

Criteria for the evaluation of doctoral theses in the Faculty of Mathematics and Science (valid from August 1, 2026)

Doctoral theses are graded according to the scale *Fail - Pass – Pass with distinction*. The grade *Pass with distinction* is awarded to outstanding theses, those comprising the top 10 % of theses in the discipline.

The criteria below should be considered to the extent applicable to the research field and the thesis in question. The thesis may contain one or more of the shortcomings specified in the criteria; the grade should be determined based on the severity of these shortcomings.

| | Fail | Pass | Pass with distinction |
|--|---|---|---|
| The scope of the topic, its treatment, and the scientific quality of the thesis | <p>The thesis does not meet the requirements for a doctoral thesis in quantity and/or quality.</p> <p>There are apparent deficiencies and/or severe errors in several sections of the thesis and/or parts of the thesis have been plagiarized and the thesis does not adhere to good scientific practice.</p> | <p>The thesis meets the requirements for a doctoral thesis in quantity and quality.</p> <p>The errors and shortcomings are overall minor.</p> <p>The thesis follows good scientific practice.</p> | <p>The thesis meets the criteria for a grade “Pass” and, in addition:</p> <p>The thesis is clearly among the best in the research field and contains significant new scientific knowledge.</p> |
| Theoretical background of the research | <p>The research is inadequately linked to the theoretical background of the topic and/or the development and history of the research field have not been sufficiently considered.</p> <p>The use of literature is one-sided, incomplete, and/or incorrect.</p> | <p>The research is essentially linked to the theoretical background of the topic. The theoretical background is addressed at a sufficient level, taking into account the development and history of the topic.</p> <p>The use of literature is quantitatively and qualitatively appropriate and sufficiently diverse.</p> | <p>The research is linked to the theoretical background of the topic. The theoretical background has been comprehensively and diversely addressed, taking into account the development and history of the topic.</p> <p>The use of literature is quantitatively and qualitatively comprehensive, relevant and critical.</p> |

| | | | |
|---|--|---|---|
| <p>Research methods</p> | <p>The terminology and concepts of the research field are systematically used incorrectly.</p> <p>There are serious deficiencies in the research material and/or research methods, or they are unsuitable for the research, or they have been used in a way that is inappropriate in the research field.</p> | <p>The terminology and concepts of the research field are presented mostly flawlessly.</p> <p>The research methods and/or material are appropriately chosen and used.</p> | <p>The terminology and concepts of the research field are used flawlessly.</p> <p>The research material is comprehensive. The research methods are topical, have been selected appropriately for the topic and have been applied appropriately and in a diverse manner.</p> |
| <p>Results and conclusions</p> | <p>The key results have been analysed inadequately, and the conclusions are presented incompletely or incorrectly.</p> | <p>The results have been analysed at a sufficient level and almost flawlessly. The key results and conclusions are clearly presented.</p> | <p>The results and/or material have been carefully and expertly analysed. The key results and conclusions are presented clearly and critically.</p> |
| <p>Author's independence and contribution to the dissertation research</p> | <p>The author's independence and/or contribution to the research are insufficient or not distinguishable.</p> | <p>The author is able to demonstrate independence as a researcher, and their contribution to the research is distinguishable and essential.</p> | <p>The author's independence as a researcher is evident, and their contribution to the research is substantial.</p> <p><i>The Assessment Board may, if it so chooses, express its opinion on the following in its statement, and the Faculty Council shall take the following into account when evaluating the thesis:</i></p> <p>The thesis is completed within the target schedule. Any delays are justified.</p> |

| | | | |
|--|---|---|---|
| <p>Appearance and language of the thesis</p> | <p>The structure and appearance of the thesis do not meet qualitative requirements.</p> <p>The language of the thesis is clearly deficient and contains serious errors.</p> | <p>The structure of the thesis is clear.</p> <p>The thesis is mostly flawless in appearance and language.</p> | <p>The structure of the thesis is clear.</p> <p>The thesis is flawless in appearance and language.</p> |
| <p><i>The opponent(s) and the Assessment Board will evaluate:</i></p> <p>The public examination</p> | <p>The doctoral candidate is unable to defend the thesis at an accepted level by demonstrating a good command of the research field and the content of the thesis.</p> | <p>The doctoral candidate performs well in the public examination and masters the research field and the content of the thesis.</p> | <p>The doctoral candidate performs excellently in the public examination, demonstrating an exceptional command of the research field and the content of the thesis.</p> |