



University of Applied Sciences

**HOCHSCHULE
EMDEN·LEER**

**FB Technik, Maschinenbau
Prof. Dr.–Ing. Agnes Pechmann**

Requirements and Information for project and thesis works

A Guideline

09.04.2024

Table of Contents

1	Introduction	3
2	Requirements for being supervised	4
2.1	Appointments/Meetings & status updates	4
2.2	Meeting minutes	4
2.3	Restricted work (Sperrvermerk)	4
3	Information about writing a brief exposé of the project topic	5
4	Requirements for project documentation.	6
4.1	Structure of the report	6
4.2	Formatting requirements for reports	7
4.2.1	Margins	7
4.2.2	Fonts	7
4.2.3	Font sizing	7
4.2.4	Caption for figures, tables, and formulas	7
4.3	Tips and requirements for the content	7
4.3.1	Form sheets: Declaration of Authorship and Confidentiality Clause	7
4.3.2	Abstracts and Introduction	8
4.3.3	References	8
5	Project submission and colloquium	10
6	References	11

1 Introduction

This document provides information on guidelines and requirements for writing project reports and final theses under the supervision of Prof. Dr.-Ing. Agnes Pechmann and/or members of her research team.

The guidelines and requirements presented here do not claim to be complete. In general. The following basic principle is valid:

"In case of uncertainty, asking questions is the best solution for getting help!"

Each student is responsible for asking for him/her necessary questions and to organize appointments.

Before any kind of project can be started or supervised, the student must

- **hand in a brief exposé to the supervisor**
- **get acceptance from a supervisor, and**
- **must acknowledge and accept the requirements of Prof. Pechmann and her team for the supervision,**
 - o **handling of appointments & status reports**
 - o **meeting minutes**
 - o **handling of restricted work**
 - o **using citavi**
 - o **hand in summary of project/thesis work as poster.**

In addition, depending on the type and content of work additional requirements might apply.

2 Requirements for being supervised

To support the student to achieve his or her best possible result, Prof. Pechmann and her team have defined expectations and requirements on how the student should conduct, report on the progress and document his or her work.

2.1 Appointments/Meetings & status updates

It is important to schedule/organize appointments and other deadlines early enough, especially toward the end of the project time. Though meetings on short notice are possible, you cannot take it for granted.

If not further discussed, it is expected that the student will **schedule weekly appointments** to clarify upcoming questions and further approaches regarding the work with the supervisor. For projects done in companies, the number of appointments must be clarified with the supervisor beforehand.

Once a week, the student must send a **short status update** by e-mail regarding the work status (preferably on Friday). The status report (max. ½ page) should contain an

- informal summary of the work done,
- deviations from the planned work/schedule and
- other relevant news/issues for their supervisors.

The purpose is to get a quick overview of the work status. The mail must be sent to all university supervisors. The template on the lab website is to be used:

<https://www.hs-emden-leer.de/studierende/fachbereiche/technik/labore-im-fachbereich-technik/produktionsplanung/richtlinien-dokumente-vorlagen>

2.2 Meeting minutes

After meetings, students must send a short summary of the content, deadlines, and agreements to the professor and other involved supervisors.

The minutes of the meeting can be written as e-mail or in the form of an extra document (see template) attached to the mail. The minutes are due by the following day.

The aim of the meeting minutes is a consistent understanding of the discussed points by all parties. A template can be downloaded on the following website:

<https://www.hs-emden-leer.de/studierende/fachbereiche/technik/labore-im-fachbereich-technik/produktionsplanung/richtlinien-dokumente-vorlagen>

2.3 Restricted work (Sperrvermerk)

Though, the copyright of a student work lays by the student, documented results as part of the curriculum and supervised by university staff, are to be made public, minimum to the university audience. Students wishing to have their thesis work-restricted, not made available to the general reader inside or outside the university, must get approval for that from Prof. Pechmann.

Regardless of any approved restriction, students must provide a version of their work where the sensitive information is either removed or changed, e.g. by anonymizing data or must allow to use the work after a blocking period of three years.

3 Information about writing a brief exposé of the project topic

A brief exposé of the topic serves as a description and first examination of the topic. The exposé is an aid for the student and for the supervisor to ensure a common understanding of the topic itself and to **define the scope** of the work. Furthermore, an exposé gives a first idea about a possible methodology and investigation approach of the problem/topic. The exposé also contains the result of a first literature survey on the topic. A thorough literature study has to be carried out once the exposé has been accepted.

