



LUND
UNIVERSITY

Bsc in Physics

LUND UNIVERSITY | SWEDEN

- Bachelor of Science in Physics
- 3 years, full-time, 180 ECTS credits
- Department of Physics
- Lund Campus
- Application deadline: January 2024
- Programme start: August 2024

PROGRAMME OVERVIEW

Our world is facing many challenges – in basic science when exploring fundamental forces and particles or the origin of the universe, planets and life – and in applied science to find sustainable energy sources, new technology on the nanoscale and tailor-made materials for industry, chemistry and medicine. Physics is the basis for this endeavour and physicists play an important role in these and many other fields.

We offer the whole three-year Bachelor's programme in English, and since all of the courses on advanced level are given in English you are free to choose from a wide variety of courses. The courses join theory with laboratory exercises, giving you a good experience in performing and analysing experiments.

As a physicist you will have a broad education and a great range of tools for problem solving, tools which you can apply in almost any situation. These tools include great mathematical and programming skills.

On completion of this Bachelor's programme, students are eligible for a number of different Master's programmes at Lund University and elsewhere.

PROGRAMME MODULES/COURSES

The Bachelor's programme is completed over the course of three years. In the first semester, you will be studying introductory mathematics, where you will learn basic calculus in one variable and basic algebra. In the second semester, you will be introduced to physics and study the basics of mechanics, electromagnetism, optics, and waves and thermodynamics. In the third semester, you will learn more mathematical methods, and you will be introduced to quantum mechanics. The fourth semester is devoted to modern physics. The fifth semester consists of more modern physics and elective courses. During the sixth semester, you will combine elective courses with your diploma work.

For more details about the programme:
www.fysik.lu.se/en/education/international-bachelors-degree-programme

CAREER PROSPECTS

General As a physicist, your expertise will be sought after on the labour market outside academia, in Sweden as well as internationally. Areas in which graduates find employment include information and communication technology, manufacturing, space exploration, life sciences, medicine, pharmacy, energy production, the environment, electronics and materials science.

Lund is consistently ranked as the top university in Northern Europe in physical sciences and this excellence is now expanding through the addition of two international research centres – MAX IV, a synchrotron radiation laboratory that opened in Lund in June 2016, and ESS, the European Spallation Source that is currently under construction and expected to be in operation in 2023. These research facilities will create new opportunities for physics graduates.

Around the University and the centres, you will find a large number of innovation companies, making Lund a motor in the economy of southern Scandinavia. Physicists in Lund are working on the cutting edge of everything from particle physics at CERN to nanoscience and photonics.

ENTRY REQUIREMENTS AND HOW TO APPLY

Entry Requirements

General and courses corresponding to the following Swedish upper secondary school studies: Physics 2, Chemistry 1 and Mathematics 4. 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/bsc-physics. 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:** 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 info

The general average (GPA) of your higher secondary school leaving certificate.





Tuition fees

Tuition fee SEK 170 000 per year for non-EU/EEA citizens. No fee for EU/EEA citizens See www.lunduniversity.lu.se for details on tuition fees.

ABOUT THE DEPARTMENT OF PHYSICS

The Department of Physics with a staff of about 400 scientists and educators is one of the largest departments within Lund University. There are seven research divisions and a number of research centers within the department. We work to extend the understanding of physics and its applications, and to communicate our findings, and those of others, to new generations. The research at the department covers a wide range of modern physics. In addition to our own research activities, our researchers participate in several collaborations and environments, both at Lund University and internationally. We also teach the basics of physics to over one thousand students every year.

ABOUT LUND UNIVERSITY

Lund University was founded in 1666 and is repeatedly ranked among the world's top universities. The University has around 45 000 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 75 countries.

Lund University has an annual turnover of EUR 892 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.

The establishment of the world-leading facilities MAX IV and European Spallation Source (ESS) will have a major impact on future scientific and industrial development in both materials science and life science. MAX IV is the leading synchrotron radiation facility in the world while ESS will feature the world's most powerful neutron source when it will be fully operational by the end of 2027. These facilities together with the new University campus in Science Village will constitute a science complex and an international hub for research, education and innovation in which Lund University plays a central role.

CONTACT

Programme webpage:
[www.lunduniversity.lu.se/
bsc-physics](http://www.lunduniversity.lu.se/bsc-physics)

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