



Accredited degree program taught in English

Faculty of Mathematics and Economics

Master Program in Finance

Why study Finance?

A well-functioning financial system is essential for the entire economy. It is essential for large firms but also for small businesses or people wishing to finance a new kitchen or a new home. The financial crisis of 2007/2008 has revealed some flaws in the system, which should be fixed. On the other hand, the fact that the crisis had such large repercussions is further proof how important finance is.

Warren Buffett, one of the most famous and successful investors of all times, once remarked: "It's only when the tide goes out that you learn who's been swimming naked." The recent financial crisis has led to the collapse of many institutions that were once proud of their apparent success and smart use of modern financial models and products. They are the ones who have been swimming naked.

One should not conclude from their failure that financial models are unreliable, or even useless. Often it was not the models that failed—it was the people who failed to use the models in the right way. There are several banks and other institutions that performed well despite the crisis. The judicious use of modern tools was essential for their success. With the knowledge that you gain from the MSc Finance program, you will be well equipped to join those who are successful even when the tide goes out.



Why Finance in Ulm?

The city of Ulm is certainly not a financial centre, but the university is a stronghold in finance. In a recent ranking of finance departments in German-speaking countries, Ulm came out 2nd in terms of research output. One reason for the faculty's success is its focus on quantitative finance. People from mathematics, financial economics and insurance work closely together.

As a student, you can directly benefit. The faculty's expertise in state-of-the-art techniques gives you a competitive edge in the job market. There are many finance programs in the world but few of them are as quantitative as ours. This helps you stand out from the crowd.

Teaching and research is quantitative and practical at the same time. In addition to being taught mathematical and statistical techniques you are also intensively trained in how to apply such techniques. In the faculty's trading room, for example, you can gain experience using the Bloomberg information system.

About Ulm and its University

Ulm is a medium-sized city (pop.120 000) located on the river Danube in the south of Germany. From its past as an important medieval city it has inherited charming historical quarters and a famous Gothic cathedral featuring the highest church spire in the world. Today Ulm is a driving regional center with attractive cultural events. The beautiful countryside and the proximity of the Alps invite to recreational activities. Ulm is also linked to high-speed rail services.

In a recent study, Ulm and the surrounding region came out first (out of all German regions) in terms of personal and economic well-being. Why don't you come and find out why this is so?

With its 8000 students, the university is one of the smaller German universities. The campus is easy to reach by public transport. Students admitted to the courses will get a room booked in a student dormitory if they wish.



Structure of the Program

The program, which is taught in English, should be completed in two years, i.e. four terms. Winter terms last from October to February; summer terms from April to July. The program starts with compulsory courses in Financial Mathematics and Asset Pricing. Other compulsory courses include Practical Financial Engineering, which is designed to practice the implementation of modern financial techniques, and seminars, in which you will write and present papers and thereby prepare for the Master thesis.

After the first term, students can decide whether to major in financial mathematics or financial economics. Depending on the chosen major, the focus of the optional courses to be taken in the second and third term will be on mathematical finance or finance, respectively.

Below we list a selection of optional courses that are on offer:

Financial Mathematics

- Interest Rate Models
- Credit Derivatives
- Energy Finance

Finance and Insurance

- Advanced Financial Modeling and Data Analysis
- Credit Analysis
- International Financial Markets
- Corporate Strategy
- Investment and Risk Management
- Asset-Liability-Management

Mathematics and Statistics

- Applied Analysis
- Numerical Finance
- Time Series Analysis
- Risk Theory

You are also requested to attend language or cultural courses.

Most students choose intensive German-language courses but there is a wide range of courses that qualify.

Study plan MSc Finance (for Major in Financial Mathematics)

Note: CP is credit points; in the Financial Economics major, 17 CP are shifted from Financial Mathematics and Mathematics to Financial Economics.

Term	Financial Mathematics	Mathematics	Financial Economics	Other
1	Financial Mathematics I 9 CP	Optional modules 8 CP	Asset Pricing 7 CP	Additional Key Qualification 4 CP
2	Financial Mathematics II 9 CP	Optional modules 8 CP	Optional modules 6 CP	Seminar I 4 CP Practical Financial Engineering 5 CP
3	Optional modules 8 CP	Optional modules 9 CP		Risk Management Roundup 5 CP Seminar II 4 CP Additional Key Qualification 4 CP
4		Master's Thesis 30 CP		

Admission requirements and application

Applicants must have completed a Bachelor's degree (or an equivalent thereof) in mathematics or in another quantitative and mathematically-orientated discipline from a recognized university. A degree in economics or management, for example, is sufficient provided that you have successfully taken a significant number of courses in mathematics and statistics.

Furthermore, an above-average performance in the completed degree and good knowledge of the English language is required (TOEFL score of at least 570 for the paper-based test, 230 for the computer-based test, or 88 for the internet-based test; instead of the TOEFL you can also present an IELTS with a score of 6.5 or better.) Applicants who have completed a Bachelor taught in English or whose mother tongue is English do not need to present a test certificate.

You do not need prior knowledge in finance. The compulsory courses of the first semester are structured such that they can serve as an introduction to finance. Successful applicants will display the willingness to work in a challenging, multi-cultural environment, a strong mathematical ability and good communication skills. For details about the application procedure see the webpage www.uni-ulm.de/msc_finance

Application deadline is April 30th for the academic year starting in October of the same year.

Career opportunities

The aim of the program is to prepare you for a career in the financial industry, consultancy, or supervisory authorities. The knowledge that you gain will be particularly useful in areas such as risk management (credit and market risk), derivatives and trading, investment banking and insurance. Through the program, you are also trained for GARP's Financial Risk Manager exam (<http://www.garp.com>). Finally, the program is an excellent preparation for doctoral studies leading to a PhD.

Among employers, the University of Ulm has an excellent reputation for well-trained finance students. Most of our graduates work for global players.

The alumni network as well as the industry contacts of the faculty will help you start into your career. Many theses, for example, are written in co-operation with industry partners.



MSc Finance graduate Isaac Ankumah receives an award (5000 Euros) for his master thesis on portfolio selection.

More information is available on: www.uni-ulm.de/msc_finance