“The exposé is not part of project documentation and is a separate document!”

The document should not exceed 3 pages excluding the title page, Table of contents, appendices, etc. For assignments and projects, the document should not exceed 2 pages. The questions/keywords listed below are an aid to writing a brief exposé.

Writing an exposé for a project or thesis may take time, though it should not exceed a week of concentrated work. It is essential for all projects to have a sound understanding of the task or problem to work on.

A word template for an expose is available here:

<https://www.hs-emden-leer.de/studierende/fachbereiche/technik/labore-im-fachbereich-technik/produktionsplanung/richtlinien-dokumente-vorlagen>

essential to have a sound understanding of the task or problem to be worked on and to agree upon a defined scope.

4 Requirements for project documentation.

The result of a project or thesis work is documented in a project report resp. the thesis. Formal requirements of the different university departments may apply for this.

Next, to the formal requirements on the work, the student is required

- to use CITAVI as a literature management system and to hand in the CITAVI file with an electronic version of the report/thesis and
- to deliver a poster on his/her work (scientific poster).

The following chapter gives an overview of the general requirements on the structure, format, and contents of the report.

4.1 Structure of the report

The structure of the report/thesis is crucial for good documentation of your work. You may use a standard structure in the beginning, During the work, while enhancing knowledge of your topic, a more comprehensive, good-fitting structure should be developed.

Documents or drafts should contain the following information/points:

- Front page (with Name of the author, Matriculation number, Official submission date, and a version number/date., Type of document and lecture)
- Declaration of authorship (if applicable)
- Confidentiality clause (if applicable)
- Summary/Abstract
- Table of contents
- List of figures (if applicable)
- List of tables (if applicable)
- List of formulas (if applicable)
- Abbreviations and Symbols
- 1. Introduction
 - o Motivation (subtitles not always necessary)
 - o Task and objectives
 - o Approach to task
 - o Structure of the report
- 2. Background necessary to understand the report (basic terms and definition, basic principles relevant to the task)
- 3. Content/Main body
-
- X. Results
- X. Conclusion and Outlook
- X. References
- Annex

In general, for headings and captions, it is recommended to use automated functions of Microsoft WORD or Latex. The pdf- version must be unlocked, and links should be usable.

4.2 Formatting requirements for reports

The following requirements are a good standard for documents. A template in the corporate design of the university can be downloaded from the following Website:

<https://www.hs-emden-leer.de/studierende/fachbereiche/technik/labore-im-fachbereich-technik/produktionsplanung/richtlinien-dokumente-vorlagen>

4.2.1 Margins

- Top: 2,0 cm
- Down: 2,0 cm
- Left: 2,5 cm
- Right: 3,5 cm

4.2.2 Fonts

- Headlines Level 1: Arial 12 pt. bold
- Headlines Level 2: Arial 11 pt. bold
- Headlines Level 3: Arial 11 pt. bold
- ...

4.2.3 Font sizing

- Text: Arial 11 pt.
- Captions for Figures: Arial 9 pt. bold (below the figure)
- Captions for Tables Arial 9 pt. (above the table)
- Captions for Formulas Arial 9 pt. (below the formula)

4.2.4 Caption for figures, tables, and formulas

All figures, tables, and formulas must be labeled. WORD provides useful functions for this problem, which are explained on the follow website:

<https://support.office.com/en-us/article/Add-captions-in-Word-82fa82a4-f0f3-438f-a422-34bb5cef9c81?omkt=en-US&ui=en-US&rs=en-US&ad=US>

The next link explains how to make s list of the captions (List of Figures, List of Tables or List of Formulas):

<https://support.office.com/en-us/article/Create-a-table-of-figures-c5ea59c5-487c-4fb2-bd48-e34dd57f0ec1?omkt=en-US&ui=en-US&rs=en-US&ad=US>

4.3 Tips and requirements for the content

4.3.1 Form sheets: Declaration of Authorship and Confidentiality Clause

The form sheets given should be adapted to the paper or final thesis. Any special regulations from companies (e.g. to add more specific information) should be discussed with the supervisor in advance.

