Comparison of syllabus

Exam regulations 2012

I.   7 lectures (7x6 = 42 ECTS)

  - 1 or 2 Key courses
    (1. PL, 2. only SL!)

  - 2 or 1 Specialization courses (PL)

  - 4 Specialization courses (in specialization area) (PL)

II. 2 Seminars (2x4 = 8 ECTS) (SL)
     (one from specialization area)

III. 1 Lab course (6 ECTS) (SL)

IV. 1 Master project (16 ECTS) (PL)

V.   Application Area (courses from subjects outside C.S.)
     (18 ECTS) (PL)

VI. Master thesis (25 ECTS) (PL)
     Master seminar (5 ECTS) (SL)
     (weighted double for final grade)
     (red: changed in new exam regulation
     blue: canceled in new exam regulation)

Exam regulations 2020

I.   7 lectures (7x6 = 42 ECTS)

  - 1 or 2 Advanced lectures
    (both PL)

  - 6 or 5 Specialization courses (PL)

II. 2 Seminars (2x3 = 6 ECTS) (PL)

III. 1 Lab course (6 ECTS) (SL)

IV. 1 Study project (18 ECTS) (PL)

V.   Personal Profile („Individuelle Studiengestaltung") (18 ECTS)

  - elective courses from subjects other than C.S. (18, at least 12 ECTS) (SL)

  - Advanced lecture or specialization course (can replace 6 ECTS from other subjects) (PL)

VI. Master thesis (27 ECTS) (PL)
     Master colloquium (3 ECTS) (PL)
     (weighted simple for final grade)

Key courses vs. Advanced lectures

Exam regulations 2012

6 Key courses:

- Algorithms theory
- Data bases and information systems
- Image processing and Computer graphics

(= winter semester)

- Foundations of Artificial Intelligence
- Computer architecture
- Software engineering

(= summer semester)

Exam regulations 2020

7 Advanced lectures:

- Algorithms theory
- Data bases and information systems
- Machine learning (*)

(= winter semester)

- Image processing and Computer graphics
- Foundations of Artificial Intelligence
- Computer architecture
- Software engineering

(= summer semester)

(*) Important note: For those who have already completed machine learning, this module changes from a specialization lecture to an advanced lecture!
If you have already completed two key courses, you *have* to choose the option "take an additional computer science lecture" for ML when changing exam regulations (and in the worst case, you will lose some already completed SLs in the application area)!

Application area vs. personal profile ("Individuelle Studiengestaltung")

Exam regulations 2012

Rules regarding the application area

I. 18 ECTS (at least – can be slightly surpassed)

II. You have to choose one subject

III. You have to pass exams (PL) → is counted into the final grade (therefore, might lead to failing the complete program)

Exam regulations 2020

Rules for the personal profile („Individuelle Studiengestaltung")

I. 18 ECTS (at least – can be slightly surpassed)

II. Application area can be composed of various elective courses from subjects other than Computer Science

III. Application area consists of SL only (is not counted into final grade)

IV. You can choose to replace application area courses amounting to 6 ECTS with another Computer Science lecture (advanced or specialization), but in this case, it will have an exam (PL) and count into the final grade!

Specialization
mandatory vs. optional

Exam regulations 2012

- You have to choose one specialization area:
  - Cognitive technical systems
  - Cyber-physical systems
  - Information systems
- In this area you have to complete 4 specialization lectures (24 ECTS)
- One of the 2 seminars you have to take must belong to your specialization area. (4 ECTS)

Exam regulations 2020

- Specialization is canceled (or better: it becomes optional)!
- Generally, there are no specialization areas any more for lectures as well as seminars.
- You can *choose* to specialize in either
  - Artificial intelligence (AI)
  - Cyber-physical systems (CPS)

  The following criteria must be met for this:
  - At least 4 lectures (24 ECTS) belong to the chosen area
  - The study project belongs to this area. (18 ECTS)
  - The Master Thesis belongs to this area. (30 ECTS)
- Specialization will be mentioned on the Degree certificates

Exam regulations 2012

I. Number of attempts are limited:
   - If failed, every exam can be repeated once
   - Three exams (written or oral) for courses in the required or elective modules can be attempted a third time
   (This rule does not include lab courses, seminars or the project!)

II. You cannot substitute a course you already took an exam in with another one! (No matter if you passed or failed the exam.)

III. No grade improvement!

Exam regulations 2020

I. Number of attempts are limited:
   - If failed, every exam can be repeated once
   - Two exams (written or oral) for courses/modules can be attempted a third time.
   (This rule does not include lab courses, seminars or the project!)

II. You can substitute one lecture (advanced or specialization) where you failed an exam in with another lecture. (A passed course can't be substituted with another one.)

III. You can try to improve one grade you got during the first year of your studies