MASTER IN CS @ TU KL

Some useful information for new students

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Regular consultation hours (no prior appointment needed):

- Tuesday   3-4 pm   Room 36-432
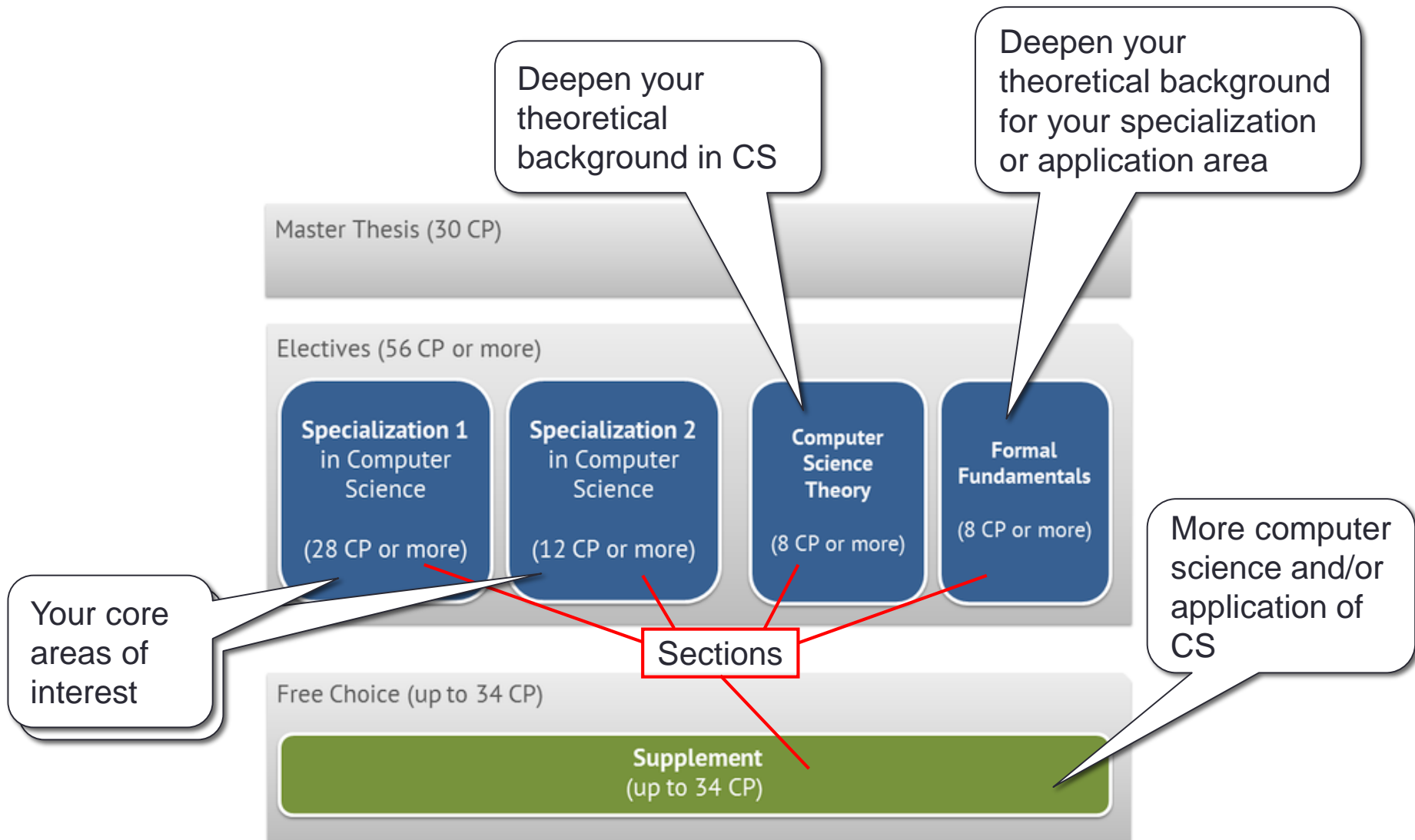- Thursday   3-4 pm   Room 36-432

Also check: *http://vs.cs.uni-kl.de/people/gotzhein/*

Disclaimer

➢ This presentation is for informational purposes only.
It is <u>not</u> a legal document – please see our examination regulations for that !

➢ All regulations are subject to change! Please keep that in mind, if you are using a printed or electronic copy of this document.

