

Guidelines on BPS Internship Report and Master Thesis

This document provides recommendations for the BPS internship report and master thesis. Both are technical reports and should follow the usual rules and conventions for technical documents. The reports document and prove that the author is able to solve a technical task in a given timeframe using scientific methods. Besides these guidelines, please also check the examination rules.

1 Content and structure

The report documents the own work carried out and the results achieved. It typically has the following structure

- i. Official titlepage
- ii. Abstract
- iii. Declarations (only for the master thesis)
- iv. Acknowledgement (optional)
- v. Table of content
- vi. List of figures and tables
- vii. Abbreviations
1. Introduction: Motivation / objectives from the company's perspective, company background, problem statement for your work, desired outcome, starting point.
2. Technical background: Describe aspects and technologies, which are needed to understand the report/thesis and which cannot be considered to be known (i.e. which are not included in the mandatory courses of your curriculum).
3. Concept: Analyze the requirements and propose an architecture. Describe the state of the art, review relevant publications (has this problem never been solved before? are there similar approaches out there?). Compare and discuss different technical options. Describe why you selected a certain solution.
4. Implementation: Describe what you have implemented. Make sure, to clearly identify parts which have been developed by you and parts which already have been there. Visualize your outcome.
5. Verification and Validation: Describe your testing strategy, the test result and the final status of your implementation. Prove, that your solution solves the problem stated before
6. Conclusion and Outlook: Summarize your work and discuss the outcome. What are possible next steps?
7. References
8. Appendix: Additional documents as needed
9. CD with a PDF of your thesis and additional documents (code, drawings,...) as needed (only required for the master thesis)

For the forms, please check: <https://mse.h-da.de/enrolled/internship-master-thesis-final-certificate>

2 General format

- A4 format
- Hardcover binding (only for the master thesis). Only paper material, no plastic, no wire binding!
- Number of pages:
 - BPS between 30 and 40
 - MT between 70 and 120
- 12pt Times New Roman or 11pt Arial
- 1,3 row pitch au
- Provide numbers for headlines, figures, tables and formulas
- Provide quotes for text and figures which have not been created by you. NOTE: Quoting text without following the citing rules will be considered as plagiarism and may lead to a non-acceptance (i.e. mark 5) of your thesis!
- Use correct English spelling and grammar

3 Quotation

Text elements, which are copied 1:1 from an external source, have to be placed in quotes. The source has to be mentioned after the quoted block. If text elements or figures are not taken word by word, the quotes are omitted. Every quotation has to be identified by a unique identifier, consisting of a 3-5 letter abbreviation of the author and the year. If several documents from the same author and year have to be quoted, a letter may be added after the year.

Examples:

Abbreviations:

- [Mueller-2012]
- [SPAN-2015a]
- [SPAN-2015b]

Usage in the text:

The statement "The report documents the own work carried out and the results achieved." [MSE-2015] means, that explaining the technical background should only be a small part of the report.

List of quoted documents:

Please use the following examples as reference.

- | | |
|---------------------------|--|
| [Book-2006] | Family Name, First Name [;additional names]: Title [: Subtitle] [Edition].
Publisher, Location, Year. [Page x-y.] |
| [Journal-2006] | Family Name, First Name [;additional names]: Title [: Subtitle]. In: Title of
journal, Year, Edition. Page x-y. |
| [Technical
paper-2006] | Family Name, First Name [;additional names]: Title [: Subtitle]. In: Title of
transcript, Publisher [, scientific society], Conference, Year. Page x-y. |
| [Internet-2015] | Organization/Company/Author: Title [: Subtitle]. URL [, date of the page
creation]. Visited on: Date. |