



LUND
UNIVERSITY

MSc in Mathematical Statistics

LUND UNIVERSITY, SWEDEN

- Master of Science in Mathematical Statistics
- 2 years, full-time, 120 ECTS credits
- Centre for Mathematical Sciences
- Lund Campus
- Application deadline: January 2021
- Programme start: August 2021

Programme overview

The Master's programme in Mathematical Statistics provides a broad spectrum of tools and methods for handling random phenomena occurring in scientific as well as industrial contexts. Within the programme, you can specialise in many different areas for different purposes, such as the modelling of economical, biological and environmental data. You study at least 45 credits in mathematical statistics at Master's level and write a Master's thesis of 30 credits. You can choose to take the remaining (at most 45) credits in e.g., mathematics or numerical analysis. You can also choose courses in other subjects, such as computer science or, if you are aiming for a career in a specific applied field, courses in that field. Examples include courses in economics, molecular biology and bioinformatics. If you intend to proceed to a PhD, you should take courses with a high degree of theory content, while if you are aiming for a career outside academia, you should take courses that cover a wide range of statistical models and methods.

Programme modules/courses

COURSES AND NUMBER OF CREDITS: Stationary Stochastic Processes (7.5), Markov Processes (7.5), Mathematical Foundations of Probability (7.5), Time Series Analysis (7.5), Monte Carlo Methods for Stochastic Inference (7.5), Non-Paramet-

ric Inference (7.5), Stationary and Non-Stationary Spectral Analysis (7.5), Linear and Logistic Regression (7.5), Statistical Modelling of Extreme Values (7.5), Inference Theory (7.5) or Design of Experiments (7.5). Non-Linear Time Series Analysis (7.5), Spatial Statistics with Image Analysis (7.5), Valuation of Derivative Assets (7.5). Financial Statistics (7.5), Statistical Modelling of Multivariate Extreme Values (7.5) or other elective courses. Master's degree thesis (30).

Career prospects

With a Master of Science in Mathematical Statistics, you have great opportunities to form an exciting career in, for example, the pharmaceutical industry, biotechnology companies or the banking and finance sector. Statistical methods are also of great importance for logistics, quality assurance and development in industry and organisations within the public sector.

Entry requirements and how to apply

ENTRY REQUIREMENTS

A Bachelor's degree of at least 180 credits or the equivalent, including at least 90 credits in mathematics, mathematical statistics, numerical analysis, scientific calculations and computer science, of which at least 45 credits must be in mathematics including courses in multivariate analysis and linear algebra, at least 30 credits in mathematical statistics and at least 15 credits in numerical analysis, scientific calculations and/or computer science.

English Level 6 (equivalent to IELTS 6.5, TOEFL 90). See www.lunduniversity.lu.se for details on English proficiency levels.





HOW TO APPLY

- 1. Apply online:** Go to www.lunduniversity.lu.se/mathematical-statistics. Click on "Apply" and follow the instructions for the online application at the Swedish national application website www.universityadmissions.se. Rank the chosen programmes in order of preference.
- 2. Submit your supporting documents:** Check what documents you need to submit (i.e. official transcripts, degree diploma/proof of expected graduation, translations, proof of English, passport) and *how* you need to submit them at www.universityadmissions.se.
- 3. Pay the application fee** (when applicable).

SELECTION CRITERIA/ADDITIONAL INFORMATION

The selection will be based on grades awarded for previous academic courses in science, mathematics and engineering.

TUITION FEES

There are no tuition fees for EU/EEA citizens. For non-EU/EEA citizens, the tuition fee for this programme is SEK 145 000 per year. See www.lunduniversity.lu.se for details on tuition fees.

About Lund University

Lund University was founded in 1666 and is repeatedly ranked among the world's top 100 universities. The University has 40 000 students and more than 8 000 staff based in Lund, Helsingborg and Malmö. We are united in our efforts to understand, explain and improve our world and the human condition.

Lund is the most popular study location in Sweden. The University offers one of the broadest ranges of degree programmes and courses in Scandinavia, based on cross-disciplinary and cutting-edge research. Because of its wide disciplinary range, interdisciplinary collaborations and engagement with wider society, Lund University is particularly well equipped to meet complex societal challenges. With partner universities in around 70 countries, the University's profile is distinctly international.

Lund University has an annual turnover of more than EUR 830 million, of which two-thirds go to research in our nine faculties, enabling us to offer one of the strongest and broadest ranges of research in Scandinavia.

The establishment of the world-leading facilities MAX IV and ESS will have a major impact on future scientific and industrial development in both materials science and life science. MAX IV is the leading synchrotron radiation facility in the world, while the European research facility ESS will be the world's most powerful neutron source when it opens for research in 2023. Adjacent to these facilities, Science Village Scandinavia is also being developed into a meeting place and testing environment for research, education and entrepreneurship.

Learn more at www.lunduniversity.lu.se
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CONTACT

Programme webpage

www.lunduniversity.lu.se/mathematical-statistics

Study Advisor

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