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Overview – Master Computer Science

Deepen your theoretical background in CS

Deepen your theoretical background for your specialization or application area

Master Thesis (30 CP)

Electives (56 CP or more)

Specialization 1 in Computer Science

(28 CP or more)

Specialization 2 in Computer Science

(12 CP or more)

Computer Science Theory

(8 CP or more)

Formal Fundamentals

(8 CP or more)

More computer science and/or application of CS

Your core areas of interest

Sections

Free Choice (up to 34 CP)

Supplement (up to 34 CP)

Information resources

- **CS department Master program web pages**

  - www.informatik.uni-kl.de/en/studium/studiengaenge/bm-inf/ for CS

- **There, look into the following sections of the <u>Master</u> program:**

  - **Study plan** – overview, descriptions of specializations, and minor subject
  - **Regulations** – Examination regulations (English translation will be made available)

- **Module handbook**

  - www.informatik.uni-kl.de/en/studium/lehrveranstaltungen/modulhb/

- **International School for Graduate Studies (ISGS)**

  - www.uni-kl.de/en/international/home/

Important first steps

- **Pick two specializations in Computer Science**

  - Do the specialization profiles (see "Study Plan") match your interests?

  - Any restrictions in your admission letter?

  - Do you have the prerequisites?

    - Check the descriptions in the study plan and module handbook for details !

  - You have to make a choice during your 1st semester ! **Also see page 12 !!**

- **Ask for mentor assignment**

  - Your mentor is your primary contact for planning your studies.

    - Professor of CS department active in your first specialization

  - Let me know your choice of specialization (by email),
    and I will assign a mentor.

    - You may also suggest a mentor.

Important first steps (cont'd)

- **Register at the examination office**

  - For general master examination (one-time registration).

  - Registration period is half-way through the lecturing period
    - Summer semester: mid May until mid June
    - Winter semester: mid November until mid December
    - https://www.uni-kl.de/fileadmin/ha-4/Terminplaene/TPLAN_aktuelles_Semester.pdf in German

Plan your studies

- **Prepare and update your <u>individual</u> study plan**

  - ➢ Your <u>individual</u> study plan is your personal aid for <u>long-term planning</u> of your studies.

  - – Structure your <u>individual</u> study plan according to the <u>general</u> study plan of your master program, to be found at

    - • www.informatik.uni-kl.de/en/studium/studiengaenge/bm-inf/

    - • There, go to "Study Plan CS (Master)".

  - – Observe the notes on the preparation of study and examination plans, and use the study plan template found at

    - • https://www.informatik.uni-kl.de/en/studium/studierende/reform18/
      → Notes on the Master studies

  - – Discuss your study plan with your mentor.

  - – It is <u>NOT</u> a formal document. → It can be extended or modified <u>any time</u>.

Plan your studies (cont'd)

- **First semester**

  - Check which courses are offered and pick those interesting for you.

  - Which courses are offered? → KIS system
    www.kis.uni-kl.de/campus/all/subfields.asp?field=Informatik

    - click on "Informatik" to see the list of all courses (including Bachelor!), or

    - explore "Spezialisierung in Bachelor und Master" for Master-level courses in specific areas

  - Give preference to elective modules (see next page).

- **Try to look ahead**

  - Most courses are offered either every two or every four semesters, some only sporadically (see module handbook for details).

  - CS course plans for current and 2 subsequent semesters at
    www.informatik.uni-kl.de/en/studium/lehrveranstaltungen/

Plan your studies (cont'd)

- **Elective modules**

  - All modules in the sections "Computer Science Theory", "Formal Fundamentals", "Specialization 1 and 2 in Computer Science"

    - Only modules listed in the corresponding sections of the general study plan can be selected.

  - ➢ An examination procedure that has been started must be finished. A failed third attempt leads to the final failure of the entire study program!

  - Modules where one or two exams have already been failed can be exchanged.

    - The examination history (e.g. failed attempts, deadlines) is transferred to the new module.

    - Constraints apply – consult with the examination board and obtain permission

Plan your studies (cont'd)

- **Free choice modules**

  - All other modules of Computer Science and all modules of other departments.

  - They can only be selected in the "Supplement" section, not in other sections, subject to certain restrictions.

  - A free choice module may be dropped before the third failed attempt, without further consequences.

  - Dropping is an active step! → get approval from the examination board

    - Failure to do so means that the examination process continues, and missed deadline will result in further failed attempts!

Plan your studies (cont'd)

- **Specializations in Computer Science**

  - Two specializations in Computer Science must be selected when registering for the first examination.

