

- Master of Science in Water Resources Engineering
- 2 years, full-time, 120 ECTS credits
- Faculty of Engineering
- Lund campus
- Application deadline: January 2021
- Programme start: August 2021

Programme overview

Having access to clean water is the cornerstone for improving healthcare, increasing food supply, reducing child mortality rates and enhancing people's overall quality of life. It has become crucial to develop technologies that can tackle water security challenges and meet the increasing demand. By applying integrated water resources management, surface water and groundwater can be used to cover this demand in a sustainable and eco-friendly way. These are the issues we explore with our students, as well as challenges such as wastewater treatment, storm water management, coastal hydraulics, and modelling of hydrological processes. The programme is broad and covers the most important aspects of water resources engineering.

Many of the courses included in the programme contain practical elements, which allow our students to deepen their understanding of the more theoretical components and to develop both professional and academic skills. Our strong links to industry and scientific cooperation projects ensure that our courses maintain a high level of relevance to current issues and developments.

Special features of the programme

- An opportunity to specialise in fields where we have world-leading expertise, such as water and waste-water treatment, coastal hydraulics and modelling of hydrological processes
- Accessible and engaged teachers who will give you thorough feedback and help you progress throughout your studies
- Strong industry links and opportunities to work closely with local and international organisations

- A multinational, innovative and interactive learning environment

Programme modules/courses

COMPULSORY COURSES AND NUMBER OF CREDITS:

Integrated Water Resources Management (7.5), Urban Storm Water Management (7.5), Water and Wastewater Treatment (7.5), Groundwater Engineering (7.5), Groundwater Modelling and Contaminant Transport (7.5), Hydromechanics (7.5), Master's degree project (30).

ELECTIVE COURSES AND NUMBER OF CREDITS: Advanced Wastewater Treatment (7.5), Water, Society and Climate Change (7.5), Coastal Hydraulics (7.5), GIS (7.5), Rainfall Runoff Modelling (7.5), Environmental Hydraulics (7.5), Finite Element Method (7.5), Pipe System Engineering and Hydraulics (7.5), Project Course I/II in Water and Environmental Engineering (7.5), Advanced course in one or more subjects.

Career prospects

The need for clean water and sanitation is a global concern affecting large, densely populated cities and smaller communities in industrialised and developing regions alike. This Master's programme will prepare you for a rewarding and challenging career within an essential profession. Our graduates play important roles in the water sector all over the world, and their educational experience in Lund has assisted them in becoming outstanding professionals.

The skills they have acquired during the programme are sought after by organisations in a wide variety of industries, from large multinational corporations and nonprofit organisations, to regional and national government bodies. Many go on to become hydrologists, process engineers, hydrogeologists, consultants and water resource managers. Others pursue an academic career within prestigious universities.

Typical examples of organisations which have employed our graduates are Sweco (Sweden), Stockholm Environment Institute (International), Hussey Gay Bell & DeYoung (USA) and Beijing YHR Environmental Engineering Co., Ltd (China).



“Since water resources is a major issue in China, I believe we must solve this problem with international partnership, and to do that, you need an international perspective. I feel very lucky to be here and I really appreciate the multicultural and international environment.

Lund University offers a world-class environment, and the professors have really designed the course tracks very well. The professors also give you the space and time to talk about your idea. They will answer you with great patience. Here we have multiple solutions to a specific problem, not just one solution.”

Luan Xiangyu from China





Some of our graduates move on to PhD programmes. Among the many universities which have accepted our students are KTH (Sweden), UC Davis (USA), and University of Melbourne (Australia).

Entry requirements and how to apply

ENTRY REQUIREMENTS

A Bachelor's degree in civil engineering, environmental engineering or equivalent, including courses in mathematics/calculus, hydraulics/fluid mechanics and geology, each of them corresponding to at least 4 credits/ECTS. 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/water-resources. 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:**
 - **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:** For information on programme-specific documentation, please check the programme webpage.
- 3. Pay the application fee** (when applicable).

SELECTION CRITERIA/ADDITIONAL INFO

The selection is based on academic qualifications.

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.

CONTACT

Programme webpage

www.lunduniversity.lu.se/water-resources

Programme directors

Gerhard Barmen, +46 46 222 9657

Åsa Davidsson, +46 46 222 9557

msc.water@lth.lu.se

About the Faculty of Engineering

The Faculty of Engineering, LTH, is as a place for dreams and discoveries. We inspire creative development of technology, architecture and design and teach some of Sweden's most attractive Master's programmes, all built on a broad research base. LTH is among the leading engineering faculties in Europe with close to 10 000 undergraduate students. Over 1 000 researchers at LTH work hard to improve the quality of life for people and promote a more careful use of the Earth's resources. Our vision is: Together we explore and create – for the benefit of the world. A world record in 5G technology, solar cell driven water purification, early cancer diagnosis, nanotechnology for more efficient solar panels, and a health-promoting oat drink are some of the innovations developed at LTH.

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 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 the most popular study location in Sweden. The University offers one of the broadest ranges of degree programmes and courses in Scandinavia, based on cross-disciplinary and cutting-edge research. Because of its wide disciplinary range, interdisciplinary collaborations and engagement with wider society, Lund University is particularly well equipped to meet complex societal challenges. With partner universities in around 70 countries, the University's profile is distinctly international.

Learn more at www.lunduniversity.lu.se

Ask questions and follow news at

facebook.com/lunduniversity



LUND
UNIVERSITY