally, your mentor may invite you to present in front of other members of the chair to gain further feedback from other researchers.
- **Preliminary results stage (optional meeting):** Taking stock of the feedback collected in the mid-term meeting, you are expected to start analyzing the data and extracting preliminary results. At this stage, you may request a meeting with your supervisor and/or engage in an email exchange loop to gain feedback on how to refine the results.
- Final results/presentation stage (mandatory meeting): At this stage your thesis should be almost completed. There should be a full and high-quality draft with clear results. Your mentor will offer final feedback for you to take into consideration as you finalize and polish your thesis. Note, if you wrote a corporate thesis, your company may ask you for a presentation of your final results. This is between you and the company. We do recommend in such case that you also invite your academic thesis mentor; he/she may attend at their discretion. However, such presentation is not part your final grade and there is no obligation for your mentor to attend.

Important notes on process management

- We strongly recommend to agree about the mentor meeting dates well in advance, ideally at the beginning of your thesis project. We also recommend the student to send out the respective calendar invites well in advance to make sure the meeting is blocked in your mentor's agenda! Also, if you need to change dates, contact your mentor well in advance to manage!
- We furthermore strongly recommend that a few days prior to each meeting, you send a written thesis draft (in the form it is at that point in time; early on it will naturally be more a skeleton) incl. specific questions you may have in order for your mentor to prepare for the meeting.
- We expect you to finish your thesis within the agreed upon time frame. Only in exceptional cases, we will agree to a prolongation. Prolongation reasons are typically related to severe health or family emergencies. If you have other foreseeable timing concerns (e.g., mandatory military service), please align with your mentor in advance to factor that into the process.

The chart on the next page illustrates the prototypical MSc thesis process. On pages 5 and 6 we describe some of the process elements in more detail.

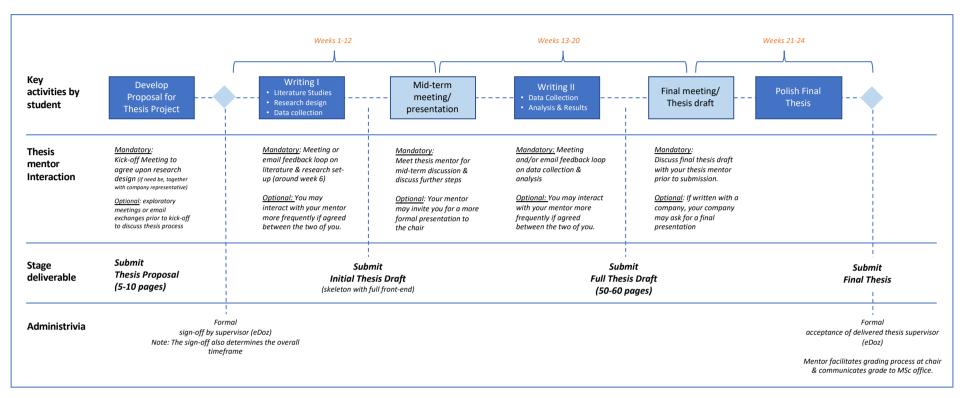


Figure 1: Schematic Overview of the MSc Thesis Process

<u>Note</u>: If you write the thesis for a company, the final presentation may also happen after the final submission of your thesis. The above outline is a just a suggestions. You and your mentors may deviate as appropriate.

THE THESIS PROPOSAL

The first step in writing a successful MSc thesis at our chair is to agree with your mentor on the thesis proposal. The **writing and sign-off of the thesis propoal is a crucial part of the supervision pro-cess** as it builds a contract between you and your mentor about content and process of your thesis.

Typically, the thesis proposal is written prior to the official kick-off of the thesis. The proposal should also be agreed upon with your company supervisor.

A thesis proposal is typically a 5 -10 pages long concise description of what you aim to research and how you are planning to achieve that. It also includes a time plan of key milestones and official supervision meetings. A good proposal helps you and your supervisor to agree on the nature and focus of your study and is the basis on what your supervisor will sign off on your thesis start.

Key Elements of a Thesis Proposal:

<u>Research Context & Problem</u>: General description of the larger context in which the problem you aim to research occurs. Develop what leads to the problem or contextual patterns and delineate a specific and concrete research question that will guide your thesis.

