**Programme overview**

This structured two-year programme offers you the opportunity to learn about the universe and apply your knowledge of physics in a vibrant and fast developing area of science.

The first semester is spent on core astronomy courses, including stellar structure and evolution and galactic dynamics. In the second semester, you will begin work on a 60 ECTS degree project under the supervision of internationally well-regarded professors, and this project continues over three semesters. You will also take four more courses broadening your knowledge of the most exciting areas of modern astrophysics such as exoplanets and the early universe.

**Programme modules/courses**


**ELECTIVES:** High Energy Astrophysics, Introduction to Astrophysics, Laboratory Astrophysics, Observational Techniques and Instrumentation, Computational Astrophysics, General Relativity, Fluid Mechanics, Radiative Transfer and Stellar Atmospheres.

In the courses there are normally about 4 hours of lectures per week as well as additional seminars and workshops that are led by the teachers. Note that you will take two courses in parallel at all times during the autumn in the first year. Supervision for the thesis project is provided on an individual basis, but students receive at least two hours supervision per week during the whole project. In addition to that, you will be fully integrated into the life of the department and actively participate in weekly group meetings and scientific seminars.

**Career prospects**

Although many of our students go on to do a PhD in astronomy, we aim to teach skills that are also of broad use outside academia.

To give an idea of the possibilities open to you, we can mention that former alumni work at Sony, the Swedish Defense Research Institute (FOI), as secondary school teachers and on developing the next generation of instruments to image the retina in the human eye. Naturally, we have many students that have gone on to do a PhD. Former Master’s students are doing or have done PhDs at the University of Cambridge, Heidelberg University, University of Groningen and the European Southern Observatory.

**Entry requirements and how to apply**

**ENTRY REQUIREMENTS**

A Bachelor’s degree of at least 180 credits in physics or the equivalent. The degree must include at least 90 credits in physics. 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 www.lunduniversity.lu.se/astrophysics. 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:**
   - **General supporting documents:** Check what documents you need to submit (i.e. official transcripts, degree certificates, etc.).

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**Tryggvi Kristmar Tryggvason from Iceland**

“Something that’s really great here at my faculty is that the Master’s and PhD students work together on the same floor. Everybody gets their own corner to work in, with any equipment that you could possibly need. The teachers are wonderful and have left me with nothing but good impressions, motivating and inspiring me throughout the process.”
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 the MSc in Astrophysics, you must also submit a statement of purpose and letter(s) of recommendation with your application.

3. Pay the application fee (when applicable).

SELECTION CRITERIA/ADDITIONAL INFORMATION
The selection will be based on the grades awarded for previous academic courses, the statement of purpose and recommendation letter(s).

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 Astronomy and Theoretical Physics
The Department of Astronomy and Theoretical Physics spans a very large range of research activities; theoretical particle physics, computational biology and biological physics, theoretical astrophysics, observational astronomy, research on atomic data, as well as instrument development. We have vibrant and active research groups in all areas. Of special relevance for the Master’s programme in astrophysics is the research on, for example, black holes, X-ray binaries, Milky Way astronomy, the Gaia satellite, planet formation and evolved giant stars.

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
Ask questions and follow news at facebook.com/lunduniversity

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