

Computer Science: Specialisations and Programme Overview

Specialisations	Computer Science and Advanced Data Analytics				Bioinformatics	Data Science	Science Communication & Society	Education
	Tracks							
	Advanced Computing and Systems	Advanced Data Analytics	Foundations of Computing	Artificial Intelligence				
Advanced Data Management for Data Analysis								
Advanced Statistical Computing (3 EC)								
Advances in Data Mining								
Advances in Model Checking								
Applied Quantum Algorithms								
Audio Processing and Indexing								
Automated Machine Learning								
Better Science for Computer Scientists (3 EC)								
Bio-Modeling								
Cloud Computing								
Competitive Programming								
Complex networks (BM)								
Computational Molecular Biology								
Coordination and Component Composition								
Deep Learning and Neural Networks								
Embedded Systems and Software								
Evolutionary Algorithms								
Foundations of Software Testing								
High Performance Computing I								
High Performance Computing II								
Image Analysis with Applications in Microscopy								
Information Retrieval and Text Analytics								
Information Theoretic Data Mining								
Introduction to Data Science for Computer Scientists								
Linear & generalized linear models and linear algebra (9 EC)								
Modern Game AI Algorithms								
Multicriteria Optimization and Decision Analysis								
Multimedia Information Retrieval								
Multimedia Systems								
Multivariate analysis and multidimensional data analysis								
Psychology of Programming								
Quantum Algorithms								
Quantum Computing (3 EC)								
Reinforcement Learning								
Robotics								
Secure Systems								
Seminar Combinatorial Algorithms								
Seminar Distributed Data Mining								
Seminar Swarm-based Computation with Applications in Bioinformatics								
Social Network Analysis for Computer Scientists								
Social Signal Processing								
Software Development & Product Management								
Statistical learning								
Text Mining								
Urban Computing								
Science Communication and Society programme (40-60 EC)								
Education programme (60 EC)								
Introductory Research Project (18 EC)								
Master Class & Master's Thesis Research Project (30-42 EC)								
	120 EC	120 EC	120 EC	120 EC	120 EC	120 EC	120 EC	120 EC

Legenda			
Mandatory	Recommended	Elective	Not applicable