Direct Doctorate in Computer Science – Master's Track in Information 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
Machine Learning	8	autumn
Security Engineering	5	autumn
Web Engineering	6	spring

Elective Focus Courses

Title	Credits	Semester
Big Data	6	autumn
Data Mining: Learning from Large Data Sets	4	autumn
Deep Learning	4	autumn
Information Retrieval	4	autumn
Mobile and Personal Information Systems	4	autumn
Probabilistic Artificial Intelligence	4	autumn
Information Systems Lab*	10	spring
Introduction to Natural Language Processing	4	spring
Object Databases	4	spring
Ubiquitous Computing	3	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
Advanced Topics in Information Systems	2	autumn
Hardware Acceleration for Data Processing	2	autumn
Algorithms for Database Systems	2	spring
Computer Supported Cooperative Work	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. Moira Norrie
Prof. Thomas Hofmann
Prof. Donald Kossmann (on sabbatical)
Prof. Andreas Krause
Prof. Gustavo Alonso
Prof. Ankit Singla
Prof. Ce Zhang