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. 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-Parametric 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.

“I chose Lund University because it is one of the best universities in the field of Mathematics and Statistics, and rightly so. I was introduced to a variety of highly intriguing subjects, subjects that pertained to statistics in the field of finance, medicine, extreme events and more. We were given real-time projects, whose difficulty level was fairly high and to be submitted on deadlines, but this helped us get ready for the projects and problems that await us in the real world. We worked on the latest and most widely used softwares in the industry these days. There was always a perfect blend of theoretical and practical knowledge. All professors had excellent knowledge and expertise in their respective field of study and were easily approachable.”

Shilpy Madan from India
HOW TO APPLY

1. **Apply online:** Go to [www.lunduniversity.lu.se/mathematical-statistics](http://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](http://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](http://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](http://www.lunduniversity.lu.se) for details on tuition fees.

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**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 7,400 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. Lund University offers one of the broadest ranges of programmes and courses in Scandinavia, based on cross-disciplinary and cutting-edge research. The University has a distinct international profile, with partner universities in over 70 countries.

Lund University has an annual turnover of SEK 8 billion, two-thirds of which are destined for research. Our eight faculties conduct strong research in many different areas, including over thirty research fields in which we are world-leading. Many scientific breakthroughs and pioneering innovations have originated from Lund University.

The world-leading research facilities MAX IV and ESS which are being established in Lund will be of great significance for research and industrial development within materials and life sciences. MAX IV, which was inaugurated in 2016, is the world’s foremost synchrotron radiation facility and the ESS will be the most powerful neutron source in the world once it opens for research in 2023. Science Village Scandinavia is developing nearby, destined to become a meeting place and a test environment for research, education and entrepreneurship.

Learn more at [www.lunduniversity.lu.se](http://www.lunduniversity.lu.se)

Ask questions and follow news at [facebook.com/lunduniversity](http://facebook.com/lunduniversity)

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**CONTACT**

Programme webpage
[www.lunduniversity.lu.se/mathematical-statistics](http://www.lunduniversity.lu.se/mathematical-statistics)

Study Advisor
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