Programme overview

This programme connects fundamental research with its applications and integrates genetics, gene technology, cell biology, molecular biology, 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, cell biology, molecular biology, biotechnology and medical genetics
• Courses contain practical training in molecular biology techniques
• Includes training in the innovation process, entrepreneurship, and the commercialisation of biotechnology

Programme modules/courses

Course of study (with number of credits): Methods in Molecular Biology (15, compulsory), Molecular Genetics of Eukaryotes (15, compulsory), Molecular Microbiology (15, optional), 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 Phyton (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 usually 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 normally 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 or within agencies concerned with patent and legal issues, education or research funding.

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 including cell- and molecular biology (30 ECTS credits), genetics (7.5 ECTS credits), microbiology (7.5 ECTS credits), biochemistry (15 ECTS credits), and chemistry (20 ECTS credits). 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/molecular-genetics-biotechnology. 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: 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.

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 for details on tuition fees.

About the Department of Biology
We have an outstanding competence in both education and research, covering a large number of biological disciplines with everything from molecular biology to large scale ecology. Several of our research groups are world-leading within their topic, which shows by the large number of international projects being coordinated from the department of Biology. Since our education is integrated with the research within the department you will, during your studies, have researchers as teachers and get into close contact with the ongoing projects. Our courses range from basic to Master’s level and we offer around 50 advanced level courses. We also have 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 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
Ask questions and follow news at facebook.com/lunduniversity

CONTACT
Programme webpage
www.lunduniversity.lu.se/molecular-genetics-biotechnology
Study Advisor
Christina Ledje, christina.ledje@biol.lu.se