Master Thesis Requirements

What is a master thesis? (I)

- A graduate thesis is a document submitted in support of candidature for an academic degree or professional qualification presenting the author's research and findings
- A thesis for the Master's degree must show familiarity with previous work in the field and must demonstrate the ability to carry out research, organize results, and defend the approach and conclusions in a scholarly manner according to disciplinary norms.

What is a master thesis? (II)

- A master's thesis is a piece of original scholarship written under the direction of a faculty advisor (optional: a double supervision from an industry partner)
- The thesis is often seen as the culmination of graduate work and it is the formal product.
- A Master's Thesis provides opportunities for students to plan, complete, interpret, and report research.
- Should be the result of work that is independently conducted, and that represents original research and critical analysis

Word etymology

- "Thesis" comes from the Greek θέσις, meaning "something put forth"
- Aristotle was the first philosopher to define the term thesis:
 - "A 'thesis' is a supposition of some eminent philosopher that conflicts with the general opinion...for to take notice when any ordinary person expresses views contrary to men's usual opinions would be silly"
- "Dissertation" comes from the Latin dissertātiō, meaning "discussion".
 - <<Originally, the concepts "dissertation" and "thesis" (plural, "theses") were not interchangeable. When, at ancient universities, the lector had completed his lecture, there would traditionally follow a disputation, during which students could take up certain points and argue them. The position that one took during a disputation was the thesis, while the dissertation was the line of reasoning with which one buttressed it.>> From Olga Weijers: The medieval disputatio, 2005

Content

- Need
 - to respond to a debate in the science literature
 - bring new evidence or arguments related to a specific topic
- The topic of the written thesis *must* be field-specific and related to the curricula.
- Demonstrates the student's ability to:
 - analyse a problem in a relevant field, state the task and find a solution
 - perform in an appropriate context to acquired field-specific knowledge
 - format appropriate master's thesis
 - defend master's thesis statements

A research oriented thesis is a proof of:

- Awareness and understanding of important current work in the field
- Ability to plan a research activity
- Knowledge and motivation to carry out the planned research activity
- Ability to analyze the results of the research
- Ability to draw reasonable conclusions from the research
- Ability to complete a written description of the work in the form of a well-written, properly organized thesis
- Ability to complete a thesis with potential for presentation at and/or participation in professional meetings and/or publication in scholarly journals

Must be in a thesis:

- An abstract
- Background information so that a person trained in the general subject area (e.g. computer science, numerical analysis...) but without specialist knowledge of the subject of the thesis can understand it (at some level).
- A description of the problem
- A description of the methods used to solve the problem
- A description of the solution itself
- An analysis of how well the problem was solved
- If the problem could not be solved completely, a description of the probable reasons.
- A critical analysis of the work itself
- A comparison with other work on similar problems.

Supervisor

- Role:
 - give methodological support to student,
 - make suggestions and recommendations,
 - assess student's accomplishment of interim tasks
- Obligations of the supervisor:
 - assistance in formulating thesis topic and specification if required;
 - guidance on developing the research question, solving problems;
 - provision of work in a laboratory (company, institution), necessary tools, equipment and materials;
- Is not responsible
 - for the content of Master thesis; the quality of final paper is responsibility of student.

Benefits of a thesis

- Gives the valuable opportunity to delve into interesting research for greater depth of learning in career area.
- Employers often prefer students with a thesis paper in their portfolio, because it showcases their gained writing skills, authoritative awareness of the field, and ambition to learn.
- Defending the thesis will also fine-tune critical communication and public speaking skills, which can be applied in any career.
- Graduates eventually publish their thesis work in academic journals to gain a higher level of credibility for leadership positions too.

Romanian regulations concerning master thesis

• Discussions on HG 404/2006 concerning the master studies