

Technology & Software Guide for New Students of the International Masters Programs at Universität Hohenheim

Introduction

Congratulations on your acceptance to Universität Hohenheim!

This document was written by members of the International Student Representatives to provide an overview of the technological and software competencies you will need to successfully complete your masters program.

The following two pages list software (e.g. basic office software) commonly used in class and briefly describes what should you know before you arrive in Germany. Please go through it carefully to check and refresh your own skills. If you are unfamiliar with the software listed, you will quickly fall behind in your classes.

Classes at Hohenheim involve a large amount of mandatory group work that requires the knowledge listed in this document. The inability to use the software or correctly cite sources will significantly limit your participation in the group, which automatically leaves more work for your group members to complete. This is not fair to your classmates, nor you, because you won't learn as much.

Hohenheim does offer supplemental workshops for some software packages, scientific writing, presentation skills and even thesis work. But we encourage students to arrive at Hohenheim with the competencies listed below.

Basic Office Software*

Word Processing

You **must** be able to...

- format paragraph spacing, tabs, columns, page sizes, margins and other layout options
- set appropriate font types and sizes
- use the "track changes" feature for editing and revision
- properly import images, graphs or vectors from other software
- use bullets and numbered lists, format footnotes and references lists
- convert word processing documents to PDF and other file formats

Presentation Software

You **must** be able to...

- prepare a professional slide presentation (not only relying on pre-formatted layouts)
- understand basic design elements and the balance of text and graphics on a single slide
- edit your own presentation for consistency in font type, size and precise layout
- import images from the internet and graphs from other software
- imbed videos into the presentation
- save the presentation as a PDF or other files formats

Spreadsheet Software

You **must** be able to...

- organize and compute equations, such as the Penman-Monteith formula for potential evapotranspiration:
- import data from other software
- create and format (size, color, etc.) various types of graphs and tables from raw data
- properly export your graphs and tables to other software (such as presentation or word processing software)
- save the graphs and tables as a PDF or other files formats

$$ET_0 = \frac{0.408 \Delta (R_n - G) + \gamma \frac{900}{T+273} u_2 (e_s - e_a)}{\Delta + \gamma (1 + 0.34 u_2)}$$

*to learn these skills, there are countless free tutorials available online.

Other Software

In addition to basic office software, each of the international programs has specialized software that every masters student must learn to use. A few examples include:

- Modeling (e.g. *Berkeley Madonna*) and mapping (e.g. *ArcGIS*) software for EnviroFood students
- Statistical (e.g. *Stata*) and modeling (e.g. *GAMS*) software for Agricultural Economics students
- Statistical (e.g. *R*) and analytical (e.g. *SAS*) software for Crop Sciences students

Students are **not** expected to learn these specific software programs before coming to Hohenheim (however, background knowledge in statistics is required for all students). If you fall behind during the module, it is *your responsibility* to catch up to the rest of the class *on your own time (outside of class)*. Each software package includes self-guided tutorials and extensive information explaining the use of the software. The inability to properly use this software will negatively affect students' grades.

Source Citation

Universität Hohenheim has a no-tolerance plagiarism policy. Written assignments and presentations that do not *properly* list sources of outside information, photographs, tables or graphs will result in a failed grade.

There are many different standard methods of source citation (APA, MLA, etc.) both within text and in the bibliography. Generally professors do not care which format you use, but you must be consistent throughout the document or presentation.

You also must be able to identify what is a good source (scientific, peer-reviewed) and what is a bad source, even when choosing graphics or images for a presentation.

Seeking Help

Perhaps the most important lesson you will learn at Hohenheim is how to ***learn and work independently***. Before approaching your fellow classmates or professors with a question or problem, you must first try to answer or solve it alone. If you experience difficulty with task - don't give up! Of course professors and tutors are available when necessary, but students are expected to try several methods of solving their own problems before seeking help.

For example, if you have never used the "pivot tables" feature in spreadsheet software, you should type "how to use pivot tables" into the google search bar. You should then read the tutorials and watch the youtube videos, following the step-by-step instructions.

If you have never before designed a scientific poster, you should type the following queries into the internet search bar: "How to design a scientific poster," "Proper font sizes for scientific posters" and "How to import graphs from a spreadsheet to a presentation," etc.

Conclusion

Please take this guidance seriously! Experience from past years has shown that students who lack these skills struggle in class and may not complete their degrees.

Despite our diverse backgrounds and varied experiences, we come to Hohenheim to obtain the *same masters degrees*. You **must** be able to perform the academic level expected of all Hohenheim students, because everyone is given the same workload and graded equally.

Welcome to Germany, and best of luck during your first year!

~Your Student Representatives, *studentsrep2013@yahoo.com*