# Direct Doctorate in Computer Science – Master's Track in Distributed Systems

Please find further information on how to plan your studies and the least amount of credits per course category in the Study Guide. Each individual study plan needs to be approved by the student's mentor.

**Core Focus Courses**

| Title | Credits | Semester |
|---|---|---|
| Advanced Operating Systems | 6 | autumn |
| System Security | 5 | autumn |
| Principles of Distributed Computing | 6 | spring |

**Elective Focus Courses**

| Title | Credits | Semester |
|---|---|---|
| Distributed Systems Lab* | 10 | autumn |
| Verteilte Algorithmen | 4 | autumn |
| Advanced Computer Networks | 5 | spring |
| Distributed Systems Lab* | 10 | spring |
| Information Systems Lab* | 10 | spring |
| Ubiquitous Computing | 3 | spring |
| User Interface Engineering | 4 | spring |

* The participation in one lab is strongly recommended to all students. If more than one lab is attended, the credits of only one count towards the Master's degree.

**Seminar in Focus**

Participation in one seminar is mandatory to all students. If more than one seminar is attended, the credits of only one count towards the Master's degree.

| Title | Credits | Semester |
|---|---|---|
| Communication Networks Seminar | 2 | autumn |
| Hardware Acceleration for Data Processing | 2 | autumn |
| Seminar in Distributed Computing | 2 | autumn |
| Ubiquitous Computing Seminar | 2 | spring |

**Elective Computer Science Courses**

Students may select all Master's level courses offered by D-INFK.

**Inter Focus Courses**

| Title | Credits | Semester |
|---|---|---|
| Advanced Systems Lab | 6 | autumn |
| Algorithms Lab | 6 | autumn |
| Computational Intelligence Lab | 6 | spring |

**Elective Courses**
All Master's level courses offered by ETH Zurich, EPF Lausanne and the University of Zurich may be chosen. Please see the Study Guide for restrictions on language courses.

**Science in Perspective**
One course offered by D-GESS: www.gess.ethz.ch

**Summer Fellowship**
The supervisor of your Summer Fellowship must be a member of your specialization area. The Summer Fellowship and the Thesis Project may not be supervised by the same professor.

**Thesis Project**
The supervisor of your Thesis Project must be a member of your specialization area. The Thesis Project and the Summer Fellowship may not be supervised by the same professor.

**Research Plan**
The Research Plan shall be written under the guidance of the supervisor of your subsequent doctoral research.

**Mentors**
Prof. Gustavo Alonso
Prof. Friedemann Mattern
Prof. Onur Mutlu
Prof. Timothy Roscoe
Prof. Otmar Hilliges
Prof. Roger Wattenhofer
Prof. Ankit Singla