

A few thoughts on MScE academic and internship theses

Luís Santos-Pinto and Sébastien Houde
Coordinators of MScE Program at HEC Lausanne

1- What is an MSc thesis?

- Cooking example:
 - Chef (PhD): Develop **new** recipe, try it out, show it's good-tasting.
 - Cook (MSc): Reproduce and adapt **existing** recipe, try it out (hopefully good tasting too...).
- MSc: Must demonstrate student's **aptitudes** for research,
 - **Master** existing methodological tools
 - Can write coherent, **scientific** text about it.
- **No** need to develop research frontier (PhD)

2- Examples of academic MScE theses

- Develop new theory, test resulting hypotheses with new data base, using frontier methods (PhD).
- Reproduce hypothesis-testing for **existing** theory with same database. Develop it with alternative data (e.g. CH vs US) and/or alternative methodology (e.g. GLS vs OLS).
- Design or run a laboratory experiment.

3-What is an internship thesis?

- An internship thesis should have as content a **practical problem**, and you should apply previously acquired academic knowledge to propose and possibly implement a solution.
- Every internship thesis should be of **publication quality**, meaning that it could be uploaded on the website of the Master's program.
- This means that the company or financial institution, within which the work got elaborated, could use the document and give it to its clients.

4- Differences internship vs academic theses?

- **Not much**
- Both must meet academic criteria (top priority)
- Internship thesis is **not sub-thesis**.
- *Joindre utile à l'agréable*
 - Can conciliate academic rigor objectives with integration and company's interests objectives.
 - Needs discussion and coordination between HEC supervisor and company's supervisors.
 - Very good basis for future career and employment

5- How to find an academic thesis supervisor?

- Do some shopping:
 - *Takes two to tango*: Talk with potential supervisors, past/current students
 - Be open to suggestions from supervisors
 - Take topic you find interesting.

6- How to find an internship?

- Go to HEC Lausanne's Career Center (Centre de Carrière) located at office 245 Internef (www.HECcareercenter.ch)
- Check the job platform for HEC students: www.HECjobs.ch
- LinkedIn, other career-related websites
- Go to the companies career websites
- Career Events

7- More info on internship thesis

- When doing an internship you need to find an academic supervisor at HEC Lausanne and an external expert at the firm
- Be careful/watchful for internship traps:
 - Low level clerical work (photocopies, coffee machine, ...)
 - Make it **worthwhile** (future work).
 - Need some time to write the thesis apart from the time at the organization

8- Final thoughts

- Thesis is hard work, but **fun**
 - First experience with actual research
 - Opportunity to show you master what you've learned **outside of exams.**
 - Important for further steps
 - PhD (academic theses)
 - Employment (academic and internship theses)
- Little differences internship vs academic theses
- Have fun