**Formal preparation of MSc Diploma Thesis**

**(Chemical Engineer)**

**Diploma Thesis**

Thesis must be originally created by the author meeting all criteria of processing the informational sources. None of thesis may have characteristic of plagiarism, it cannot break authorship rights of other authors. The author is obliged to cite properly all used informational sources, to name and specify all results published by different authors or author teams, to precisely describe all used methods, techniques and procedures of other authors or author teams, and to document all laboratory and research results of other authors or author teams.

**Extent**

The joint extent of the literature part and experimental part (without introduction and conclusion) should be minimum 50 pages; maximum extent of the completed thesis can be 80 pages with Annexes but without Appendices; ratio of the extent concerning the literature part to the experimental part should be 1/3:2/3 approximately. Deviation from the extent limitations can be allowed only in a justifiable case based on a preliminary, written decree of the Chemical Engineering MSc Committee.

**Formal requirement**

The layout of Diploma Thesis is in accordance with Directive of Pannonia University Faculty of Engineering.

In the following chapters the layout used by electronic preparation of thesis in MS Word is described.

**Manuscript, margins and lining**

The text size and style:

* for standard text size 12 pt is used, script is Times New Roman, 0pt above and 6pt under the paragraph
* for main headings size 14 pt is used, first letter is capital, script is **Times New Roman bold**
* for sub-heading size 12 pt is used, first letter is capital, script is **Times New Roman bold**
* The footnotes (under line) are to be inserted via function “Insert footnote”. The script size of footnote should be set to 10 pt.
* Upper and lower margins are set to 2,5 cm, right margin is 2,5 cm and left margin is 3,5 cm. Portrait page orientation, format A4.
* Line spacing set to 1.5, the first row of new paragraph is beginning with a tabulator.

**Numbering of chapters**

By numbering of chapters Arabic numerals are used. The numbering starts with No. 1. Each chapter can be divided to several sub-chapters. Between the numerals marking sub-chapters of various levels small dot is to be inserted. There is no dot after the last number. The dot is missing after the title of chapter or sub-chapter, too.

**The structure of the Diploma Thesis work**

Cover page

Title page

Thesis initiation form (original, signed)

Declarations

Abstract in English language with keywords

List of illustrations and tables (optional)

List of abbreviations and symbols (optional)

Thesis contents

Introduction

1. Literature survey
2. Practical part
3. Result and discussion
4. Conclusion

References

Acknowledgement

Diploma Thesis

Author (Student’s name)

Year

**University of Pannonia**

Institute/Department

*Chemical Engineer MSc*

Diploma Thesis

Title

Author (Student’s name)

Supervisor:

Name of supervisor

Consultant:

Name of consultant (if relevant)

Year

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| **Diplomamunka feladat vegyészmérnök mesterszak** |
| Szakirány: |  |
| Diplomamunka címe: |  |
| Diplomamunka kidolgozásának helye: |  |
| Témavezető neve, beosztása: |  |
| Feladat részletezése (speciális követelmények, határidők):  |
| Dátum: |  |
|  |  |
| Témavezető aláírása | Intézeti tanszékvezető aláírása |

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| **Thesis Work for Chemical Engineer MSc** |
| Specialization: |  |
| Title of the Thesis: |  |
| The Place of the implementation: |  |
| Supervisor’s name, position:Consultant’s name, position: |  |
| Task description (special requirements, deadline):  |
| Date: |  |
|  |  |
| Signature of Supervisor | Signature of head of department |

**DISCLAIMER**

Undersigned *<<Student’s name>>* hereby declare that the *<<Diploma work title>>* titled work has been written at the University of Pannonia, *<<Institute/Department name>>* in order to achieve master degree in Chemical Engineering.

I also declare that the results in the Diploma Thesis (both in theoretical and practical parts) were the result of my own work. To achieve these, only the given resources and only the given references were used. I also followed the rules for reference during the preparation of the Diploma Thesis and I have avoided any form of the plagiarism.

I also agree that the results of the diploma work should be used for any purposes by the University of Pannonia, *<<Institute/Department name (Supervisor, Consultant)>>* for its own purposes in the future.

Place, Date

……………………………………..

Name

Undersigned, *<<Name of the supervisor>>* supervisor declares, that the thesis was written by *<<Student’s name>>* on the University of Pannonia, *<<Institute/Department name>>* in order to achieve master degree of Chemical Engineering. The thesis is permitted to proceed to final defence.

Place, Date

……………………………………..

Supervisor

Abstract

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**Keywords:** 4-6 keywords

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# Introduction (18pt above and 6pt under)

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# Literature survey (18pt above and 6pt under)

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## Sub-chapter title (16pt above and 6pt under)

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### *Sub-chapter title (12pt above and 0pt under)*

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## Sub-chapter title (16pt above and 6pt under)

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# Experimental part (18pt above and 6pt under)

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## Raw materials (16pt above and 6pt under)

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## Process (16pt above and 6pt under)

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## Methods (16pt above and 6pt under)

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# Result and discussion (18pt above and 6pt under)

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## Numbering of tables and figures (16pt above and 6pt under)

Tables, figures (e.g. graphs, charts, schemas and photographs) are numbered individually from the first to the last as well as from the first figure to the last in the thesis. The number and legend of table should be before the table, the number and legend of the figure under the figure. Text size of legend is 10 pt, type Bold and centred. It is compulsory to refer to the figure (e.g. ***Figure 1***) and table (***Table 1***) in the text. The size of the text in table is 8-9pt.

**Table 1 (18pt above and 0pt under)**

The title of the table (0pt above and 6pt under)

|  |  |  |
| --- | --- | --- |
| **Testing substance** | **HR before administration (min-1)** | **HR after administration (min-1)** |
| Caffeine (100 mg)  | 64  | 78  |
| Theophylline (100 mg)  | 66  | 76  |
| Caffeine (100 mg)  | 64  | 78  |
| Theophylline (100 mg)  | 66\*  | 76  |
| Caffeine (100 mg)  | 64  | 78  |
| Theophylline (100 mg)  | 66  | 76  |

 \* explanatory text must be sized at 8pt with 5pt above



Figure 1 (6pt above and 0pt under)

The title of the figure (0pt above and 18pt under)

The pages are numbered from the “Introduction” chapter excluding the count of all previous pages. E.g. if the first chapter starts on the 8th page of the thesis, the first “written” number will be 1). The numbers are printed on the right bottom corner of the page.

# Conclusion (18pt above and 6pt under)

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# Reference (18pt above and 6pt under)

1. Ch. Baerlocher, D.H. Olson, W.M. Meier, Atlas of zeolite framework types, fifth ed., Elsevier, Amsterdam, 2001.
2. W.J. Hall, N. Zakaria, P.T. Williams, Pyrolysis of latex gloves in the presence of Y-zeolite, Waste Manage. 29 (2009) 797‑803.
3. https://ec.europa.eu/environment/sustainable-development/strategy/index\_en.htm (5 September 2019)

# Acknowledgement (18pt above and 6pt under)

Text of acknowledgement, text of acknowledgement, text of acknowledgement, text of acknowledgement, text of acknowledgement, text of acknowledgement, text of acknowledgement, text of acknowledgement, text of acknowledgement, text of acknowledgement, text of acknowledgement, text of acknowledgement, text of acknowledgement, text of acknowledgement, text of acknowledgement, text of acknowledgement, text of acknowledgement.