



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 2023
- Programme start: August 2023

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, bio-computing 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. For details on English proficiency levels, see www.lunduniversity.lu.se

How to apply

1. **Apply online:** Go to www.lunduniversity.lu.se/bioinformatics. 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 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.
3. **Pay the application fee (when applicable).**



“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



Selection criteria/additional info

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

Tuition fee SEK 155 000 per year for non-EU/EEA citizens. No fee for EU/EEA citizens. See www.lunduniversity.lu.se for details on tuition fees.

ABOUT BIOINFORMATICS AT THE FACULTY OF SCIENCE

Bioinformatics is a multidisciplinary field from molecular biology to ecology, AI, and medicine. Over the past decade, new technologies in next-generation sequencing and high throughput genomics and proteomics have revolutionised research in biology and medicine. Nowadays, scientific discovery relies heavily on our ability to handle and analyse the enormous amounts of data generated from wet lab experiments. Our education program is fully integrated with the department's research. You will be taught by world-leading researchers who collaborate on international projects. You will get the opportunity to learn from them and later join their groups and contribute to these exciting projects. You do not need prior computational experi-

ence to apply to the program. The Bioinformatics programme is fully designed to train students from diverse backgrounds to become experts in computational biology.

ABOUT LUND UNIVERSITY

Lund University was founded in 1666 and is repeatedly ranked among the world's top 100 universities. The University has around 46 000 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 considered one of the most popular study locations in Sweden. The University offers one of the broadest ranges of programmes and courses in Scandinavia, based on cross-disciplinary and cutting-edge research. The unique disciplinary range encourages boundary-crossing collaborations both within academia and with wider society, creating great conditions for scientific breakthroughs and innovations. The University has a distinct international profile, with partner universities in approximately 70 countries.

Lund University has an annual turnover of EUR 912 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.

CONTACT

Programme webpage:

www.lunduniversity.lu.se/bioinformatics

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Learn more at www.lunduniversity.lu.se

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