



## School of Management and Law

# Self-Study Statistics Preparation Course 2023 for MSc Banking and Finance

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You get the chance to learn the basics of statistics which are required for the lectures “Quantitative Methods”, “Investments”, “Risk Management”, “Advanced Quantitative Methods”, “Machine Learning” and “Deep Learning” in the MSc Banking and Finance.

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### Course Description

Students will learn the basics of statistics, which are required for the methodological lectures of our master’s program MSc Banking and Finance. This course is setup as a self-study program with Q&A sessions held by lecturers who will also teach these lectures in the MSc Banking and Finance. It contains material on descriptive and inferential statistics and thus covers the basics for

understanding many aspects of finance and data science.

The course provides statistic theory as well as several hands-on exercises. This model allows students to quickly grasp the main concepts and learn their relevance and practical application in their own time-set.

### Course Content

Block 1: Basic math (functions, derivatives and integrals)

Block 2: Basic statistical notions (samples, data types, diagrams), statistical parameters

Block 3: Probability theory

Block 4: Discrete and continuous random variables

Block 5: Sampling and sample distributions

Block 6: Point- and interval estimation

# Additional Information

## Head of Program

Dr. Bledar Fazlija is Senior Lecturer for “Statistics”, “Machine Learning” and “Deep Learning” at ZHAW School of Management and Law.

## Costs

The self-study program is free of charge.

## Target Audience

This course is the ideal preparation for ZHAW students who will begin the Banking and Finance Master's program or master's programs such as International Business, Business Administration, etc.

We recommend all students who need to improve their mathematical and statistical background efficiently and adequately to join this course. In principle, all ZHAW students can participate.

## Course Dates

The self-study area is accessible as of June 1<sup>st</sup>, 2023. During the semester we will organize three onsite or remote Q&A sessions. Dates will be announced via MS Teams channel.

## MS Teams

Students will be invited to join a closed MS Teams channel where the entire course material is accessible. Interactions and knowledge-transfer through the channel are welcome.

## Registration, Cancellation

Please register at <https://www.zhaw.ch/de/sml/studium/master/banking-and-finance/precourse-statistics/>.

# Testimonials

The statistics preparation course was conducted as an online course for the first time in August 2020 and received very positive feedback from the course participants.

«The preparation course was excellent, although it was held online. I have taken two statistics courses two years ago and had some difficulties at that time. The structure of this course and your dedicated teaching helped me a lot. You managed to compress a one-year lecture into 6 days, and I am very grateful for that».

X. L., course participant

«As I will be studying in Capital Markets and Data Science and because it has been over 7 years since I did statistics for my bachelor's degree, it was very important for me to refresh the basics of statistics and I'm very glad that I took part in your preparation course. It will definitely help me during my master's studies to understand modules such as Quantitative Methods and Machine Learning better and faster».

D.D., course participant

«I want to thank you for teaching the course. The way you explained the topics was very clear and it was easy for me to understand it. As a student who did not take math classes a lot during my undergraduate studies, I will 100% recommend this course to future MSc students. This course has helped me understand the basic concepts of statistics and it is worth it».

R. J., course participant

«As I was working in marketing for the last 5 years and did not have any contact with statistics/math theory, this refresher course was great. I really appreciated how you wrote the detailed formulas or drew a graph to explain what we were actually doing (do we calculate an area, or a point, where does the point lie, etc.), not just filling out formulas, not knowing what the result of the formula means. You also took your time to explain the same things again, when someone asked».

S. S., course participant