



*„An investment
in knowledge pays
the best interest.“*

Benjamin Franklin



Faculty of Mathematics and Economics

M. Sc. Master in Finance

4 Faculties: Medicine
Natural Sciences
Mathematics and Economics
Engineering, Computer Sciences and Psychology

more than **50** study programmes numerous additional language and
soft skills courses

more than **90** institutes

Approx. **10.000** students

more than **200** Faculty members Door to door with businesses and
industry

2000 academic staff

Time-tested accompanying
support programmes

Ulm – a dynamic city in Germany's South
offering excellent quality of life

Our international finance program...

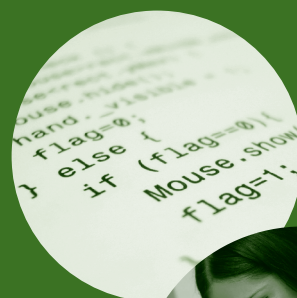


... is quantitative and practical

... teaches state-of-the art techniques demanded on the job market and in academia

... offers a **flexible** curriculum according to your own goals

... allows you to network and connect with students from all over the world



Why Finance in Ulm

“The MSc Finance programme in Ulm has the capacity to equip students with the knowledge and skills necessary for a successful career in the financial industry. The flexible structure and wide range of courses offer numerous directions of specialisation, and an invaluable cultural experience is obtained through studying with colleagues from across the globe.”

Christopher Davis (England), Quantitative Management Associate, Bank of America Merrill Lynch

“What I really like about the Master in Finance program is that it offers courses that cover a wide range of areas in finance and that students are completely free to choose their own study path. The experience I gained during two years I spent in Ulm prepared me in the best possible way for my future career and enabled me to enter a leading-edge company in the area of investment and risk.”

Jovana Zavisin (Serbia), Analyst, risklab GmbH, The Investment and Risk Advisory Experts of AllianzGI Global Solutions

“MSc Finance at Uni Ulm provides students with a lot of flexibility in designing their own bespoke program in finance. Also, it is a very good opportunity to get to know Germany and German culture and meet people from around the world.”

Natalia Kalashnikova (Russia), ABS Strat, Goldman Sachs

“The Master of Finance program offers classes that are well suited to prepare students for a career in the financial sector, as well as classes that are more research oriented. Due to the various seminars I took during my studies, several group projects and the master's thesis, I was well prepared for my Ph.D., which I am currently doing at Ulm University as well.”

Mazen Ali (Yemen), PhD student in numerical finance, Ulm University

Advantages for you

- Our program is very quantitative and practical – it makes you stand out from the crowd.
- Digitalization will change the world of finance, but with the MSc Finance, you will be ready for that change.
- The curriculum allows you to customize your studies according to your own interests and goals.
- Many opportunities to network with other students – from both Germany and from many other countries.
- Yearly job fair and contacts to industry partners via our alumni association.
- According to Times Higher Education, Ulm is **ranked 16 worldwide** among all universities founded in the Golden Age of Higher Education, the era between 1945 and 1967. In the global comparison of all universities regardless of their age, Ulm University is ranked 141.
- Ulm is a beautiful city, lively but safe, with a top rank in terms of personal wellbeing. Close to Europe's financial centers and easily reachable by public transportation.



Read more testimonials



Watch our video on YouTube

What you can expect

The program is spread over four terms (two years), with three terms of course work and one term to write the master's thesis. After the first term, students can decide whether to specialize in Financial Mathematics, Financial Economics or Actuarial Science.

Core courses of the first term are Financial Mathematics I and Asset Pricing. Other core 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's thesis. Seminars also make you familiar with current topics such as climate risk.

Courses from mathematics and statistics also constitute an important part of the program. Here you can choose among a wide range of topics, including courses on machine learning.

Some of the courses are fairly theoretical, others focus on applications, and many are in between. In the end, you will be equipped with both the theories and the skills to apply them. For example, you are also trained for GARP's Financial Risk Manager exam or the professional examination of the German Actuarial Society (DAV).

Professional perspectives

Through the program, students will gain a sound understanding of cutting-edge techniques used by financial institutions, consultants, regulators as well as fintechs, i.e., companies that offer new products based on modern technology. Topics of the program include valuation of derivatives, portfolio and risk management, insurance and data analytics. Graduates with a sound training in these areas are sought after on the job market. The program is also an excellent preparation for doctoral studies leading to a PhD.

