# Master Thesis Structure Recommendations

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Intelligence in Learning

**Formal aspects**

- The thesis should have around 60 pages. SRH defines 40-80 pages as reasonable range for a master thesis.
- The font for the main body of the text should be Arial 11 pt or equivalent. For table or diagram captions, please use the next lower font size. Set the line spacing to 1.5 lines. The main body of the text should be formatted in full justification rather than left justification.
- Special care needs to be taken for the bibliography. It is mandatory that all sources are cited properly (books, papers, web pages, blog articles, software, GitHub repositories, ...) and referenced within the text.
- The bibliography must follow academic standards. It is mandatory that authors (surname and firstname), title and year are specified, and additional information depending on the type of reference (journal name and number, conference name, pages, URL for web article).
- Citation should consistently follow one of these standards:
    - ISO 690 numeric / IEEE style (preferred): References in square brackets, for example [1] or [2,3,5].
    - ISO 690: References with authors' surnames and year, for example (Graham, Knuth and Patashnik, 1994).

**Outline Proposal**

- Chapter 1: Introduction
    - Motivation
        - Introduction of the application scenario and its challenges
        - What are the roles / people in the application domain that are affected? How could they benefit from the results of your thesis?
    - Problem statement / Research questions
        - What specific application problems are addressed by the thesis?
        - What data science questions are addressed?
- Chapter 2: Foundations
    - Formal introduction of the problem, inputs and outputs
- Chapter 3: Related Work
    - Short explanation of 3-10 papers that have previously proposed some solutions
    - Short statement for each paper how the approach in the thesis is different
- Chapter 4: Methodology
    - High-level description of the approach taken in the thesis
    - Architecture of data pipeline, ML algorithms, ...
- Chapter 5: Evaluation
    - Data used for validation (explanation of specific data sources)
    - Description of experiments, model accuracy
    - Accuracy and limitations of the approach, comparison with other methods
- Chapter 6: Conclusion
    - Summary (What can be learned from the thesis? How does it benefit the application domain?)
    - Outlook / Future work