



Guidelines Master's thesis in Data Science

Credit Points for Master`s thesis	30 CP
Duration of the Master`s thesis	6 months
Registration for the master`s thesis	by submitting the master`s thesis study contract
Admission to Master`s thesis	Admission to the master`s thesis is granted to students who <ul style="list-style-type: none">• have successfully completed the module Preparation Master`s Thesis,• have fulfilled all requirements• have earned 76 CP in the modules Mathematical Foundations, Machine Learning Foundations, Systems Foundations, and Electives in Data Science.

Preparation Master`s Thesis:

The module Preparation Master`s Thesis is supervised by one or two lecturers from the field of Data Science. At least one supervisor must be a member of the Philosophisch-Naturwissenschaftlichen Fakultät at the University of Basel (habilitation or equivalent qualification required). The topic, format, scope, and end date of the Preparation Master`s Thesis are documented in a study contract, which must be approved by the supervisor, the student, and the Head of the Teaching Committee before the preparation phase begins.

The Preparation Master`s Thesis has a duration of four weeks. At the end of this phase, the results are presented in a short presentation (approximately 15–20 minutes), accompanied by a written report of approximately 10 pages. The preparation phase is assessed by the supervisor on a pass/fail basis.

Study Contract for Master`s Thesis:

Before starting the Master`s Thesis, a study contract for the Master`s Thesis must be completed and submitted to the Program Coordinator. The Master`s Thesis may only be started once the study contract has been approved by the Teaching Committee.

Duration of the Master`s Thesis:

The time allowed for completing the Master`s Thesis is six months. The period begins on the date specified in the study contract.

Formal Requirements

The Master`s Thesis is generally written in English. It may be between 30-100 pages long.

The title page of the Master`s Thesis must contain the following information:

- University of Basel
- Degree program (Master of Science in Data Science)
- Type of thesis (Master`s Thesis)

- Title and subtitle of the Master's Thesis
- Name of the student
- Name of the responsible supervisor(s)
- Place and date of submission

Submission of the Master`s Thesis

The Master's Thesis must be submitted on time via email to the supervisor and to the program coordinator. If statistical analyses, numerical calculations, or simulations have been carried out as part of the master's thesis, these must be submitted together with the thesis.

The *Erklärung zur wissenschaftlichen Redlichkeit* ([Philosophisch-Naturwissenschaftliche Fakultät > Studium > Masterstudiengänge](#)) must be signed and included in the Master's Thesis. By signing the plagiarism declaration, students confirm that they have written the master's thesis independently and have used only the sources and resources indicated in the thesis.

Confidentiality Notice

If the Master's Thesis may not be made publicly accessible, a corresponding note must be included in the declaration of academic integrity, and a short written statement must be attached to the thesis. The confidentiality notice should ideally be included in the thesis before the title page.

Presentation

After the submission of the Master's Thesis, students present their work in a university-public presentation lasting 30 minutes, followed by an oral question session. A prerequisite for the presentation is the completion of all 84 CP in the modules Mathematical Foundations, Machine Learning Foundations, Systems Foundations, and Electives in Data Science.

Grading of the Master`s Thesis

The master's thesis is graded. The thesis is considered passed if a grade of at least 4.0 is achieved. Only whole or half grades are awarded (see *Ordnung der Philosophisch-Naturwissenschaftlichen Fakultät der Universität Basel für das Masterstudium*, §9 Ab. 3).

The grade of the master's thesis has a weight of 50% in the calculation of the final master's degree grade. (siehe).

Repetition of the Master`s Thesis

A failed Master's Thesis may be repeated once. In this case, a second Master's Thesis must be written on a different topic.