

Curriculum structure

The Master's in Statistics is a full-time study programme that lasts three to four semesters. It consists of different courses, a seminar or semester project and culminates in the master's thesis.

You can start in either the autumn or spring semester.

Ninety ECTS credit points are required to obtain the master's degree.

A typical curriculum consists of:

Core courses Courses such as Fundamentals of Mathematical Statistics, which give you a solid foundation in statistics	25 credit points
Statistical electives Courses that bring you to the cutting edge of your statistical field of interest	15 credit points
Applied electives Courses outside the Maths Department to boost your knowledge in the field where you primarily want to apply statistics	10 credit points
General education Courses in ETH Zurich's Department of Humanities, Social and Political Sciences to improve your general education	4 credit points
Seminar or semester project One theoretical seminar and one applied seminar based on statistical consulting cases take place every spring; semester projects deal with small research questions and can be started anytime	6 credit points
Master's thesis Five-month project to solve a research question. The content can be more theoretical (e.g. proving a new result) or applied (developing new methods or making a very sophisticated application and adapting existing methods). Supervisors are chosen on a first-come-first-served basis. Collaborations with industry are possible.	30 credit points

Especially in the statistical electives, you can choose to focus on applied statistics, methodology or biostatistics and have it mentioned on your Master's certificate.

Tuition and cost of living

The tuition fee is CHF 580 per semester. As regards the cost of living in Zurich (accommodation, food, health insurance etc.), you should budget around CHF 20,000 a year. A very limited number of scholarships are available for applicants with outstanding academic records.

Further information

More on the programme:
www.masterinstatistics.ethz.ch

More on applying:
www.ethz.ch/prospectives

Contact

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MASTER

Master of Science in Statistics at ETH Zurich



Department of Mathematics

ETH
Eidgenössische Technische Hochschule Zürich
Swiss Federal Institute of Technology Zurich

Meaning from data

Nowadays, statistical methods are essential in almost every field. Whether you analyse genomic data, credit card transactions or machine failures: in our infocentric world, making sense of massive amounts of data is the key to success, and the need for well-trained statisticians is ever-increasing.

The Master's in Statistics at ETH Zurich addresses this challenge. By imparting solid knowledge and the necessary skills, it enables you to analyse and interpret the huge amounts of data that are produced routinely today. It is an excellent complement to your bachelor's or master's degree in any scientific discipline, turning you into an expert in statistical applications in your field and opening a wider array of excellent job opportunities.

ETH Zurich: the right choice

ETH Zurich, situated at the heart of Switzerland, is one of the leading universities in the world. Its international faculty offers high-level lectures that take you to the cutting edge of statistical research. Especially the field of computational statistics (i.e. computer-intensive methods for analysing data) is very strong at ETH Zurich.

Join world-class researchers for a semester project or your master's thesis. Deal with real world consulting problems in a seminar from the ETH-Zurich statistical consulting service. Listen to inspiring talks from top-flight researchers who visit ETH Zurich from around the globe, and choose from a huge variety of top lectures. A mentoring programme will guide you and help you make smart degree decisions.

The master's programme was established in 2007 and is part of ETH Zurich's Department of Mathematics.

Prospective candidates

The Master's in Statistics is aimed at talented students who have a bachelor's or master's degree in mathematics, physics, statistics, computational science, engineering, biology or other science-related subject. A solid foundation in mathematics, computer science, and statistics, as well as exemplary grades are expected. Lectures are conducted in English; therefore, you need a very good command of spoken and written English.

If you have a degree from a country that is not in the Bologna System, you need a GRE (Graduate Record Examination).

A special committee reviews all applications and decides on admissions. Currently, about fifty students are registered in our programme, representing a wide variety of scientific backgrounds and nationalities.



“There are many reasons why I chose to study at ETH Zurich. The school is ranked among the top universities in the world and the statistics programme has a great reputation. ETH Zurich also has high-calibre professors who offer a wide range of courses. As a result, I was able to tailor my degree to my interests.”

Garder Sveinbjörnsson, Iceland. Background: mathematics



“I decided to do an MSc in statistics to hone my critical thinking and analytical skills and conduct research more effectively. The programme at ETH Zurich absolutely fulfilled my expectations. Additionally, Zurich is an amazing city with no end of things to do. To cut a long story short, the best eighteen months of my life!”

Ana Yanes, Venezuela. Background: systems engineering



“In my field, environmental sciences, many methods are based on statistics. Studying statistics at ETH Zurich enables me to both use and understand them.”

Stephan Hemri, Switzerland. Background: environmental sciences

Career prospects

“I keep saying that the sexy job in the next 10 years will be statisticians. And I'm not kidding.”

Hal Varian, chief economist at Google, Source: NY Times, 5 August 2009

The Master's in Statistics gives you an excellent start for your future career, no matter if you aspire to a position in a university, a research institute, the pharmaceutical industry, the insurance industry, the financial industry or any other field. Specialists with the ability to extract and interpret information from huge amounts of data are highly sought after nowadays.

Our programme provides the best prerequisites for this challenging business. Employers appreciate our graduates because of their broad statistical knowledge and keen analytical skills.



“The statistical methods I acquired during my degree in mathematics at ETH Zurich and especially during my PhD at the Seminar for Statistics built the fundament for my current work in the pricing team at AXA Winterthur. In addition to statistical know-how, analytical thinking and problem-solving strategies turned out to be very important in my everyday working life.”

Dr Christoph Buser, pricing team at Axa Winterthur



“Decision-making is at the core of pharmaceutical development, and advanced statistical methods allow us to design clinical trials which use resources efficiently to make critical decisions in the development of new drugs. Cutting-edge methods are absolutely essential to discover and confirm how to use drugs the most effectively to treat diseases and get them to the patients who need them. Improving statistical efficiency is one of the few ways to speed up the process for the company and patients without sacrificing quality.”

Prof. Dr Anthony Rossini, Head of Statistical Methodology, Novartis Oncology