The confidentiality clause is allowed only with prior consent by the supervisor, therefore, it has to be discussed in advance.

For a thesis with accepted confidentiality, the 3rd. copy of the work deviates from the first two.

Attendance at a colloquium should be open for students and members of the research staff.

Declaration of authorship:

Use the official version provided by the university!

Confidentiality clause (need special acceptance of supervisor):

This **[Kind of report]** is based on internal and confidential information of the company **[name of the company]**. Publishing the thesis, part of it and/or making it accessible to third parties other than necessary within the grading process at the university without the explicit permission of the supervisor and the author is not allowed.

A separate version where company sensible data is cleansed is made available for university public use, e.g. teaching.

OR

After a period of three years, the results can be used (in anonymized form) for research and teaching purposes.

Place, date

Signature
(First and last name)

4.3.2 Abstracts and Introduction

The following link leads to a useful website about writing technical papers, especially abstracts and introductions:

<https://cs.stanford.edu/people/widom/paper-writing.html>

4.3.3 References

Projects need to be carried out according to the rules of scientific work and students must follow the scientific conduct at all times.

“Plagiarism is a criminal act in Germany!”

Any document, that contains plagiarized text or other intellectual property which is not cited correctly will not be accepted! Be aware that the supervisor checks the documents with software tools. If any severe plagiarism is detected after a degree, the degree can even be revoked.

The citation style of scientific papers should follow the APA 6 e.d. (author, date, page).

For more information about the APA Style:

https://files.taylorandfrancis.com/tf_APA6.pdf

The direct citation of literature sources should be used as little as possible since copy and paste of literature does not show the student's understanding and amount of work. Paraphrasing is encouraged! Using the same words with using a different sentence structure is not paraphrasing.

A scientific paper always includes current primary, secondary and if needed tertiary literature sources. This is also valid for scientific articles, journals, and magazines. Particularly for internet sources, the same quotation style as for primary literature sources is valid. Additionally, the web address (URL) and date of access have to be added. Any source which is not reproducible cannot be used in a scientific paper. Internet sources such as blogs, forums, scripts, and other insecure sources should, if possible, not be used. (This does not account for if your work is an analysis of the content of these sources.)

A Citavi- literature database must be maintained in parallel and is a part of the report submission. The program is licensed by the university. It can be downloaded from the following website:

<http://www.citavi.de/en/download.html>

For the Introduction of Citavi please use:

<https://www.hs-emden-leer.de/en/university-of-applied-sciences/organization/departments-a-z/university-library/collections/electronic-collections/software/citavi>

5 Project submission and colloquium

The submission of a paper must be discussed and agreed with the first supervisor.

If specific formal requirements exist (e.g. form sheets and regulations for specific courses of study) it is mandatory to clarify them in advance. This also includes organizational aspects and tasks to be done before the submission deadline.

The submission of a paper/project/thesis contains the following.

- The paper in digital form (Word or PDF) and as hard copy. Except for thesis reports, hard copies are to be stapled. (A big stapler can be found in T230).
- Temporary working files (tables, reports, diagrams, programs, simulations, etc.)
- Literature database (Citavi)
- **Poster (70mm * 100mm)**
- Additional required documents (depending on the course of studies e.g. Erasmus program, etc.)

Colloquium / project presentation:

The purpose of a presentation is to show the project results as well as evaluate the work and discuss further works in a precise and understandable way. The presentation needs to be adapted to the target audience, mainly the supervisors. It offers the opportunity for the presenter to demonstrate his/her profound knowledge of the work and to discuss the topic and the results.

The timeframe for a presentation should not exceed 20 min (thesis) resp. 10-15 min (project).

A rule of thumb says that a presenter needs approx. 2 min. per slide.

A template for the corporate design of the university can be downloaded from the university website (general template or go the lab website. Please, take notice of the different colors of the departments. Department of Technology uses green.

<https://www.hs-emden-leer.de/studierende/fachbereiche/technik/labore-im-fachbereich-technik/produktionsplanung/richtlinien-dokumente-vorlagen>

6 References

Brink, A. (2007) *Anfertigung wissenschaftlicher Arbeiten: Ein prozessorientierter Leitfaden zur Erstellung von Bachelor-, Master- und Diplomarbeiten ; in acht Lerneinheiten*, 3rd edn, München, Oldenbourg.