**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. Computational biology also involves mathematical modelling of biological systems.

**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
- Proteomics, genomics, transcriptomics and other data will be analysed and combined to gain a global understanding of a biological problem

**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.

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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. a total of 60 credits per year.

**Career prospects**

Graduates have a diverse set of employers to choose from, both in industry, health care and academia. 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). For details on English proficiency levels, see www.lunduniversity.lu.se.

**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

   “Studying Bioinformatics allows me to apply and master my skills in analytical thinking and programming as well as my knowledge in molecular biology and adjacent areas. Moreover, bioinformatics is not only about having that set of knowledge and skills – it’s about combining them with scientific approaches to offer new solutions to biological problems. In the big picture, I see bioinformatics building a path for a new set of discoveries in the field.”

   Jelena Calyseva from Lithuania
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).

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 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
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