

# Research in Computer and Systems Engineering

## Curriculum when starting in the winter semester

### Version without internship

| Study section / Modules                                           | Module type<br>(compulsory<br>/ optional) | Mode of the<br>examinations<br>(form and<br>duration you find<br>in the<br>book of moduls) | Semester |    |    |    | Total<br>CP | weight |
|-------------------------------------------------------------------|-------------------------------------------|--------------------------------------------------------------------------------------------|----------|----|----|----|-------------|--------|
|                                                                   |                                           |                                                                                            | 1        | 2  | 3  | 4  |             |        |
|                                                                   |                                           |                                                                                            | WS       | SS | WS | SS |             |        |
|                                                                   |                                           |                                                                                            | CP       | CP | CP | CP |             |        |
| <b>Basic Studies</b>                                              |                                           |                                                                                            |          |    |    |    |             |        |
| Algorithms                                                        | C                                         | ME                                                                                         |          | 5  |    |    | 5           | 5      |
| Advanced Database Systems                                         | C                                         | ME                                                                                         | 5        |    |    |    | 5           | 5      |
| Software & Systems Engineering                                    | C                                         | ME                                                                                         | 5        |    |    |    | 5           | 5      |
| Advanced Mobile Communication Networks                            | C                                         | ME                                                                                         |          | 5  |    |    | 5           | 5      |
| Controll Engineering                                              | C                                         | ME                                                                                         | 5        |    |    |    | 5           | 5      |
| Research Skills                                                   | C                                         | MSA                                                                                        | 5        |    |    |    | 5           | 0      |
| <b>Advanced Studies</b>                                           |                                           |                                                                                            |          |    |    |    |             |        |
| Choice of modules from the current catalogue                      | O                                         | 5 ME                                                                                       | 5        | 15 | 5  |    | 25          | 25     |
| <b>Individual Studies</b>                                         |                                           |                                                                                            |          |    |    |    |             |        |
| Research Project                                                  | C                                         | ME                                                                                         |          |    | 15 |    | 15          | 15     |
| Research Seminar                                                  | C                                         | ME                                                                                         |          | 5  |    |    | 5           | 5      |
| Group Studies                                                     | C                                         | ME                                                                                         |          |    | 10 |    | 10          | 10     |
| <b>Soft Skills</b>                                                |                                           | MSA                                                                                        |          |    |    |    | 5           | 0      |
| Course from the electives offered by the WM department or the ZIB | O                                         |                                                                                            | 1        |    |    |    |             |        |
| General language DaF (depending on previous knowledge A1.1 - C1)  | O                                         |                                                                                            | 4        |    |    |    |             |        |
| <b>Master's Thesis</b>                                            |                                           |                                                                                            |          |    |    |    | 30          | 30     |
| Master's Thesis with Colloquium RCS                               | C                                         | ME                                                                                         |          |    |    | 30 |             |        |
| <b>Summe LP</b>                                                   |                                           |                                                                                            | 30       | 30 | 30 | 30 | 120         |        |

### Version with internship

| Study section / Modules                                           | Module type<br>(compulsory<br>/ optional) | Mode of the<br>examinations<br>(form and<br>duration you find<br>in the<br>book of moduls) | Semester |    |    |    | Total<br>CP | weight |
|-------------------------------------------------------------------|-------------------------------------------|--------------------------------------------------------------------------------------------|----------|----|----|----|-------------|--------|
|                                                                   |                                           |                                                                                            | 1        | 2  | 3  | 4  |             |        |
|                                                                   |                                           |                                                                                            | WS       | SS | WS | SS |             |        |
|                                                                   |                                           |                                                                                            | CP       | CP | CP | CP |             |        |
| <b>Basic Studies</b>                                              |                                           |                                                                                            |          |    |    |    |             |        |
| Algorithms                                                        | C                                         | ME                                                                                         |          | 5  |    |    | 5           | 5      |
| Advanced Database Systems                                         | C                                         | ME                                                                                         | 5        |    |    |    | 5           | 5      |
| Software & Systems Engineering                                    | C                                         | ME                                                                                         | 5        |    |    |    | 5           | 5      |
| Advanced Mobile Communication Networks                            | C                                         | ME                                                                                         |          | 5  |    |    | 5           | 5      |
| Controll Engineering                                              | C                                         | ME                                                                                         | 5        |    |    |    | 5           | 5      |
| Research Skills                                                   | C                                         | MSA                                                                                        | 5        |    |    |    | 5           | 0      |
| <b>Advanced Studies</b>                                           |                                           |                                                                                            |          |    |    |    |             |        |
| Choice of modules from the current catalogue                      | O                                         | 4 ME                                                                                       | 5        | 15 |    |    | 20          | 20     |
| <b>Individual Studies</b>                                         |                                           |                                                                                            |          |    |    |    |             |        |
| Research Project                                                  | C                                         | ME                                                                                         |          |    | 15 |    | 15          | 15     |
| Research Seminar                                                  | C                                         | ME                                                                                         |          | 5  |    |    | 5           | 5      |
| Internship                                                        | C                                         | MSA                                                                                        |          |    | 15 |    | 15          | 0      |
| <b>Soft Skills</b>                                                |                                           | MSA                                                                                        |          |    |    |    | 5           | 0      |
| Course from the electives offered by the WM department or the ZIB | O                                         |                                                                                            | 1        |    |    |    |             |        |
| General language DaF (depending on previous knowledge A1.1 - C1)  | O                                         |                                                                                            | 4        |    |    |    |             |        |
| <b>Master's Thesis</b>                                            |                                           |                                                                                            |          |    |    |    | 30          | 30     |
| Master's Thesis with Colloquium RCS                               | C                                         | ME                                                                                         |          |    |    | 30 |             |        |
| <b>Summe LP</b>                                                   |                                           |                                                                                            | 30       | 30 | 30 | 30 | 120         |        |

#### Legende

ME Module examination

MSA Module study achievement

CP

C

O

Credit Points

compulsary

optional