



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