



LUND
UNIVERSITY

MSc in Bioinformatics

LUND UNIVERSITY, SWEDEN

- Master of Science in Bioinformatics
- 2 years, full-time, 120 ECTS credits
- Department of Biology
- Lund Campus
- Application deadline: January 2021
- Programme start: August 2021

Programme overview

Bioinformatics is a broad subject in which biology, medicine, computer science and statistics intertwine. Many times, the basis for bioinformatics is the massive amount of biological data derived from genomic studies, structural biology and other areas of biology and medicine.

Special features of the programme

- A combination of advanced research with training of current techniques, as well as the development of novel software tools
- Close connections to research in an international environment
- Data from proteomics, genomics, transcriptomics and other data will be analysed to gain an understanding of biological problems.

Programme modules/courses

Bioinformatics and Sequence Analysis, Bioinformatics: Programming in Python, Modelling Biological Systems, Processing and Analysis of Biological Data, DNA Sequencing Informatics, electives and a Master's degree project.

Most courses are full-time studies, and you usually take only one course at a time. The courses are typically teaching-intensive, with lectures and seminars as well as theoretical and practical exercises. You are expected to spend about 40 hours per week on studies, self-studies included. Normally you take 30 credits per semester, i.e. 60 credits per year.

Career prospects

Graduates have a diverse set of employers to choose from, mainly in academia, but also in industry and in the medical sector. You can work as a bioinformatician, biostatistician, biocomputing specialist or in related positions. Previous graduates have found employment with Silicon Genetics and Novozymes, as well as in research groups including Harvard Medical School.

Entry requirements and how to apply

ENTRY REQUIREMENTS

A Bachelor's degree of at least 180 credits in molecular biology, biomedicine, biology, bioinformatics, biotechnology, microbiology, biochemistry, or the equivalent, or a Bachelor's degree of at least 180 credits in computer science, mathematics, or the equivalent. 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 the webpage www.lunduniversity.lu.se/bioinformatics. 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:

- **General 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.
- **Programme-specific supporting documents:** When applying for this programme, you must also submit a 'Summary Sheet' with your application. See the programme webpage for details.



"The teaching style at Lund University is more applied and is a good example of the Swedish mentality. It is non-strict and at the same time adjusted to the individual needs; nobody is left behind. There is a good balance between theory and applied work, which prepares you well for the challenges that come after the Master's programme."

Robin Clemens Köhler from Germany





- 3. Pay the application fee (when applicable).

SELECTION CRITERIA/ADDITIONAL INFORMATION

The selection will be based on grades awarded for previous academic courses, as well as the statement of purpose and qualifications from research/work of relevance (from the applicant's 'Summary Sheet').

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 Bioinformatics at the Faculty of Science

Bioinformatics is a multidisciplinary field between biology, biochemistry, physics and medicine. New technologies in high throughput genomics and proteomics have revolutionised modern research in biology and medicine during the past decade. Scientific discovery now relies heavily on efficient handling and analysis of the enormous amounts of data generated from wet lab experiments. The Bioinformatics programme trains students from diverse fields in the computational analysis of biological data.

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/bioinformatics

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