Programme overview
This programme connects fundamental research with its applications and integrates genetics, gene technology, cell biology, molecular biology, molecular biotechnology and bioinformatics. All these disciplines have a common basis in molecular genetics, which is the discipline that explains how the information in the genes is expressed and how it can give rise to various traits of an organism. Emphasis is also put on genetic mechanisms underlying disease, genetic mapping, molecular genetic techniques and diagnostic methods.

Special features of the programme:
• Courses in genetics, molecular biology, molecular biotechnology and medical genetics
• Courses contain practical training in molecular biology techniques
• Includes training in the innovation process, entrepreneurship and the commercialisation of molecular biotechnology

Programme modules/courses
Course of study (with number of credits): Methods in Molecular Biology (15, optional), Molecular Genetics of Eukaryotes (15, compulsory), Genetic Analysis I (7.5, compulsory) + Genetic Analysis II (7.5, optional), Molecular Biotechnology (15, compulsory), Bioinformatics and Sequence Analysis (7.5, optional), Programming using Python (7.5, optional), Master’s degree project of 30, 45 or 60 credits.

For the full list of electives, see www.biology.lu.se/master-programme-molecular-genetics-and-biotechnology.

Most courses are full-time studies, and you take only one course at a time. The courses are typically teaching-intensive with lectures, seminars, theoretical and practical exercises as well as self-studies. During one semester, you usually take two courses of 15 credits (i.e. a total of 60 credits per year).

Career prospects
The knowledge and skills you will gain on this programme open doors to employment within many sectors in industry, academia, and society, for example in the biotechnology or pharmaceutical industries.

The programme provides you with a solid grounding for PhD studies. A majority of the students that graduate from the programme continue with PhD studies, often within the biomedical research field.

Entry requirements and how to apply
ENTRY REQUIREMENTS
A Bachelor’s degree of at least 180 credits or the equivalent, of which 120 credits must be in science/biomedicine/engineering, including:
• 45 credits in molecular biology comprising genetics, cell biology and microbiology
• 30 credits in chemistry comprising biochemistry

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 www.lunduniversity.lu.se/molgenetics-biotechnology. Click on “Apply” and follow the instructions for the online application at the Swedish national application website www.universityadmissions.se

“In one of my courses, we were divided into small groups and participated in a research project led by a professor. Through this, I gained many practical skills, good research experience and new inspiration. If you are interested in molecular biology, you can consider Lund University because they have a lot of nice facilities with experienced lecturers. The professors are very open to sharing their experience and to facilitating your own research and studies.”
Margareth Sidarta from Indonesia
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).

**SELECTION CRITERIA/ADDITIONAL INFORMATION**
The selection will be based on grades awarded for previous academic courses and the statement of purpose (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 the Department of Biology**
We have outstanding competence in education and research, covering a large number of biological disciplines from molecular biology to large-scale ecology. Several of our research groups are world-leading in their topic and a large number of international projects is coordinated by the department of Biology. As our education is integrated with the department’s research, you will have researchers as teachers and get involved in ongoing projects during your studies. Our courses range from basic to Master’s level. We offer around 50 advanced level courses as well as an extensive postgraduate programme.

**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 7 600 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 around 70 countries.

Lund University has an annual turnover of SEK 8.5 billion, more than half of which is 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 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 and is destined to become a meeting place and a test environment for research, education and entrepreneurship.

Learn more at www.lunduniversity.lu.se
Ask questions and follow news at facebook.com/lunduniversity

Contact:
Programme webpage
www.lunduniversity.lu.se/molecular-genetics-biotechnology
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