Doctorate
Doctor of Sciences ETH Zurich
PhD Program in Computer Science

Computer Science at ETH Zurich stands for ground-breaking research at one of the world’s leading institutions. Located in one of Europe’s most attractive cities, ETH offers a PhD program geared towards quality education and diverse career opportunities.

Cutting-edge and multi-faceted PhD program
The Computer Science Department’s goal is to educate students to become mature researchers and future leaders in the field of computer science. Doctoral students are part of a body of bright, talented and highly motivated scientists collaborating in research groups. The rewarding work experience is complemented by a competitive salary that comfortably covers the living expenses in Switzerland. Typically, the completion of a PhD degree takes 4-5 years.

The internationally diverse faculty covers a wide range of research areas including Information Security, Machine Learning, Programming Languages, Software Engineering, Computer Systems and Networks, Data Technology, Visual Computing, and Theoretical Computer Science.

A university with a world-class reputation
ETH continually strives to bring some of the world’s most influential thinkers to Zurich, promoting a vibrant intellectual community for its students and young researchers. Since its foundation in 1855, the institution has believed and invested in long-term research and regularly appears as one of the leading universities in international rankings. 21 Nobel laureates have studied, taught, or conducted research at ETH. Niklaus Wirth won the Turing Award for ETH for developing a sequence of innovative computer languages, including Pascal. John von Neumann, a pioneer in computer architecture, is an ETH alumnus. Currently, more than 450 professors maintain and build upon the institution’s excellent reputation and scientific proficiency.

Business and industry partnerships
The computer science faculty at ETH comprises 30+ professors that conduct both fundamental as well as applied research. The expertise of the department attracts numerous industry collaborations. These include global players in information technology such as IBM, Microsoft, Intel, SAP, Google, and Credit Suisse. The department is also well known across borders for its strong ties to the Disney Research Zurich center at ETH, the only Disney research laboratory in Europe.
Incubator for start-ups
One of ETH’s primary missions is to leave a footprint on knowledge and technology in the private sector and on society at large. Long-lasting achievements include an average of 80 new patent applications per year as well as the establishment of 283 spin-offs between 1996 and 2013. With a survival rate of about 90%, these spin-offs influence the business landscape by boosting economic growth and shaping career possibilities. In 2013, about 70% of ETH’s company founders were doctoral students and 30% either Master’s students or employees. Close partnerships with business and industry, venture capital firms and private investors mark their high success rate.

Fast-Track Doctorate
The Fast-Track Doctoral Studies program offers exceptionally qualified students the possibility to enroll in a doctoral studies program (tentative admission) before having fully completed their Master’s degree. Students who wish to enroll in this accelerated degree program first apply and enroll in the computer science Master’s program. At the end of their first semester, students may apply for the Fast-Track assessment.

Switzerland and Zurich
Switzerland is known for its political and economic stability, safety, and exceptional natural landscapes. Swiss cities, such as Zurich, blend rich, traditional history with highest standards of modern living. Zurich is Switzerland’s cultural, economic, and technology hub and has developed a vibrant IT start-up scene. The city is ethnically diverse and is consistently ranked among the most livable cities in the world. Within walking distance of ETH, Zurich’s charming old town presents itself with bustling restaurants, quaint cafés, world-class museums and much more.

Amid this diverse and stimulating setting, PhD students at ETH have excellent opportunities to grow and learn both inside the institution and out. The choice of cultural and recreational activities is vast, complementing ETH’s diverse and dynamic atmosphere. PhD students regularly mention ETH as a great place to study, develop, and celebrate success.

“ETH is a fantastic place to pursue a PhD. An internationally renowned faculty pursuing cutting-edge research and a lovely city with mountains at its doorstep are all yours to experience.”
Prof. Markus Püschel, Head of the Department