

Guideline for a Doctoral Thesis Referee Report

Doctoral School Mechanical Engineering, Graz University of Technology

We appreciate the effort you give to review a doctoral thesis submitted to our Graz University of Technology and we are much obliged to you! In order to ease your task, we would like to give you few instructions as to how your critical evaluation and final judgment as expert could be structured. Before that, we will provide you with an overview of the legal requirements for a doctoral thesis at Graz University of Technology.

The structure, the content and the embodiment of a doctoral thesis is administered by the „Curriculum for the Doctoral Program in Technical Sciences at Graz University of Technology“. The most important paragraphs, which should be taken into consideration when formulating a referee report, are quoted in this section:

„In the course of the doctoral studies, a PhD thesis is to be written, which proves the doctoral candidate’s ability to master new scientific problems independently.“ (Curriculum for the Doctoral Program in Technical Sciences, TU Graz, §5, section.1)

„The PhD thesis must present the new scientific knowledge from the work accomplished and a comparison with the current state of scientific research. The work carried out must be documented consistently and the results presented in a comprehensible form. The structure of the doctoral thesis should follow the standards of the subject. For group work, the individual contributions of each student are to be clearly identified, according to § 83, para 2 UG in junction with §81 para. 3, and each contributing candidate is to submit an independent PhD thesis. It is recommended that the doctoral thesis be written in the usual language of the subject.“(Curriculum for the Doctoral Program in Technical Sciences, TU Graz, §5, section 5)

„Publication of finished parts of the doctoral thesis in international scientific media, even before assessment, is recommended. If evidence of such publications cannot be provided at the time of appointment of the referees, at least three referee reports are required. At least one report must come from outside Graz University of Technology. A final comprehensive PhD thesis is, however, indispensable. This thesis may consist of a summary of publications of the candidate ("Mantel" doctoral thesis) and must include a list of publications of the candidate.“ (Curriculum for the Doctoral Program in Technical Sciences, TU Graz, §5, section 6)

„The referees should be pre-selected 2 months before submission of the doctoral thesis at the latest. From that time on, all the referees are to be provided with a preliminary version of the doctoral thesis. Upon submission of the doctoral thesis, the officers responsible for study matters initiate the final assessment by the selected referees. As a part of the assessment, the doctoral thesis is to be graded according to the applicable rating system.“ (Curriculum for the Doctoral Program in Technical Sciences, TU Graz, §5, section 3)

„The doctoral examination is followed by the overall assessment. The assessment is based on the grades of the doctoral thesis, the doctoral examination, and the instructional classes. The overall assessment is “bestanden” (“pass”) if all three grades are positive. It is "mit

Auszeichnung bestanden" ("pass with distinction") if at least 50 % is assessed with "sehr gut" ("very good"), and if none of the three grades is less than "gut" ("good"). " (Curriculum for the Doctoral Program in Technical Sciences, TU Graz, §8)

[Curriculum for the Doctoral Program in Technical Sciences](#)

Based on the previous legal paragraphs a possible structure for your referee report shall be as follows:

(Your mailing address and affiliation, date)

Studiendekan der Fakultät für Maschinenbau und Wirtschaftswissenschaften
Technische Universität Graz
Inffeldgasse 23/I
8010 Graz
Austria

**Critical Evaluation and Expert Opinion for the Doctoral Thesis Submitted by
Mr./Mrs.....**

For the doctoral thesis entitled „.....“ by Mr./Mrs. , I give the judgment as expert based on the following:

1) Subject and Significance

- Classification of the subject and the objective of the thesis.
- Assessment of the thesis with respect to its relevance and significance for Science and Technology.

2) Scientific Content

- In which way does the work contribute to the further development of science? What are the novel ideas and contributions by the author? Assessment of **novelty** of the thesis.
- Assessment of the scientific level of the thesis.
- Does the work correspond to the requirements you place on a doctoral thesis with regard to the scientific aspects? Does the author present new scientific findings in a comprehensible manner and does the author compare these findings with the current state of scientific research? Do you acknowledge the author's ability to master, apply and further develop the fundamentals of the subject and to interpret experimental and numerical results accurately?

3) Substantial Aspects

- Please discuss the content in the individual chapters critically (a summary of individual chapters is not required).

- Assessment of the methodical approach of the author in processing the subject and in presenting the content. Assessment of **consistency** of the thesis.
- Assessment of detail global literature review by the author. Does the author exercise strict honesty about work done by colleagues, partners or competitors?
- Assessment of publications of accomplished tasks of the doctoral thesis in national and international scientific media. Does the candidate explain and defend the contributions of other authors to his or her publications? Assessment of the candidate's ability to master new scientific problems **independently**.

4) Structure, Presentation and Language

- Assessment of the logical structure. Does the structure of the thesis follow the standards common to the field?
- Is there an appropriate and complete presentation of the essential content?
- Does the author present the results in a generally comprehensible form? Are equations, tables and images presented acceptable?
- Does the thesis correspond to the requirements you place on a doctoral thesis in the technical sciences with regard to linguistic correctness and stylistic expression? Does the author use technical terms precisely?

5) Overall Assessment

- Please, give a short summary of your assessment, and a final judgment, e.g.:

The work submitted by Mr./Mrs..... contributes to the field /..... provides a major contribution to the field. The doctoral thesis submitted by Mr./Mrs fulfills the requirements for a dissertation (in the highest degree) /goes far beyond the prerequisites. I therefore recommend the (unreserved) acceptance of the thesis to the Faculty of Mechanical Engineering and Economic Sciences, Graz University of Technology / I therefore recommend to reject the thesis. According to the Austrian grading system I grade the work with “.....” (numerical digit).

SIGNATURE

The Austrian grading system ranges from 1 to 5:

- 1 = “sehr gut” – very good (outstanding performance)
- 2 = “gut” - good (generally good, but with some errors)
- 3 = “befriedigend” - satisfactory (generally sound work with a number of errors)
- 4 = “genügend” - sufficient (performance meets the minimum criteria)
- 5 = “nicht genügend” - unsatisfactory (substantial improvement necessary; requirement of further work)