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

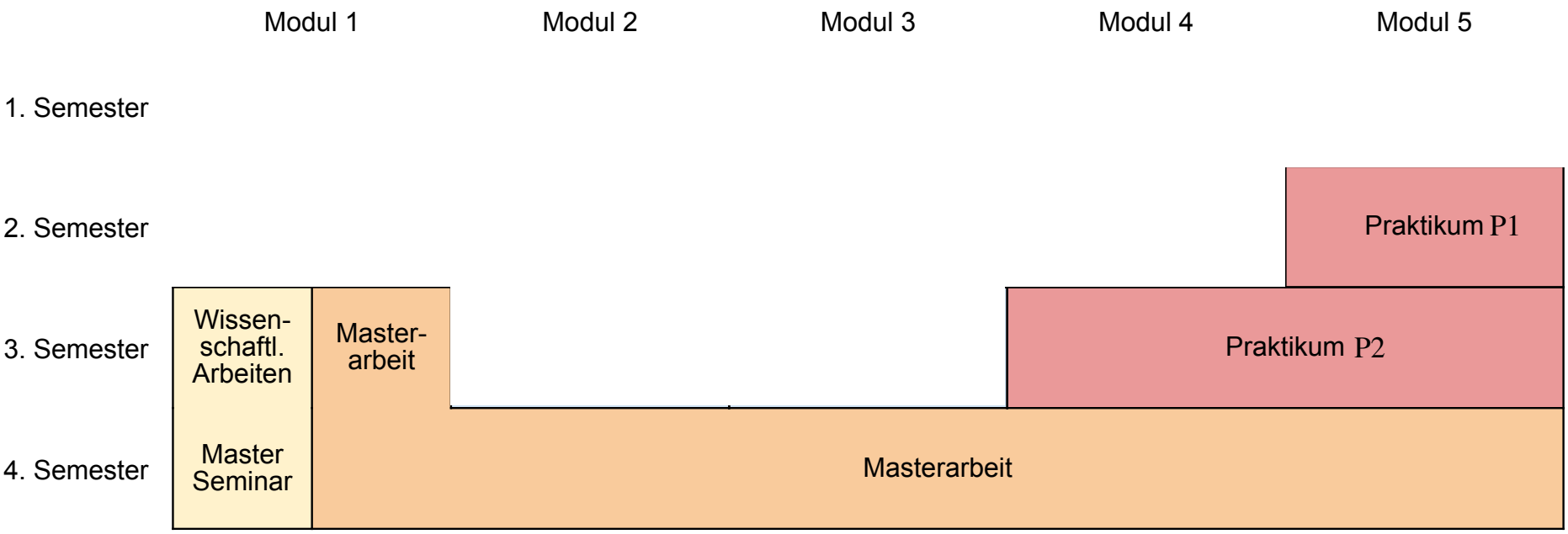
There are three stages in your Master / for your scientific contributions:

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

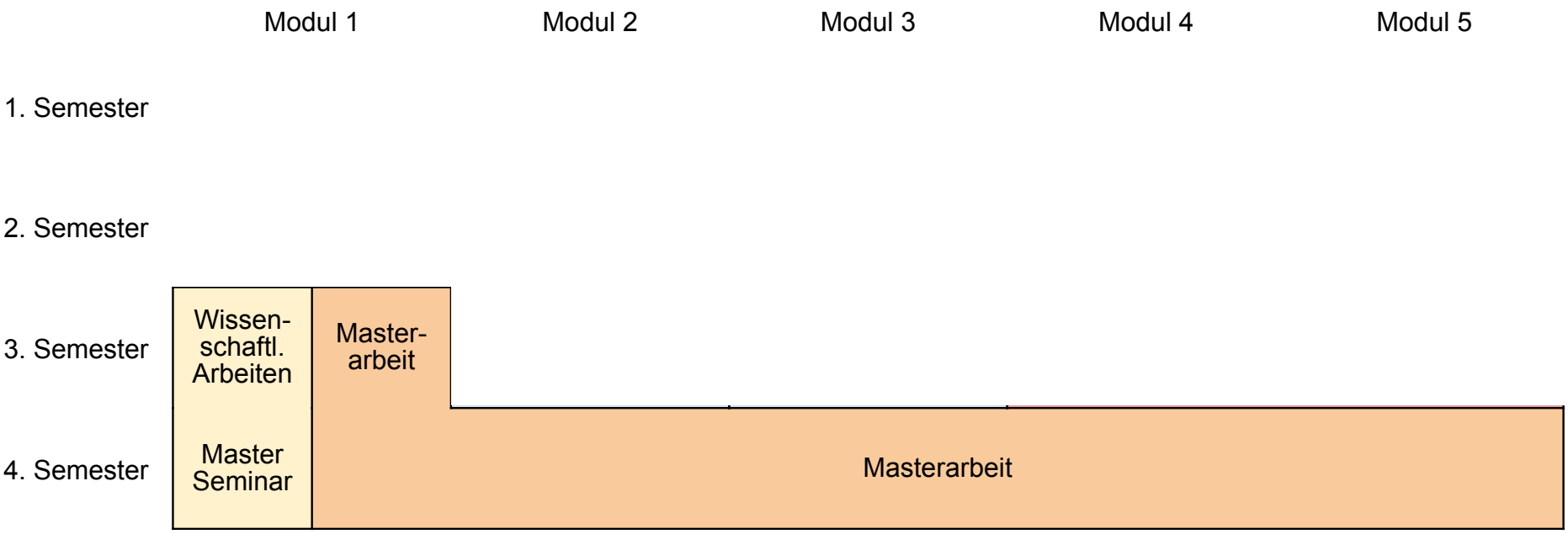
We offer help

- 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.

Timeline

This Moodle course: 2023W Praktikum Informatik P1+P2

- **Oct 14** (deadline for dropping the course): confirm a topic and supervisor, enter into Moodle (link to Moodle course will be provided)
- **Oct 14**: if you have no topic, either drop the course or email me, and I will assign you a topic
- **Oct 14**: 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
- **Jan 31**: finish all requirements and have results presented

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Additional deadlines Masterseminar

- **Oct 14th:** enter a topic or be dropped
- Meet with your supervisor at least twice between agreeing on a topic and presenting your final result
- **Dec 1st** — submission of your expose/survey paper in the conference system
- **Dec 20th** — finishing all the assigned reviews
- **Jan 19th** — 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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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

Data Mining

- 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

- 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)

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Workflow Systems and Technology

- https://wst.cs.univie.ac.at/teaching/open-topics/
- possible supervisors:
  - Erich Schikuta (erich.schikuta@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)