

GENERAL INFORMATION



The study programme is divided into specializations some of which are then divided into study plans. The course of studies is not determined; the student chooses courses so as to satisfy the requirements of the chosen specialization and earn the necessary number of credits, which will be reviewed at the end of the academic year.

Study specializations and study plans offered in Continuing Master Study Programme Computer Science are as following:

I1 Theoretical Computer Science

(guaranteed by Department of Theoretical Computer Science and Mathematical Logic)

- Algorithms and Complexity
- Nonprocedural Programming and Artificial Intelligence

I2 Software Systems

(guaranteed by Department of Software Engineering)

Database Systems

- Systems Architecture
- Software Systems
- Computer Graphics (guaranteed by Department of Software and Computer Science Education)

I3 Mathematical Linguistics

(guaranteed by Institute of Formal and Applied Linguistics)

- the specialization is not divided into study plans

I4 Discrete Models and Algorithms

(guaranteed by Department of Applied Mathematics)

- Discrete Mathematics and Combinatorial Optimization
- Mathematical Structures in Computer Science
- Optimization

I5 Training Teachers of Computer Science at Higher Secondary Schools in Combination with Professional Computer Science (guaranteed by Department of Software and Computer Science Education)

Students apply for the continuing Master Study Programme Computer Science for the chosen specialization. The student will later choose a certain study plan.

Required core courses

Required core courses are those **courses which are fundamental for completing the master study in the respective specialization** and which must be passed by all the students no matter which specialization they have (i.e. the chosen topic of their diploma thesis, choice of their study plans, and choice of optional topics at the State Final Examination).

Common required core courses

Subject	Credits
Complexity I	4
Computability I	3
Data Structures I	3
Diploma Thesis	30

Formula for success:
$$S = \sum_{i=1}^n K(C_i) \cdot \begin{vmatrix} a_{11} & \cdots & a_{1n} \\ \vdots & \ddots & \vdots \\ a_{n1} & \cdots & a_{nn} \end{vmatrix}.$$