Intro to P1+P2+Masterseminar Computer Science (CS) + Mediainformatics (MI) + Business informatics (BI)

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Outline

- The idea
- Requirements
- Expectations
- Timeline
- How to find a topic

- These slides are also here:
  http://vda.univie.ac.at/Teaching/P1_P2_Masterseminar/

The Idea

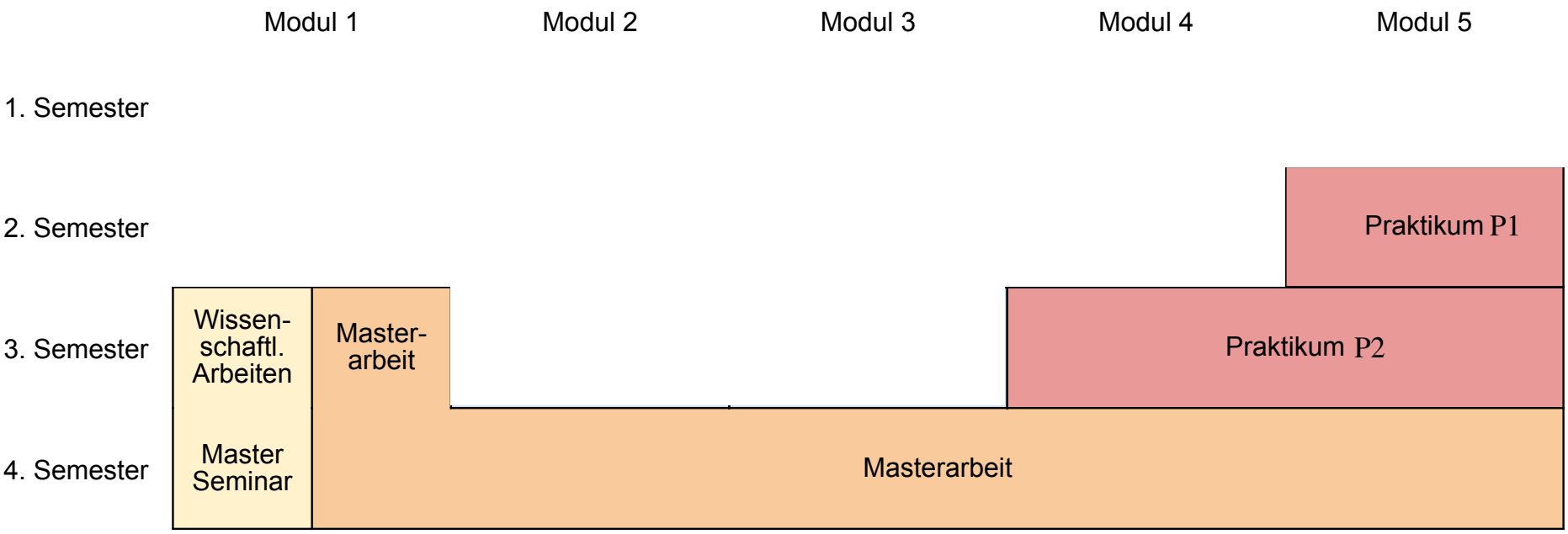
There are three stages in your Master / for your scientific contributions:

- 2nd semester: 6 ECTS practicum
- 3rd semester: 12 ECTS practicum
- 3rd+4th semester: 30 ECTS Master thesis + 3 ECTS Masterseminar

