

Assessment Support for the fulfillment of degree objectives in the thesis

The purpose of this assessment support is to ensure a rectified and thorough assessment of individual theses with respect to the achievement of objectives of the Master in Industrial Management and the MSc in engineering degrees.

The student and the supervisor should, therefore, always initially make it clear whether the thesis will lead to an MSc in Engineering and if so, in which area of technology. Nearly all theses in the course ME200X lead to both a Master in the main field of Industrial Management, and to an MSc in Engineering, either immediately or later, if the student requests it and has sufficient credits in designated courses.

Assessment support is used throughout the thesis process – not just at the final assessment. It should continuously be included as a basis for reconciliation between the student, the supervisor, and the examiner; and is also used within Indek's seminar series so that the different goals can be discussed in connection with various steps in the process.

The assessment template is designed to cover the objectives of both degrees (Master in Industrial Management and MSc in engineering) without having to use two sets of partially overlapping targets.

Final grading of the thesis is done with the formal assessment criteria that is used for all theses at KTH. Assessment support is, therefore, in itself not a basis for grading, but all eleven points below have to be met (with ☺ or ☹) for the thesis to be examined.

1. Demonstrate advanced knowledge in industrial management, including advanced insights into current research and development

☺ Advanced knowledge in current research and development work within the field of industrial management is demonstrated. The work utilizes knowledge from studies on an advanced (master) level in industrial management. An extensive review of existing literature as well as a reflection on how the work is linked to the field of industrial management are presented. This adds in a clear way to new knowledge in industrial management. The work demonstrates the ability to make an independent contribution to the field.

☹ Advanced knowledge in current research and development work in the field of industrial management is demonstrated. The work utilizes knowledge from studies on an advanced (master) level in industrial management. An extensive review of existing literature as well as a reflection on how the work is linked to the field of industrial management are included.

☹ The link to industrial management is weak or missing in the thesis. Knowledge from studies on an advanced (master) level within industrial management is not utilized. The literature summary and the reflections on how the work is linked to the field of industrial management has its weaknesses.

2. Show substantive methodological knowledge in industrial management

☺ Potentially relevant theories, methods and concepts in engineering and science have been identified. A well-motivated choice of theory and method has been made. Selected theories and methods have been applied in a correct and innovative way. The work demonstrates a deep and broad knowledge when it comes to methodology.

☺ Potentially relevant theories and methods in engineering and science have been identified. A well-reasoned and appropriate selection of both theories and methods has been made. The methods selected have been applied correctly.

☹ The selected theories and methods are not sufficiently relevant for the work. The student has not demonstrated sufficient proficiency with the selected theories and methods.

3. Show ability to contribute to research and development, thus contributing to the development of knowledge

☺ The contribution to research and development, and how this contributes to the development of knowledge, is adequate and reported in a relevant way. It is clear if the contribution is theoretical, methodological, analytical and / or empirical.

☹ The work cannot be sufficiently linked to research or development.

4. Show ability to identify, formulate and deal with complex issues holistically, critically, independently and creatively, and to evaluate this work

☺ The report presents a clear and well-defined research question, objective and aim. The research questions, the objective and the aim have been processed adequately, creatively, critically and reflectively. There is a clear link between the research question, the objective, the results, the discussion and the conclusions. The report's conclusions are well-founded and correct. The work has been evaluated and this has been included in the report.

☺ The report has a clear, distinct and relevant research question. The question has been processed adequately and contains some form of originality. There is a clear link between the question, the findings and the conclusions. The report's conclusions are well-founded and correct. The work has been evaluated and this has been included in the report.

☹ The research question is unclear or missing. Relevant methods are not used. The report does not include an answer to the question raised. The conclusions are incorrect.

5. Show ability to plan and carry out advanced tasks within specified limits

☺ A realistic work plan has been formulated. The deadlines which have been communicated and established have been respected during the implementation of the work and are also described in the report. The adjustments that have been necessary for the implementation have been documented regularly and communicated clearly with the supervisor.

☹ The work has not followed the established deadlines, nor have relevant factors for deviations been reported.

6. Show ability to create, analyze and critically evaluate different technical solutions

☺ The report addresses new solutions that have been analyzed and evaluated critically and systematically. Alternative solutions have been produced and processed meaningfully and comprehensively.

☺ The report suggests solutions that have been analyzed and evaluated critically and systematically.

☹ The work has not suggested solutions and analyzed and evaluated these critically and systematically.

7. Show ability to critically and systematically integrate knowledge

☺ The work and the report integrate knowledge and methods from multiple fields in an innovative, clear, systematic and critical way.

☺ Relevant knowledge and methods have been integrated, applied and reported.

☹ Areas of relevance to the work are not reported or not used. The selected and acquired knowledge is not reported clearly and lacks justification.

8. Show ability to, in speech and writing, clearly present and discuss conclusions and the knowledge and arguments that underpin these

☺ The report is very well written. Overall, the structure and layout are of very high quality. The work has also been presented verbally in an adequate and pedagogical way.

☺ The report covers the selected area with relevant and correct language. Overall, the structure and layout are of good quality. The work has also been presented verbally in an adequate and pedagogical way.

☹ The report lacks adequate language processing, which means that the work cannot be easily understood or assessed based on the report. The oral presentation of the work has been inadequate.

9. Show ability within the context of the specific thesis to identify the aspects that must be answered in order for sustainable development to be considered

- ☺ The thesis reports and explains the chosen methods and discusses results from a perspective with a focus on sustainable development.
- ☹ The thesis does not consider this aspect, even though the examiner deemed it to be relevant to the thesis.

10. Show ability to make judgments with respect to the relevant scientific, social and ethical aspects and awareness of ethical aspects of research and development

- ☺ The report presents a scientific approach and accounts for relevant social and ethical assessments, and accounts for the possible ethical implications of the work performed.
- ☹ Scientific, social and ethical issues are not considered, even though the examiner deemed them to be relevant to the thesis.

11. Demonstrate the knowledge and ability required to work independently as a Master in Industrial Management and as an MSc in Engineering, and to participate in research by having implemented the thesis

- ☺ The thesis was independently conducted without extraordinary support measures or adjustments needed. No extra additional resources have been needed for fulfillment of the work.
- ☹ The student carried out the work with reasonable support.
- ☹ The student required an unreasonable amount of support. These support measures have made it likely to believe that the student isn't able to work independently after graduation.