  - An exchange of Specialization 1 and Specialization 2 is possible at any time during your studies.

  - **One of the two** specializations in Computer Science can be exchanged for a new one later.

    - In this case, the modules of the former specialization where the examination process has already been started are shifted to the "Supplement" section.

    - Modules of the new specialization that have been placed in the "Supplement" section, and for which the examination procedure has already been started or finished – including modules opted out ! – are to the moved to the new specialization and retain their examination history.

Plan your studies (cont'd)

- **Supplement**

  - Any of the modules offered at TUK, provided some constraints are met.

    - E.g. modules from specializations that have not been selected as electives.

    - E.g. modules from other departments on Master level, with a maximum of 8 CP on Bachelor level.

    - Modules in the scope of 4 to 8 CP from an interdisciplinary area, e.g. language courses must be chosen.

  - Apart from at least 4 CP in the interdisciplinary area, it is possible to leave the Supplement empty, by selecting additional elective modules.

Plan your studies (cont'd)

- **Overall regulations**

  - Exams for modules on Master level totaling at least 56 CP must be completed.

  - <u>Note</u>: There is a minimum of exams for elective modules of 44 CP, so additionally, 12 CP are required. These can be elective or free choice modules.

Examination plan

- **Formal document** for the examination office to coordinate your exams

  - Get the appropriate form:
    https://www.uni-kl.de/fileadmin/ha-4/42-Pruefung/MA-Formulare/Pruefungsplan_Masterstudiengang_Informatik.pdf

  - Lists the modules you plan to get examined in, assigned to sections where you want to place them in.

  - Can be completed/modified step-by-step (see below).

  - Please include all required module details: module id, title, # of ECTS !

  - Any change needs consent (by signature) by your <u>mentor</u> !

  - The approved plan has to be submitted to the examination office **before** you can register for any individual exams.

  - The plan for your first semester can be submitted with your initial registration at the examination office.

Examination plan - Modifications

- **Possible modifications**

  - Add new modules

  - Remove modules, if no examination has taken place yet

  - Replace elective module, if you have already failed an exam (<u>exceptional case</u>)

    - Modify your examination plan (indicate the replacement !) and have it signed by the chairman of the examination board.

    - Failed attempts (including deadlines !) are <u>carried over</u> !!

  - Drop free choice modules before the third attempt: see the chairman of the examination board with the examination plan for approval

  - Change a specialization – BUT: constraints to be observed !

- **It is not possible to remove a module once you've passed the exam!**

Examinations

- **Register <u>ALL</u>** your (written and oral) exams at the examination office (building 47, floor 3) <u>no later than 2 weeks</u> before the exam date.
  - <u>Before</u> you register an exam, you have to file an **examination plan** (see below). **!!**
  - <u>No retrospective registration !</u>

- **Cancelling an exam**
  - <u>Up to 1 week before the exam</u>, no questions asked.
  - <u>Up to the day of the exam</u> due to sickness or other important reasons.
    - ➢ Contact examination office <u>no later than</u> the day of the exam.
    - ➢ Provide documentation (e.g., statement by medical doctor) immediately.
  - <u>No retrospective cancellation !</u>

- **Find out** whether the exam of a course is written or oral.
  - Check Web page of the course.
  - Ask the professor holding the course.

Examinations (cont'd)

- **Written exams**
  - Examination dates are published at the beginning of the semester.
    - See "KIS: Informatik -> Prüfungen" of that semester
  - Usually, two exam dates are offered in the (academic) year in which the course takes place.
    - These may be in the same or in different semester(s).

- **Oral exams**
  - Obtain an examination date from the professor holding the exam.
  - Then, register at the examination office.

- **Make sure you have all prerequisites to take an exam!**
  - Prerequisites may be attendance of exercises and delivery of solutions.
  - Find out in the first lecture of the course which rules apply. See the Web.

Examinations (cont'd) – Failing an exam (1)

- You have a <u>maximum of 3 attempts</u> to pass an exam.

- The second attempt has to be made during the two examination periods following the period where the first attempt was made.

  – Means: you can skip the next date and repeat a (yearly) lecture before retaking the exam for the first time.

- The third attempt has to be made during the four examination periods following the period where the first attempt was made.

  – If your 3rd <u>written</u> attempt was unsuccessful, there is a supplementary oral exam to finally decide about "pass" or "fail".

- For oral exams: there must be at least one month between consecutive attempts.

Examinations (cont'd) – Failing an exam (2)

- If you fail an elective module exam, you have to retake the exam !

