



Guidelines for Writing a Bachelor or Master Thesis

Qualifying requirements:

Bachelor:

- 1.) Six points (Studienpunkte) from the module Applied Statistics to be attained by the time of submission of the Bachelor thesis.
- 2.) One satisfactory presentation and regular attendance in "Privatissimum Statistics" (PRI)

Masters:

- 1.) Exam pass in "Multivariate Statistical Analysis I" (MVA1) (4 SWS)
- 2.) Exam pass in "XploRe Introductory Course" (XIC) (2 SWS)
- 3.) One satisfactory presentation and regular attendance in "Privatissimum Statistics" (PRI).
- 4.) A ten-page pilot paper on a given topic with corresponding Quantlets.

Confirmation by the appropriate examination office is required for 1) and 2).

Aim of the thesis:

The purpose of the final thesis is to show that you have the ability to apply statistical methods to a problem in an appropriate manner. For a bachelor thesis this means tackling a problem using mathematical statistical **or** data-analytical methods. In a masters thesis the problem must be tackled in an appropriate manner using both mathematical statistical **and** data analytical methods.

The evaluation of the thesis is orientated towards the following aspects:

- 1.) *Form* – Have the formatting instructions been observed? Is the work legible from a formatting perspective; for example, are all of the graphic elements in the correct place, or are any of the tables outside of page borders? Are there any typing mistakes, grammatical errors or incomplete sentences?
- 2.) *Statistics* – Have the mathematical statistical aspects been correctly processed? Are the statistical methods used for the problem appropriate?
- 3.) *Interpretation* - Is the work clear in relation to the formulation of the problem? Have the problems presented been adequately answered? Is the sequence of the methods applied clearly described, self-evident and understandable? Is the interpretation of the results correct, complete and understandable?

Requirements of content and form of the pilot paper and thesis:

- 1.) The work should present the author's competence in the subject and their ability to independently handle and process statistical data with the help of statistical software (for example XploRe, SPSS, Matlab, R, etc.)
- 2.) The thesis should be written in LaTeX. Any deviation from these regulations will only be permitted with prior approval.
- 3.) MD*Stat style should be used for the mathematical symbols in presentations and in the thesis. Here is an example:

– use `\stackrel{\mathrm{as.}}{\sim}` to write the symbol for asymptotic distribution, it produces

$$X \stackrel{\text{as.}}{\sim} \chi^2$$

LaTeX Source

Result

The corresponding LaTeX-source (Slides: MD*Stat Style) can be found at: http://www.quantlet.com/mdstat/products_content_right.html

- 4.) The cover page should contain the Humboldt University logo (see: <http://www.hu-berlin.de/hu/design/logo>), the name of the chair and the CASE logo (both can be found at <http://www.case.hu-berlin.de/>)
- 5.) Tables should be integrated into the text (not in the Appendix). Each table should not exceed one page. Here is an example:

<i>m</i>	KQ		Hill	
	20	50	20	50
DAFOX	3.25	2.94	3.17	2.88
ALLIANZ	2.29	2.44	2.28	2.96
BASF	4.19	4.29	4.58	4.01
BAYER	3.32	3.20	3.90	3.23
BMW	3.42	3.05	3.05	2.89
COMMERZBANK	6.58	4.67	7.14	5.19
DAIMLER	2.85	2.85	2.43	2.56
DEUTSCHE BANK	3.40	3.26	3.41	3.29
DEGUSSA	3.03	4.16	2.93	3.30
DRESDNER	5.76	4.08	4.20	4.32
HOECHST	4.77	3.68	5.66	4.05
KARSTADT	3.56	3.42	3.11	3.16
LINDE	3.30	3.35	3.87	3.37
MAN	3.83	3.66	3.17	3.45
MANNESMANN	3.19	3.85	2.84	3.22
PREUSSAG	3.52	4.11	3.57	3.68
RWE	3.87	3.78	3.51	3.54
SCHERING	3.34	4.82	3.22	3.64
SIEMENS	6.06	4.50	5.96	5.23
THYSSEN	5.31	5.36	4.67	4.97
VOLKSWAGEN	4.59	3.31	4.86	4.00

Tabelle 12.1: Naive Kleinste-Quadrate (KQ) und Hill Schätzer des Flanken-Exponenten a mit Stützpunkten m .

