

Master's Program in Computer Science –

Master's Track in Visual Computing

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

At least two Core Focus Courses must be chosen:

Title	Credits	Semester
Computer Graphics	6	autumn
Computer Vision	6	autumn
Machine Learning	6	autumn

Elective Focus Courses

Title	Credits	Semester
Computer Vision Lab	10	autumn
Multimedia Communications	4	autumn
Multiscale Modeling and Computation	6	autumn
Physically-Based Simulation in Computer Graphics	4	autumn
Probabilistic Artificial Intelligence	4	autumn
Probabilistic Graphical Models for Image Analysis	4	autumn
3D Photography	4	spring
Computational Vision	6	spring
Data Mining: Learning from Large Data Sets	4	spring
Foundations of Artificial Intelligence	5	spring
Game Programming Lab	10	spring
Image Synthesis	4	spring
Mathematical Foundations of Computer Graphics and Vision	4	spring
Scientific Visualization	4	spring
Shape Modeling and Geometry Processing	4	spring
Statistical Learning Theory	4	spring

Seminar in Focus

At least one Seminar must be chosen:

Title	Credits	Semester
Advanced Topics in Computer Graphics and Vision	2	autumn
Advanced Topics in Pattern Recognition	2	autumn
Seminar Scientific Visualization	2	autumn
Seminar Computational Geometry	2	spring
Advanced Methods in Computer Graphics	2	spring

Elective Computer Science Courses

Of all Master level courses offered by D-INFK at least one course must be chosen.

Inter Focus Courses

At least two of the following three Labs must be chosen:

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

Elective Courses

All Master 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.

GESS Courses

One course offered by GESS: www.gess.ethz.ch

Master's Thesis

The supervisor of your Master's thesis must be a member of your specialization area of D-INFK.

Mentors

Prof. Marc Pollefeys
Prof. Markus Gross
Prof. Joachim Buhmann
Prof. Olga Sorkine
Prof. Andreas Krause
Prof. Ronald Peikert