- Free choice modules can be dropped before the third attempt.
  - Dropping modules is an active step, i.e. it has to be approved by the chairman of the examination board and to be documented in the examination plan.
  - Failure to do so means that the examination process continues, and missed examination deadlines result in further failed attempts.

➤ Make sure to register at the examination office !
You are <u>NOT</u> automatically registered for repeat exams !!!

➤ If you don't register, it's an automatic "fail" !!!

➤ Make sure to cancel an exam, if you don't want to take it (now).
Otherwise, this counts as a failed attempt !

Examinations (cont'd) – Leave of absence (1)

- In certain cases (proof required!), it is possible to apply for a leave of absence ("Urlaubssemester"), e.g.:
    - Long-lasting sickness preventing from studying
    - Sickness or care of a close relative
    - Maternity or childcare leave
    - Studies in a foreign country

- Regulations
    - During a leave of absence, no exams can be taken. Exceptions: maternity or childcare leave; exams of studies in a foreign country.
    - Examination deadlines are paused.
    - The application has to be filed before the semester starts. In case of unforeseen events, it may be possible to file it later.

Examinations (cont'd) – Leave of absence (2)

- For further information, please refer to

  - https://www.uni-kl.de/en/
    goto "Information for … Current Students"
    and select "Student Affairs" → "Leaves of Absence"

  - www.uni-kl.de/fileadmin/ha-4/Antrag_auf_Beurlaubung.pdf

  - Mrs. Ochsenreither, 47-530

Study progress

- Standard period of study is 4 semesters

- Maximum study period and progress deadlines

  - You need to register for all exams (i.e. <u>all</u> courses <u>and</u> the Master thesis) <u>no later than</u> at the end of your sixth semester.

  - If you don't register until 2 semesters after this deadline, you will get a "failed" grade for your first attempt of the exam. From that point on, the regular deadlines for repeating exams hold!

  - To register the start of your Master thesis, you need at least 60 CP from courses (and completion of your prerequisite courses, if any) !

German language courses

- DSI test (equivalent to German A1-level)

  - This is a general requirement for all foreign master students (as defined by the university), if you don't hold an equivalent certificate!

  → Please don't take this requirement lightly! <u>Deadline</u> – check with ISGS!!

- You can place a German language course (A2-level or higher) of the TU Kaiserslautern into your examination plan!

  - 89-8303 General Fundamentals: German Language Course A2 (6 CP)

    - CS: in the general fundamentals section of the section "Supplement"

  - A certificate about the 6 CP can be obtained from language course lecturer on request.

    - requires at least 80% presence time <u>and</u> passing the exam!

Additional prerequisite courses

- **Goal**: make up for Bachelor courses not covered in your previous studies
  - Prerequisite courses are assigned by the admission committee.
  - They are listed in your admission letter.
  - Mostly, prerequisite courses are in the area of CS theory.

- **Double-check the assignment of prerequisite courses**
  - The admission committee has assigned prerequisite courses based on the available information.
  - Check the module handbook for the contents of these courses.
  - If you find that the topics have already been covered in your previous studies, please identify the courses and provide syllabi to the committee.
  - The admission committee will then reconsider.

Additional prerequisite courses (cont'd)

- **Course preparation**

  - Courses are mostly in German (Bachelor level).

  - <u>Our offer</u>: for prerequisite courses, literature, exercise sessions, and examination questions are also provided in English

  - ➤ Please contact the professor giving the course early on to clarify details and obtain information !

  - ➤ http://www.informatik.uni-kl.de/en/studium/bewerber/howto/#prerequisite

  - Prerequisites in Theoretical Computer Science

    - *Logic and Semantics of Programming Languages*: Prof. Dr. Ralf Hinze ralf-hinze@cs.uni-kl.de

    - *Formal Languages and Computability*: Prof. Dr. Katharina Zweig zweig@cs.uni-kl.de

Additional prerequisite courses (cont'd)

- **Deadlines**

  - You *must* pass exams for all prerequisite courses by the end of 4 (four) examination periods !!

  - You *should try to* pass exams for all prerequisite courses within the first two semesters of your master studies (unless specified otherwise).

  - A failed exam can be repeated only once!

  - Option 1: regular CS Bachelor exams

    → Make sure you register for the exams in time; usually, these are written exams.

  - Option 2: "equivalence exam" – arranged with the professor (oral or written, depending on the prerequisite course)

    → Make sure you register for the exams in time.

    → Only "pass" or "fail" grades.