Master AI Thesis: Criteria for Evaluation and Score Assignment

1 Introduction

This document informs about a number of important criteria for delivering a high quality thesis and how the thesis work is being assessed and evaluated within the master of Artificial Intelligence programme at KU Leuven.

The output of the thesis work consists of three main parts:

1. **Thesis text**

   Important points: writing style, language, readability and structure of the text.

2. **Final thesis presentation**

   This includes a 20 min. oral presentation and 10 to 15 min. questions by the jury consisting of the promotor(s), assessors and daily advisor(s).

   Important points: style of the presentation, language, structure, completeness, usage of time.

3. **Work done during the year**

   Important points: independence, quality and amount of work, potentially software-aspects.

2 General criteria

To give an indication of what is relevant towards the score, a list of important points is given here:

- **Scope of the thesis**
  - Volume of literature study
  - Embedding in/of existing paradigms, systems, software or algorithms
  - Difficulties with use of existing systems
  - Extensive interactions with end users
  - Scale of analysis/design/implementation/testing
  - Scope of research activity

- **Realization of the thesis**
  - Have the goals been accomplished?
  - Quality and method of the solution
  - Has the student been able to independently apply the basic methods of scientific research?
  - Has the student done what was asked of him/her?
  - Has the student done more than was asked and taken additional initiatives?
  - Has the student reported on a regular basis?

- **Difficulty of the work**
  - Complexity of the task
  - To which extent is shown that unmet goals were not attainable within the scope of the thesis?
  - Is there an original and/or significant scientific contribution?

- **Thesis text**
  - Correctness
  - Completeness
  - Clarity of the text
  - Structure
  - Language
  - Setting in scientific domain
  - Clear and well interpretable graphs and figures
  - Correct quotation of the scientific literature
  - Plagiarism is absolutely forbidden

- **Oral presentation**
  - Language
  - Clear and well-structured slides
  - Usage of time
  - Setting of topic for broad audience
  - Demonstration of software if any

- **Defense**
  - Response to questions
  - Clarification of presentation

- **Attitude**
  - Amount of dedication and initiative
  - Critical attitude w.r.t. literature, guidance from advisor/promotor and own results

- **Additional circumstances**
  - Was the task too difficult or too easy?
  - Was there a lack of guidance?

3   Score assignment

The score reflects all three parts of the thesis: text, presentation/defense and daily work. Note that most of the people in the jury can only base their evaluation on the text and the presentation. For this reason a discussion takes places among the promotor(s), assessors and daily advisor(s) after the thesis presentation to reach a consensus about the final score. The daily advisor and promotor can inform the other members of the jury about the student's daily work during this discussion.
    The qualitative score assignment is as follows:

- **18-20 = exceptional result**
  Excellent work in all aspects. This thesis could result in a good scientific publication according to the criteria of the research group.

- **16-17.5 = very good result**
  Very good work and high degree of originality; the student has a good grasp of the subject and has shown to possess a critical attitude.

- **14-15.5 = good result**
  Good work, good insights but the original contribution is rather limited. The student has proven to master the subject.

- **12-13.5 = acceptable result**
  Acceptable results, but some there are a few minor errors in the delivered work. Limited own contributions from the student.

- **10.5-11.5 = minimally acceptable**
  Some of the results are dubious, small errors in the delivered work. Limited or no own contribution from the student.

- **10 = absolute threshold**

- **9.5 or less = unacceptable**
  One or more of the following aspects hold for this thesis: work of inferior quality, serious shortcomings or errors, incomplete according to the minimal goals for the thesis, the student did not contribute to the work, the student has no understanding of the subject.

- **Not taken.** No thesis was presented.

  Note: In case a score lower than 10 or a score of 18 or higher is decided, the promotor needs to send a written motivation to the Master AI secretariat. This is in accordance to the guidelines of the faculty of engineering.

The above guidelines hold for the ECS, BDA and SLT option. In the SLT option the work done during the year takes the form of an internship, where the daily advisor monitors and supervises the work during the internship.