- 6.) Graphics should be provided with legends, as in the following example:

Vega

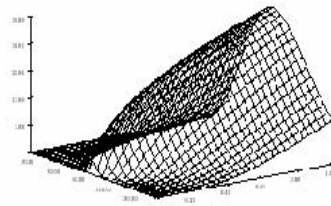



Abbildung 6.3: Das Vega als Funktion von Aktienkurs (rechte Achse) und Laufzeit (linke Achse), mit $K = 100$, $r = a = 0$ und $\sigma = 0.25$.

[3FMvega.xpl](#)

- 7.) Programs (Quantlets) should be submitted with the thesis. Each program should have  a Quantlet logo:
- 8.) All references should be prepared in AMS-style and should be quoted as in the following example: "... was used from **Bossaerts and Hillion (1993)** ... ". The list of references should be compiled in the following way:

Authors → Bossaerts, P. and Hillion, P. (1993). Test of a general equilibrium stock option pricing model, *Mathematical Finance* 3: 311-347. → Paper
Journal → Box, G. E. P. and Jenkins, G. M. (1976). *Time Series Analysis: Forecasting and Control*, Holden-Day, San Francisco. → Book

- 9.) All sources, quotes, graphics, tables etc. should be clearly identified. The thesis will be checked for plagiarism, and if found the work will be assessed as "failed".
- 10.) Cases falling outside of the above rules are to be referred to the Examination Office (Prüfungsamt).

Guidelines for thesis submission:

- 1.) Two additional copies of the thesis are required for the examination office; one of them for the chair of statistics which should be marked as follows: title of the thesis and author's name, both on the cover page and on the spine of the work in gold letters.

Daten Mining

Note the direction of the text

- 2.) The thesis should also be produced in an electronic PDF format in order for it to be uploaded onto the HU's website and be publicly available. The PDF file must comply with the requirements stipulated by the HU computer centre, these can be found at: http://edoc.hu-berlin.de/e_autoren/vorlage-pdf.php?arbeit=Dissertationen%20%C2%BB&index=index.php&nav=diss: The PDF file should then be sent as an email attachment to: stat@wiwi.hu-berlin.de.
- 3.) The period permitted to write the thesis is 90 days; this deadline must not be exceeded. The

90 day period commences on the day the topic is selected and assigned. The online version and duplicates for the chair of statistics may be handed in after the official deadline; however the assessment of the work will only be carried out when all required versions have been submitted.



Application Form for Masters or Bachelor Thesis

This form is to be kept in the secretariat of the Chair of Statistics. All signatures for submission dates can be obtained either in the secretariat or through the supervisor.

Submission of thesis by author:

Family Name: _____ Forename: _____
 Field of Study: _____ Student ID Nr: _____
 Tel: _____ E-Mail: _____
 Address: _____ Future Employer: _____

Submission of thesis:

Bachelor thesis

Master thesis

Title:	
Start Date:	
Supervisor:	

I confirm that:

<input type="checkbox"/>	I have obtained and read the guidelines for writing a bachelor and master thesis in full.
<input type="checkbox"/>	I consent to my thesis being publicly available on the Internet.
<input type="checkbox"/>	I consent to subscribing to the ALUMNI email group.
<input type="checkbox"/>	I consent to providing the secretariat with the address of my new employer or new position after completion of my studies, as soon as it is known.

_____ **Date**

_____ **Signature**

Confirmation of qualifying requirements and submission of thesis:

		Comment/Grade	Date	Signature
<input type="checkbox"/>	Ten-page paper submitted			
<input type="checkbox"/>	RDC Account set up			
<input type="checkbox"/>	Exam pass in "Multivariate Statistics" (Master/Diplom)			
<input type="checkbox"/>	Exam pass in "Statistical programming languages (Master/Diplom)"			
<input type="checkbox"/>	Six points (Studienpunkte) in module "Applied Statistics" (Bachelor)			
<input type="checkbox"/>	Presentation in "Privatissimum Statistics"			
<input type="checkbox"/>	Online version submitted			