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 and transcriptomics 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.

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 between, both in industry, health care and academia. You can work as a bioinformatician, biostatistician, biocomputing specialist or 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
An undergraduate degree corresponding to a B.Sc. in molecular biology, biomedicine, biology, biochemistry, bio-physics, bioinformatics or biotechnology, or an undergraduate degree corresponding to a B.Sc. in computational science, mathematics or mathematical statistics with the recommendation of cell biology to be included. English Level 6 (equivalent to IELTS 6.5, TOEFL 90). For details on English proficiency levels, see www.lunduniversity.lu.se.

“Studying Bioinformatics allows me to apply and master my skills in analytical thinking and programming as well as apply 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
HOW TO APPLY
1. **Apply online:** Go to the webpage [www.lunduniversity.lu.se/bioinformatics](http://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](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**
Selection of students is based on grades on academic courses of relevance for the Master’s programme.

**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.

**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 program train 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 42 000 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. The University offers one of the broadest ranges of programmes and courses in Scandinavia, based on cross-disciplinary and cutting-edge research. The compact university campus encourages networking and creates the conditions for scientific breakthroughs and innovations. The University has a distinct international profile, with partner universities in over 70 countries.

Lund University has an annual turnover of SEK 8 billion, of which two-thirds go to research. Our research is characterised by both breadth and strength and, according to independent evaluations, over 30 of our research fields are world-leading.

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, which was inaugurated in June 2016, 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](http://www.lunduniversity.lu.se)
Ask questions and follow news at [facebook.com/lunduniversity](http://facebook.com/lunduniversity)