



Having been founded by Duke Christian Albrecht in 1665, the university has a long history. As a university town of tradition, Kiel offers an attractive student and cultural life close to the campus.

The costs of living and housing are moderate in Kiel. On top of that, there are no tuition fees at Kiel University, which also offers free language courses. Of course, we require your strong dedication and enthusiasm for the field.



Kiel University
Christian-Albrechts-Universität zu Kiel

Faculty of Mathematics and
Natural Sciences

Department of Mathematics

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$$dS_t = S_t \mu dt + S_t \sigma dW_t$$

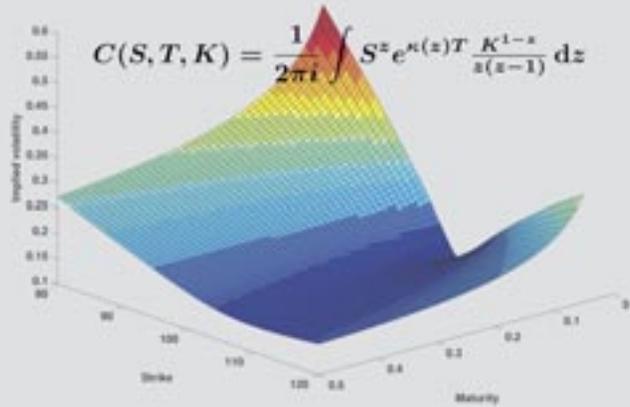
Master

Mathematical Finance



Kiel University
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WHY SHOULD I STUDY MATHEMATICAL FINANCE?

Graduates in Mathematical Finance benefit from excellent career prospects involving challenging tasks. These require a high level of mathematical and financial engineering skills which are acquired in this programme. Mathematical Finance is – notably in times of financial crisis – highly relevant for good governance and sharpens the judgement of decision makers. The finance industry continually employs graduates as e.g. the so-called quants. Their sophisticated skills are in high demand, in particular as regulatory statutes become more and more complex.

MASTERS PROGRAMME MATHEMATICAL FINANCE

The masters programme in Mathematical Finance leads to an MSc within two years. Combining mathematics, financial engineering, economics and statistics, it provides all the knowledge for a successful career in finance. The masters programme is aimed particularly at graduates with a BSc in Mathematics. Bachelors in physics, engineering, or economics are welcome as well if they dispose of a solid background in university level mathematics. Knowledge of German is not mandatory in order to successfully complete the programme and obtain the MSc.

WHAT IS MATHEMATICAL FINANCE?

The finance industry increasingly relies on complex mathematical models and highly sophisticated mathematical tools, e.g. for derivative trading and risk management. Mathematical Finance provides their scientific foundation on a variety of levels and deals with a wide range of theoretical and practical issues. On a general theoretical level, one studies e.g. the probabilistic structure of financial markets or the choice of a consistent way to measure risk. From a more applied point of view, the concrete valuation of a financial product or the quantification of risk via numerical procedures are of interest. Methodologically, the mathematical focus is on probability, statistics, numerics, optimization, and analysis.

WHY SHOULD I STUDY MATHEMATICAL FINANCE IN KIEL?

The masters programme is embedded into a very active research environment in the departments of mathematics and economics. It is distinguished by tailor-made courses with a strong emphasis on the interplay between mathematical and economic methods for financial engineering. Relying on a dedicated teaching staff from the departments of mathematics and economics, students are offered a great variety of courses from the participating disciplines. They also benefit from the links to the more economically oriented MSc programme Quantitative Finance.

Kiel is located beautifully on the Baltic Sea shore and offers, especially during summer, a wide range of sports and beach activities. The world's largest sailing event, the Kiel Regatta Week, attracts millions of visitors each year.