Among employers, Ulm University has an excellent reputation for well-trained finance students. Many of our graduates work for global financial players (e.g. Bank of America or Allianz). And many of them have found a job in Germany even though they had no knowledge of German when they arrived.

Below we list a selection of optional courses that are on offer. You can find a complete list on our webpage.

Financial Mathematics

Interest Rate Models, Time Series Analysis, Numerical Finance

Financial Economics and Actuarial Science

Credit Analysis, Advanced Financial Intermediation, Insurance Economics, Investment and Risk Management, Risk Management in Insurance, Life-, Health- and Pension Mathematics, Machine Learning and Decision Making

Mathematics and Statistics

Introduction to Measure-Theoretic Probability, Markov Chains, Monte Carlo Methods, Risk Theory, Mathematical Introduction to Machine Learning

You are also requested to attend language or cultural courses.

Master in Finance



- Degree: Master of Science
- Duration: 4 semesters
- Language of instruction: English
- Start: winter semester
- Admission requirements:

Applicants must have completed a Bachelor's degree (or an equivalent) in mathematics or in another quantitative and mathematically-orientated discipline from a recognized university. Applicants must have performed above average in the completed degree.

Good knowledge of the English language:

Minimum TOEFL score of 88 for the internet-based test

Minimum IELTS score of 6.5

Applicants who have completed a Bachelor taught in English or whose native language is English do not need to present a test certificate.

- www.uni-ulm.de/index.php?id=72296&L=1



Counselling Services



Academic Counselling Finance

Institute of Finance

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89081 Ulm

Phone: +49 (0)731 50-23598

Email: mscfinance@uni-ulm.de

Homepage: http://www.uni-ulm.de/msc_finance

Any questions...?

Should you have further questions concerning your course choice or our information services, please do not hesitate to contact us under

<https://www.uni-ulm.de/index.php?id=79989&L=1>



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Study plan MSc Finance for Specialization in Financial Mathematics

Term	Financial Mathematics		Mathematics		Financial Economics		Other		CP
1	Financial Mathematics I 9 CP		Optional modules 9 CP		Asset Pricing 7 CP		Additional Key Qualification 3 CP		28
2	Financial Mathematics II 9 CP		Optional modules 4 CP		Optional modules 6 CP		Seminar I 4 CP Practical Financial Engineering 5 CP Additional Key Qualification 3 CP		31
3	Optional modules 8 CP		Optional modules 12 CP				Risk Management Roundup 5 CP Seminar 2 4CP Additional Key Qualification 2 CP		31
4	Master's Thesis 30 CP								30

Study plan MSc Finance for Specialization in Financial Economics

Term	Financial Mathematics	Mathematics	Financial Economics	Other	CP
1	Financial Mathematics I 9 CP	Optional modules 8 CP	Asset Pricing 7 CP Optional modules 3 CP	Additional Key Qualification 3 CP	30
2	Optional modules 4 CP		Optional modules 14 CP	Seminar I 4 CP Practical Financial Engineering 5 CP Additional Key Qualification 3 CP	30
3	Optional modules 4 CP		Optional modules 15 CP	Risk Management Roundup 5 CP Seminar II 4 CP Additional Key Qualification 2 CP	30
4	Master's Thesis 30 CP				30

Study plan MSc Finance for Specialization in Actuarial Science

Term	Financial Mathematics	Mathematics	Financial Economics	Actuarial Science	Other	CP
1	Financial Mathematics I 9 CP	Optional modules 8 CP	Optional modules 4 CP	Optional modules 7 CP	Additional Key Qualification 3 CP	31
2	Optional modules 4 CP		Optional modules 3 CP	Optional modules 11 CP	Seminar I 4 CP Practical Actuarial Science 4 CP Additional Key Qualification 3 CP	29
3	Optional modules 4 CP			Optional modules 7 CP	Seminar II 4 CP Risk Management Roundup 5 CP Additional Key Qualification 2 CP	30
4	Master's Thesis 30 CP					30

CP = Credit Points

Example optional modules:

Financial Mathematics: ■ Interest Rate Models ■ Time Series Analysis ■ Numerical Finance

Mathematics: ■ Introduction to Measure-Theoretic Probability ■ Risk Theory ■ Mathematical Introduction to Machine Learning

Financial Economics: ■ Credit Analysis ■ Advanced Financial Intermediation ■ Investment and Risk Management

Actuarial Science: ■ Life, Health and Pension Mathematics ■ Insurance Economics ■ Risk Management in Insurance

Note: Within the area »Financial Economics« you can also choose courses from Actuarial Science.