<u>Background & Gap</u>: Summarize relevant existing academic research that informs your research question, i.e. what academic papers have already done some research on the context or managerial problem you are studying. Usually 4-5 key papers should be sufficient at this step but that may mean that you have to survey more papers to tease out the most relevant. A complete review will follow in the thesis. Practitioner research should only come as complement, not as a primary source. You will find relevant academic papers on Google Scholar and notably in the **top management journals**. Summarize how the insights from the literature will help you address the research problem or what the literature does not answer (gap) and thus requires your research.

<u>Proposed Research Design</u>: What is the specific empirical context in which you would like to conduct the research, i.e. a specific company, an industry, etc., and which methodology fits your purpose? What data do you aim to collect and how do you envision to analyze it?

<u>Proposed Timeline</u>: Rough course of actions over a period of at least 6 months, incl. meetings with the supervisor (see stylized process) and tentative dates for final defense and hand-in.

<u>Bibliography</u>: List papers and publications you have cited in your proposal. Use established scientific citation practice (e.g., APA).

Corporate Thesis & NDA Requirements

Sometimes, when writing your thesis together with a corporate partner, the partner may require specific confidentiality clauses. Confer with your thesis mentor for an NDA template. Please do not just sign anything the corporate partner asks you to sign. ETH uses an official NDA template, which has been developed for this purpose.

OFFICIAL START OF THE THESIS

After you agreed with your supervisor(s) about the thesis proposal, you can sign up for the thesis via **mystudies.ethz.ch**.

As you sign up:

- Define a short and poignant title that summarizes the key theme. Try to find a good balance between a catchy and easily graspable title. In doubt, check back with your mentor.
- Upon sign-up, indicate as main tutor Prof. Bart Clarysse and as co-supervisor the main mentor from our chair who will guide you through the process.
- Define the starting date of your thesis, as agreed with the mentor. The end date will be six month after your start
- Upload the proposal as task description
- Inform your thesis advisor so she or he can officially confirm and sign you up in the system.

MANAGING THE PROCESS

We expect you to drive the thesis process. While your mentor will be your guide through the scientific process, notably providing feedback on structuring your work, literature review and methodological approach, it is your responsibility to do the work. Note, that in particular the implementation of your data strategy and the analysis and development of insights is a key element of your contribution.

As outlined above, it is recommended that you manage the meetings with your mentor well in advance and maintain professional communication with your mentor incl. sending upfront preparation materials and questions to your mentore to facilitate the mentoring process.

As long as you steer proactively your thesis project, our commitment is to provide constructive and timely feedback to help you keep going and create your best possible work.

HANDING IN YOUR THESIS

Please ask your thesis mentor about formatting requirements of the thesis document. We do offer a thesis template your mentor can share with you.

Other Submission requirements

- Electronic copy of final thesis to mentor. Discuss also any data submission requirements. Typically, we request full transparency regarding your data and data collection.
- One or two bound hard copies please confer with your thesis mentor about precise number. One copy goes into the official MTEC archive.
- Along with the thesis, please hand submit a filled and personally signed "Declaration of Originality." You may include a scanned copy in the electronic thesis file.

THESIS ASSESSMENT

We expect MSc students to know about the basics of academic writing and proper code of conduct, most notably vis-à-vis plagiarism.

We typically check each submitted thesis for plagiarism. In accordance with the ETH rules, we have to report incidences of plagiarism to the Dekanat where the decision about further consequences will be taken. It goes without saying that you do not want to end up in that process.

When assessing your thesis, we typically look at the following elements:

- Content (clear problem, comprehensive treatment, critical synthesis and structuring of relevant background literature, appropriate method to produce valuable insight, well structured presentation of key results in accordance with academic standards, an evaluative discussion of the results with your own conclusions, practical and/or theoretical relevance)
- Form & Writing (academic writing style, proper referencing, professional design)
- Work process (professional attitude, independent workstyle, coachability)

Please note that the aim of the MSc thesis is to provide an academic depth that allows us to assess your ability to use scientific methods. It is imperative that you

base the core elements of your study on scientific foundations.

Also note, while our aim in supervising is to provide constructive feedback that will help you to improve your work to levels that allow you to pass and hopefully even pass with excellent results, none of this can be guaranteed. You are the driver of your thesis, and as such responsible for your level of achievement.

For further info about the general MSc Thesis process and timing for the academic year, please check the MTEC MSc Thesis guidelines.

ETH Zürich

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www.entgroup.ethz.ch