How to write a master’s thesis (in cooperation with a company)?

Date: 12/2018
Formal requirements

• Duration: 6 months
• Work load: 900 h, max. 120 pages
• Oral Examination: 30 to 45 minutes, presentation: 20 minutes
• Scheduled for the fourth semester
• Content
  • “The master's thesis is a scientific work that concludes the master program. It aims to demonstrate that the candidate is able to solve a problem independently within a period of one semester by applying scientific methods.”
• Competence
  • “By completing the master’s thesis, students demonstrate their ability to perform a scientific work independently, to apply scientific knowledge, to solve engineering problems, and to perform a final oral presentation. Not only technical but also method competence shall be acquired. By preparing and performing the oral presentation, students also develop key skills in decision making, taking responsibility and having self-confidence.”
Preparation

- Recommended start to look for a topic 4 months prior to registration
- **Topic has to be accepted by TU Dortmund examiner**
- **Topic has to have its focus on manufacturing technology**
- **Scientific knowledge / methodologies have to be applied**

Thesis in industry:
- Recommended to ask researchers for company to collaborate with
- After having made contact with possible partner in industry, immediately contact a researcher to discuss the topic
- Address the issue of possible non-disclosure agreement immediately
- The topic has to be elaborated in cooperation with a researcher from the university
During work on thesis

- Thesis in industry:
  - Inform supervisor from university regularly (every 4 weeks minimum) about state / whether there are difficulties
  - At least 2 personal meetings together with supervisors from university and company

- Start actual writing early (final 4 weeks are too late) and ask supervisor for comments
- Use institute’s template for word processing, citations, figures

- Scientific aspects
  - Develop a clear structure of research and thesis in advance, changes may come later though
  - Always keep in mind, that in the end there should be something that the reader has learnt from your thesis