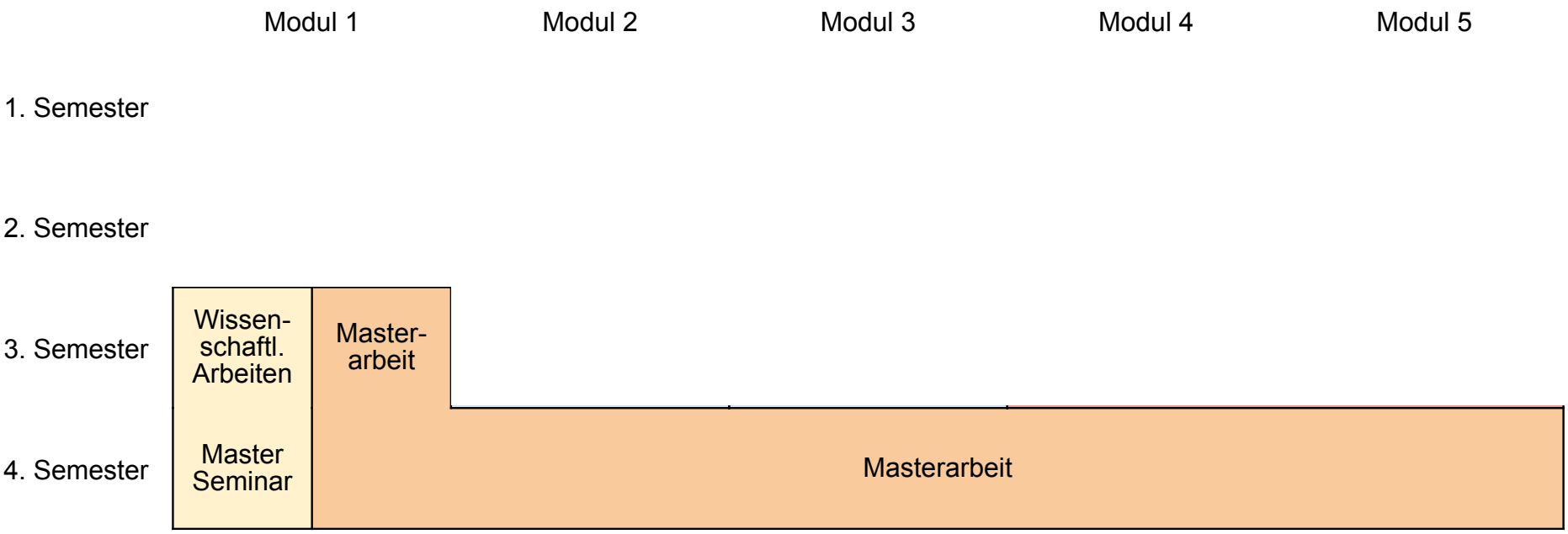
We offer help

- Practice P1+P2: help in finding a topic
- VU Academic research and writing: solidifying the scientific approach
- Masterseminar: solidifying + communicating the topic

The idea — CS + MI



The idea — BI


Modul 1
Modul 2
Modul 3
Modul 4
Modul 5
1. Semester
2. Semester
3. Semester
4. Semester
Wissen-schaftl. Arbeiten
Master-arbeit
Master Seminar
Masterarbeit

The idea — V1

- Master topic comes from P2 and P2 builds on P1

However

- if P1 didn't work, there is a chance to switch topics for P2
- in **extreme** cases, P2 didn't work either, there is a chance to switch topics for the thesis

The idea — V2

- P1 + P2 allow you to get “your feet wet” on different topics in different research labs. It helps to expose you to different research approaches.

However

- by the time you choose your thesis topic you need to be all prepared to do great work!

The idea — Masterseminar

- Here you are writing a survey paper on the topic you have chosen. This will become your literature review chapter for your thesis.
- you will review (in a conference system) the survey papers of your peers
- you will present your survey paper in a conference style setting
- Instead of a survey paper, you can also opt for writing a research proposal

Requirements

- P1+P2: you are supposed to put what you learned in the previous courses into practice by developing a software tool
- Thesis: you are supposed to tackle the state-of-the-art in a well defined research topic

Requirements

- Master seminar: you are supposed to present your thesis topic to your peers to get early feedback and to become aware of related work / what others are doing

Formal requirements

	CS	MI	BI
P1	12 ECTS from a cluster	12 ECTS from CG or MM	NA
P2	P1, 12 ECTS from a cluster	P1, 12 ECTS from CG or MM	NA
Master-seminar	P1, ASE	P1, ASE	ASE, MEM, IOP, BPM

Req — CS

- "The topic of your thesis arises out of one of the modules of specialization."

general CS	Scientific Comp.	Data Science
• Algorithms • Data Analysis • Parallel Computing • Networks • Computer Graphics • Multimedia • Information Management & Systems Engineering • Internet Computing & Software Technology	• Algorithms • Data Analysis • Parallel Computing • Networking	• Algorithms • Data Analysis • Parallel Computing

Req — Mediainformatics

- "The topic of your thesis arises out of one of the modules of extended Mediainformatics, Computer Graphics or Multimedia."

Req — Businessinformatics

- "Das Thema der Masterarbeit ist aus einem der Module der Pflichtmodulgruppe Wirtschaftsinformatik zu entnehmen."
  - Geschäftsprozessmanagement
  - Knowledge Engineering
  - Interoperabilität
  - Metamodellierung
  - Digitale Ökonomie
  - Sichere Digitale Wirtschaft
- PS: Wir sehen dies schon ein wenig breiter.

Expectations

- It's work, i.e. studying is a full-time job!
  - 6 ECTS (P1) =
    150h of your time or 10h/week
  - 12 ECTS (P2) =
    300h of your time or 20h/week
  - 3 ECTS (Masterseminar) =
    75h of your time or 5h/week
  - 30 ECTS (Thesis) =
    750h of your time in a semester

Expectations

- P1+P2: find topic
  - best before the start of the semester (but not necessary)
  - latest by deadline for dropping the course
- Masterseminar: you should already have a topic and supervisor for your master thesis!
- meet at least 4 times during the semester with your supervisor
  1. in the beginning to clarify the topic
  2. after 4 weeks to clarify progress and milestones
  3. one month before end of semester to clarify progress and expectations
  4. end of the semester: to present your results

Grading

- P1: Evaluation of the entire project, the implementation of the prototype as well as the written report.
- Masterseminar:
  - 70% of the grade: quality of the survey paper / thesis proposal
  - 10% of the grade: quality of the reviews
  - 20% of the grade: quality of the presentation
  - In order to pass the course you need to achieve at least half of the points for the paper, the reviews, and the presentation, each.

