

**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 Vision	6	autumn
Machine Learning	6	autumn
Shape Modeling and Geometry Processing	6	spring

**Elective Focus Courses**

Title	Credits	Semester
Computer Graphics	6	autumn
Data Mining: Learning from Large Data Sets	4	autumn
Physically-Based Simulation in Computer Graphics	4	autumn
Probabilistic Artificial Intelligence	4	autumn
3D Photography	4	spring
Computational Vision	6	spring
Game Programming Lab	10	spring
Mathematical Foundations of Computer Graphics and Vision	4	spring
Statistical Learning Theory	4	spring
User Interface Engineering	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 Machine Learning (previously named Advanced Topics in Pattern Recognition)	2	autumn
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](http://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 (on sabbatical)  
Prof. Joachim Buhmann  
Prof. Markus Gross  
Prof. Otmar Hilliges  
Prof. Andreas Krause  
Prof. Olga Sorkine-Hornung  
Prof. Robert Sumner