MSc in Data Analytics and Business Economics

LUND UNIVERSITY | SWEDEN

- Master of Science, major in data analytics and business economics
- 1 year, full-time, 60 ECTS credits
- School of Economics and Management
- Lund campus
- Application deadline: January 2024
- Programme start: August 2024

PROGRAMME OVERVIEW

Have you noticed how Netflix and YouTube send you suggestions based on your previous views, or how Spotify makes suggestions based on what you have listened to in the past, or how Amazon shows similar products that you might be interested in based on previous purchases, or how the ads showing on your Facebook page are related to what you purchased or viewed online?

These are companies that are known for their use of 'big data' and analytics to predict and steer customer behaviour. But the truth is that today most organisations are heavily reliant on big data. And the more data businesses amass, the more important it becomes for organisations to be able to harness the information their data provides and use it strategically to improve their operations. This development has given rise to a huge demand for technically talented individuals who can leverage analytics to translate big data into valuable business insights.

In particular, organisations are searching for analytically talented individuals with statistical and programming skills that also understand the business-economic context in which they will be working, as well as the relevant legal and ethical boundaries of that work. The aim of the MSc in Data Analytics and Business Economics is to meet this demand in the labor market.

The programme is multidisciplinary and is designed to solve business problems by integrating statistics, economics, business, informatics and law.

As a student, you will will learn how to write your own computer code, how to manage data, how to use statistical machine learning tools in order to explore and deduct hidden patterns from data, and how to incorporate the results obtained into strategic decision-making.

You will also learn about the relevant data legislation, and why it is important to ensure regulatory compliance when working with sensitive data.

You will develop your communicative and collaborative skills. You will learn not only how to work the numbers and draw conclusions, but also how to clearly communicate your results to data technicians and business managers alike.

The programme provides rigorous, hands-on training, and it does so through a careful blend of lectures, seminars, case assignments, computer labs and self-studies.

The training is carried out under the supervision of a number of carefully selected researchers from across the departments of the School, which are working closely together with partner companies and institutions within data analytics in order to maximise the programme's relevance for employers.

PROGRAMME MODULES/COURSES

This one-year multidisciplinary programme will prepare you for solving business challenges by transforming data into insights that can enhance decision-making for companies of every size, across all industries.

COURSES AND NUMBER OF CREDITS: Semester 1: Programming in R (3.5 credits); Data Visualisation (4 credits); Machine Learning from a Regression Perspective (7.5 credits); Legal Aspects of Data Analytics (4 credits); Working with Databases, (3.5 credits); Advanced Machine Learning (7.5 credits). Semester 2: Analytics-based Strategic Management (7.5 credits); Elective (7.5 credits); Master's thesis (15 credits).

CAREER PROSPECTS

Transforming data into insights that can enhance decision-making is a key challenge for companies of every size, across all industries.

Be it the travel industry, technology, retail, healthcare, manufacturing, consulting, banking, finance, or insurance, data generated from market interaction is being used to determine and influence trends and gain a competitive edge over other players in the field. Companies are therefore looking for experts who have the capacity to use data to make informed strategic decisions. The same is true in government. Being able to minimise costs while at the same time deliver better services to citizens requires making the most of the information available.

Graduates from the MSc in Data Analytics and Business Economics are at a competitive advantage as organisations are looking for people who are not only fluent in the language of data but who also understand how to apply that data in the business-economic context. This layered skillset enables them to communicate effectively with clients, programmers, managers, data scientists, and policy makers to drive strategic decision-making.

ENTRY REQUIREMENTS AND HOW TO APPLY

Entry requirements

The programme is developed for recent graduates with a BA/BSc of at least 180 credits, in a subject matter including quantitative methods. This includes backgrounds in mathematics,

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statistics, economics, informatics and others. It is of special importance that the undergraduate studies include courses in quantitative methods (statistics and linear algebra are of particular importance). English Level 6. See the programme web page for more requirement details.

How to apply

1. **Apply online:** Go to www.lunduniversity.lu.se/data-analytics-business-economics. Click on "Apply" and follow the instructions for the online application at www.universityadmissions.se, the Swedish national application website. Rank the chosen programmes in order of preference.
2. **Submit your supporting documents:**
- **General 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 info

Selection is based on academic merits from university studies. In the assessment, special weight will be given to grades on courses that prepare students for the curriculum of this study programme.

Tuition fees

Tuition fee SEK 135 000 per year for non-EU/EEA citizens. No fee for EU/EEA citizens.See www.lunduniversity.lu.se for details on tuition fees.

ABOUT THE SCHOOL OF ECONOMICS AND MANAGEMENT

Lund University School of Economics and Management (LUSEM) offers you a broad education with a competitive competence. Being a graduate from LUSEM you are well equipped for all the challenges at the workplace of your dreams.

A degree from LUSEM has a good reputation; the School is part of Lund University, ranked among the 100 best universities in the world (2023) and as triple accredited (2023) LUSEM is one of the leading business schools in the world. But we are much more than a business school: We offer courses and programmes in six subject areas; economics, business administration, economic history, business law, informatics, and statistics. At the faculty's six departments and five research centers world-class research is conducted.

With us at LUSEM you will learn to understand the world around you, develop it for the better and be able to make impact on the society in which you live. You will get both the theoretical knowledge for how to make a difference in society and how to actually make it happen!

LUSEM also invites students enrolled in selected one-year Master's programmes to apply for an 'International Master Class' at one of our prestigious partner universities. Learn more on www.lusem.lu.se/study/international-opportunities/outgoing/master-class

CONTACT

Programme webpage:
www.lunduniversity.lu.se/data-analytics-business-economics

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Lund University was founded in 1666 and is repeatedly ranked among the world's top universities. The University has around 45 000 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.

Learn more at www.lunduniversity.lu.se

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