

# M.Sc. in Quantitative Finance by Coursework

From AY2024/2025

1. Read and pass **five** essential courses:

- QF5202      Structured Products
- QF5203      Risk Management
- QF5209      Financial Derivatives: Modelling and Computation
- QF5210      Financial Time Series: Theory and Computation
- QF5212      Introduction to Quantitative Finance

2. Read and pass **five** elective courses (we recommend at least three QF or DSA courses):

## *Recommended*

- DSA5102      Foundations of Machine Learning
- DSA5205      Data Science in Quantitative Finance
- MA5232      Modeling and Numerical Simulations
- MA5233      Computational Mathematics
- QF5201      Interest Rate Theory and Credit Risk
- QF5204      Numerical Methods in Quantitative Finance
- QF5205      Topics in Quantitative Finance I
- QF5206      Topics in Quantitative Finance II
- QF5207      Investment and Portfolio Selection
- QF5208      AI and FinTech
- QF5211      Monte Carlo Methods in Quantitative Finance
- QF5213      Financial Management
- QF5214      Data Engineering for Quantitative Finance
- QF5401      Graduate Internship in Quantitative Finance I

## *General*

- ECA5102      Macroeconomics
- ECA5103      Quantitative & Computing Methods
- ECA5304      Machine Learning and Economic Forecasting
- ECA5334      Corporate Finance
- ST5207      Nonparametric Regression
- ST5227      Applied Statistical Learning

3. A student must have a minimum [Grade Point Average \(GPA\)](#) of 3.00 or an average grade of at least B-.

#### NOTES

- Courses with codes beginning with MA or QF are offered by the Department of Mathematics. Courses with codes QF5xxx and DSA5205 are offered exclusively to students in the Master of Science in Quantitative Finance programme.
- Courses with codes beginning with ECA are offered by the Department of Economics.
- Courses with codes beginning with ST are offered by the Department of Statistics and Data Science.

### Continuation Requirement

To remain in good academic standing, and to continue in a Master's programme, a student may not have:

- GPA below 3.00 (but  $\geq 2.50$ ) for three consecutive semesters; or
- GPA below 2.50 for two consecutive semesters.

All courses taken are graded and counted towards your GPA. In the event where a student fails a course and has to retake it, the grades for both courses will be counted toward the student's GPA.

For any semester in which the student's GPA falls below 3.00 (but  $\geq 2.50$ ), that student will be issued an academic warning. If, in the following semester, the student's GPA again falls below 2.50, s/he will be placed on probation. If the student's GPA remains below 2.50 for the third consecutive semester, the student will be issued a letter of dismissal.

For students whose GPA falls below 2.50 for two consecutive semesters, they will be placed on probation for the first semester, followed by dismissal in the second semester.

Students who have fulfilled their degree requirements will be required to proceed with graduation and will not be allowed to stay on for an additional semester or more.