

INSTRUCTIONS FOR THE EVALUATION OF A MASTER'S THESIS¹

Evaluation is based on the final content of the thesis. If the supervisor has significantly assisted the author regarding to an aspect, one point can be subtracted from that aspect. This applies to items 3, 4, 6, 9 and 10. The evaluation criteria below are guidelines, and should be applied with individual consideration.

Aspect	Criteria for evaluation
1. Scope of thesis 1-3 points	<ol style="list-style-type: none"> 1. Relatively limited scope. 2. Requires knowledge of a number of themes. 3. Comprises several themes and shows author's ability to compare and prioritize them.
2. Challenge 1-3 points	<ol style="list-style-type: none"> 1. Basic studies provide sufficient theoretical background for the thesis. 2. Apart from the above, requires ability to apply the latest knowledge and methods of the theme. 3. Very demanding theoretically or in implementation (e.g. basic theory of the theme must be studied and applied in modelling or quantitative evaluation of phenomena).
3. Outlining of the theme 1-5 points	<ol style="list-style-type: none"> 1. The author has great difficulty in defining the problem. The thesis is not logical, nor are the presented facts or solutions well justified. 2. Shortcomings in the logical structure which make it difficult for the reader to understand the applied methods and presented solutions. 3. Consistent structure. 4. Clear, consistent structure. The main issues are appropriately emphasised making it easy to evaluate the applied methods and achieved results. 5. Clear, consistent structure with appropriate emphasis. It also shows the author's thorough knowledge of the main issues in the problem.
4. Introduction to the problem and state of the art 1-5 points	<ol style="list-style-type: none"> 1. Critical shortcomings or mistakes in introduction to the problem and previous research. 2. Superficial, stereotyped or inaccurate introduction to the problem. 3. Main issues and methods applied in the solution of the problem are comprehensible. 4. Introduction of the problem makes it possible for the reader to compare the applied methods and results to the state of the art in the field. 5. Comprehensive, in-depth introduction. Prior research or technical solutions have also been considered so that the methods used in the thesis are justified in relation to the state of the art in the field of engineering or science in question.
5. Achievement of aims 1-5 points	<ol style="list-style-type: none"> 1. The aims have not been achieved. Obvious shortcomings in solution of the problem. 2. The aims have not been fully achieved. Minor shortcomings in the solution of the problem or insufficient proof or documentation regarding achievement of aims. 3. The essential aims have been achieved. 4. The essential aims have been achieved better than expected; swift performance, fresh viewpoints into the problem. 5. The essential aims have been achieved better than expected. The thesis has remarkably contributed to research and development or achieved scientifically significant results that have been published in a prominent publication.

¹ Translated into English by Ms. Maritta Juvani.

Aspect	Criteria for evaluation
6. Author's evaluation of results 1-5 points	<p>All presented results, such as numeric results, simulations or measurements, must be evaluated and analysed. The author must describe how the result was obtained, what impact the hypotheses or measuring setup have on the results etc. The results must be compared with the theory, possibly with results presented in other sources, as well.</p> <ol style="list-style-type: none"> 1. Results have not been assessed in relation to set aims. 2. Assessment of results is superficial or inadequately justified. 3. Results have been assessed in relation to set goals and the evaluations are properly justified. 4. Results have been assessed in relation to set goals, compared with results presented in other sources and the evaluations are properly justified. Possibilities for further development have been considered as well. 5. Results have been compared with set goals and are clearly and properly justified, their general significance to modern engineering or science has been considered and their significance to the company, organisation or project has been discussed.
7. Significance of results 1-5 points	<p>Significance of the results to the employer and to the field of engineering or science must be discussed.</p> <ol style="list-style-type: none"> 1. Minor significance. 2. Significance smaller than expected. 3. Expected significance. 4. Significance greater than expected. 5. The thesis introduces a remarkable improvement or new result. The thesis may be published in a prominent publication or patented.
8. Initiative 1-3 points	<p>Student's ability to work independently and need for guidance is assessed. The supervisor's duty is to counsel and guide the students but not solve problems for them.</p> <ol style="list-style-type: none"> 1. Passive. 2. Normal performance. 3. Active, familiar with thesis work, manages scheduling and meetings appropriately.
9. Language 1-5 points	<p>Clarity and legibility of text are reviewed as well.</p> <ol style="list-style-type: none"> 1. Obvious shortcomings in language such as linguistic and spelling errors and incorrect terminology. 2. Minor shortcomings such as poor legibility, undue use of acronyms and clumsy sentences. 3. Impeccable language. 4. Impeccable and clear language. 5. Impeccable, clear and revised language.
10. Layout (conformity with instructions) 1-3 points	<ol style="list-style-type: none"> 1. Shortcomings in the layout that undermine the general impression of the thesis or impede reading, such as too small font, unclear images or inappropriate graphs. 2. Minor shortcomings in the layout that sometimes impede the total presentation. 3. Impeccable layout (clear pictures, captions consistent with the language of the thesis).