Plagiarism

You will need to write your report / submission in your own words. When referring to the contents of other papers, e.g., regarding the considered problem settings or findings, you need to clearly mark this by adding a reference and, if appropriate, quotes. If you fail to do so, this would be plagiarism and will result in an “X”.

In the case of an existing survey on your topic, your paper should be substantially different. Please consult your supervisor to agree on the focus of your survey.

Timeline P1+P2

This Moodle course: 2024S Praktikum Informatik P1+P2

- **Mar 15** (deadline for dropping the course): confirm a topic and supervisor, enter into Moodle
- **Mar 15**: if you have no topic, either drop the course or email me and I will assign you a topic
- **Mar 15**: if I don't hear from you and you didn't enter a topic, I will drop you from the course
- meet with supervisor at least twice in-between
- **Jun 30**: finish all requirements and have results presented

Additional deadlines Masterseminar

- **Mar 15** — just like for P1/P2.
- **May 1** — submission of your survey paper in the conference system
- **May 26** — finish all the assigned reviews
- **Jun 21** — presentation day
- (deadlines are strict; no extension is possible)

How to find a topic

General remarks

- you want to enjoy it! — what was the most fun subject thus far?
- take advantage of your strength (programming, math, design, …)
- search for it early (you don't want one assigned)
- talk to potential supervisors!

Finalizing your specific topic … arranged by labs

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Faculty of Computer Science

Theory and Applications of Algorithms (TAA)

- https://taa.cs.univie.ac.at/teaching/open-topics/
- Possible supervisors:
  - Kathrin Hanauer (kathrin.hanauer@univie.ac.at)
  - Gramoz Goranci (gramoz.goranci@univie.ac.at)
  - Wilfried Gansterer (wilfried.gansterer@univie.ac.at)

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Cooperative Systems (COSY)

- http://cosy.cs.univie.ac.at/teaching/open-topics/
- Possible supervisors:
  - Peter Reichl (peter.reichl@univie.ac.at)
  - Pls send email for appointment

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Data Mining + Machine Learning

- http://dm.cs.univie.ac.at/teaching/open-topics/
- possible supervisors:
  - Christian Böhm (christian.boehm@univie.ac.at)
  - Nils Kriege (nils.kriege@univie.ac.at)
  - Claudia Plant (claudia.plant@univie.ac.at)
  - Benjamin Roth (benjamin.roth@univie.ac.at)
  - Sebastian Tschiatschek (sebastian.tschiatschek@univie.ac.at)
  - Yllka Velaj (yllka.velaj@univie.ac.at)

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Education, Didactics and Entertainment Computing

- http://entertain.univie.ac.at/~hlavacs/Topics_EC.pdf
- Possible Supervisors
  - Helmut Hlavacs (helmut.hlavacs@univie.ac.at)

Knowledge Engineering

- https://ke.cs.univie.ac.at/teaching/open-topics/
- Possible supervisors:
  - Dimitris Karagiannis (dk@dke.univie.ac.at)

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Multimedia Information Systems (MIS)

- https://mis.cs.univie.ac.at/teaching/open-topics-practical-courses-theses/
- possible supervisors:
  - Wolfgang Klas (wolfgang.klas@univie.ac.at)

NeuroInformatics (NI)

- https://ni.cs.univie.ac.at/teaching/open-topics
- possible supervisors:
  - Moritz Grosse-Wentrup (moritz.grosse-wentrup@univie.ac.at)

Scientific Computing

- https://sc.cs.univie.ac.at/teaching/open-topics/
- possible supervisors:
  - Siegfried Benkner (siegfried.benkner@univie.ac.at)
  - Eduard Mehofer (eduard.mehofer@univie.ac.at)
  - Atakan Aral (atakan.aral@univie.ac.at)
  - Enes Bajrovic (enes.bajrovic@univie.ac.at)

Software Architecture

- http://swa.cs.univie.ac.at/teaching/open-topics/
- possible supervisors:
  - Uwe Zdun (uwe.zdun@univie.ac.at)

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Visualization and Data Analysis

- http://vda.cs.univie.ac.at/teaching/open-topics/
- Main contact:
  - Torsten Möller (torsten.moeller@univie.ac.at)
  - Laura Koesten (laura.koesten@univie.ac.at)

Workflow Systems and Technology

- https://wst.cs.univie.ac.at/teaching/open-topics/
- possible supervisors:
  - Han van der Aa (han.van.der.aa@univie.ac.at)

Security & Privacy

- https://sec.cs.univie.ac.at/teaching/
- possible supervisors:
  - Edgar Weippl (edgar.weippl@univie.ac.at)
  - Sebastian Schrittwieser (sebastian.schrittwieser@univie.ac.at)