

# Master's Theses Assessment Criteria

## Master's Programme in Data Science (DATA)

April 9, 2024

- The matrix shows a set of factors that affect the assessment of a thesis, and outlines typical features of these factors at different assessment levels.
- Small shortcomings in one area may be compensated with better results in another. The overall impression of the thesis is key when assessing it.
- The column for grade 1 describes the minimal requirements for an acceptable thesis. **If the requirements are not met, the grade for the area is 0.**
- The proposed grade of the thesis is 0 (fail) if one or more of the assessment areas are graded as 0.

Assessment area	1	2	3	4	5
<b>1. Thesis objective and research questions</b> - Justified and insightful selection of the topic - Clarity and definition of the research task - Formulation of research questions	The research problem has not been explained or motivated clearly. The goals or topic area of the work have not been fully understood or are not apparent when reading the work.  However, some description of the purpose of the thesis is given.	Problems with outlining or delimiting the research area. The objectives are unspecific.	Well-delimited topic and objectives. The topic is not very challenging.	A challenging research topic, well outlined with a focus on the essential. The research setup is described in suitable detail.	The topic is challenging/significant enough to warrant a scientific publication.
<b>2. Scholarly framework and use of sources</b> - Theoretical background and its connection to the research task - Selection and definition of the concepts used - Selection of sources - Analytical discussion and use of research literature	The work shows significant shortcomings in the knowledge of the research area. Few sources have been used, or the sources referenced are irrelevant or sub-quality.  However, some relevant scientific articles or books are cited.	Shallow knowledge of the topic or the writer's own input is small. Few or sub-quality source references. Not critical enough.	The work shows the writer is familiar with the research topic through background literature. The topic and literature were mainly analysed critically.	The writer shows good command of the topic. Comprehensive source material of good quality.	Excellent in-depth command of the topic area based on high-end scientific source material. The discussion provides excellent understanding and critical maturity.
<b>3. Research data and method</b> - Selection, acquisition and description of data, suitability of data for the research task - Selection and description of the research method, suitability of the method for the research task - Mastery of the research method - Ethical issues and their consideration	Significant shortcomings in choice of methods, data, and analysis.  However, some relevant methods and materials are used correctly to obtain results.	The writer has mainly used good research methods and data, but the work contains some problems or inconsistencies in the choice of data and analysis.	The research methods and data are suitable for the problem, and their choice is well argued. The analyses are mainly justified.	Good and well-argued use of research methods and data, clearly based on scientific method literature or scientific tradition.	The work is excellent when it comes to research methods and data selection. The methods have been analysed in depth.

Assessment area	1	2	3	4	5
<b>4. Presentation of thesis results</b> - Logic and clarity in reporting results - Addressing of the research task and questions - Illustration of the results (e.g., relationship of figures and tables to text)	<p>Significant shortcomings in all areas of reporting the results.</p> <p>However, there is some presentation of research results.</p>	<p>The work shows that the writer has some concept of reporting research findings but clear shortcomings in communicating them. The significance of the results remains partially unclear.</p>	<p>The findings have mainly been reported in a clear and logical way. The use of pictures, figures, tables is mostly good. The results answer the research questions and are feasible.</p>	<p>The findings are reported in a clear and logical way. The use of pictures, tables and drawings supports the analysis of results. The work ponders how generalizable the findings are.</p>	<p>The reporting of findings and use of pictures, tables, and drawings is well considered and apt. The findings are applicable in further research and/or industrially applicable. The results have the potential for publishing.</p>
<b>5. Discussion and conclusions</b> - Critical and ethical examination of the thesis process and results - Assessment of the reliability of results - Analysis of the relationship between thesis results and previous research - Justified and insightful conclusions - Presentation of application opportunities and topics for future research	<p>Conclusions and discussion are mostly missing or very brief.</p> <p>Nevertheless, there is some discussion of how the work done and results obtained are related to the topic of the thesis.</p>	<p>The work shows the writer's own input. On the basis of the conclusions and discussion, however, the writer does not have a clear concept of the significance of the findings.</p>	<p>The writer's own input is evident in the conclusions and discussion of results.</p>	<p>The writer has understood the phenomena correctly and included their own input and evaluation.</p>	<p>The core matter has been deeply internalised, and the conclusions and evaluations are clear and to the point. The discussion of findings may even show an aptitude for independent, critical, and innovative research.</p>
<b>6. The thesis as an academic text</b> - Scholarly argumentation and academic writing - Thesis structure - Coherent content and language - Mastery of scholarly conventions (e.g., referencing technique and list of references) - Spelling and grammar - Layout and finalisation	<p>The text does not follow a scientific style but is, e.g., list-like or unpolished.</p> <p>However, the reader can mostly follow the communicated arguments, ideas, and thoughts. The thesis is structured into sections and paragraphs.</p>	<p>The writer has divided the text into logical parts, but the parts are imbalanced. Room for improvement in language and use of source references.</p>	<p>The language is exact. The terms have been defined. The style of presentation varies, but the disposition is clear and progresses well. Clear and well argued pictures. Well polished.</p>	<p>The text runs smoothly. The presentation is consistent in style. The use of pictures and tables is well justified. Flawless use of source references. The whole text is logical and consistent when it comes to research questions, description of research setup, findings and conclusions.</p>	<p>The presentation is technically camera-ready. Discussion is providing excellent understanding and knowledge of the entire topic, as well as critical maturity. The scientific results have been pinpointed with care with the help of pictures and tables. Excellent finishing polish. Language, disposition, structure and the contents of the different parts follow good scientific practice.</p>
<b>7. Work during the thesis process</b> - Receipt and use of feedback, relationship between independent input and supervision - Adherence to thesis schedule and time management - Systematic planning and progress of thesis work	<p>The completion of the work has not been predictable. Has required a great deal of supervising resources to bring the work to an acceptable form.</p> <p>The author's own contribution is recognisable.</p>	<p>The work has progressed at varying speeds, which has made supervision challenging.</p>	<p>The writer has matured into independent work during the thesis process. The work has primarily followed the allocated timetable.</p>	<p>The writer has quickly matured into independent work during the thesis process. The work has typically followed the allocated timetable.</p>	<p>The work has been very creative and independent. The work has progressed at a good speed the whole time.</p>