



LUND
UNIVERSITY

MSc in Water Resources Engineering

LUND UNIVERSITY, SWEDEN

- Master of Science in Water Resources Engineering
- 2 years, full time, 120 ECTS credits
- Faculty of Engineering
- Lund campus
- Application deadline: 16 January 2017
- Programme start: August 2017

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 many other 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 wastewater 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 Water (15), 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** (45 in total): Decentralised Water and Wastewater Treatment (7.5), Water, Society and Climate Change (7.5), Coastal Hydraulics (7.5), GIS (7.5), Rainfall Run-off 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).

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), Beijing YHR Environmental Engineering Co., Ltd (China). Some of our



“Since water resources is a major issue in China, I believe we must solve this problem with international partnership – to do that you need an international perspective. So I feel very lucky to be here and I really appreciate the multi-cultural 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 multi-solutions to a specific problem, not just one solution.”

Luan Xiangyu , from China





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. English 6/English Course B. 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:** 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.
- 4. 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. For details on tuition fees, see www.lunduniversity.lu.se

About the Faculty of Engineering

The Faculty of Engineering at Lund University (LTH) is among the leading engineering faculties in Europe with over 9,000 undergraduate students and 800 postgraduates. LTH is one of the few comprehensive engineering faculties in Sweden, and in addition to traditional engineering programmes we also offer programmes in architecture and industrial design.

With a 50-year long history of research and education excellence, we are well equipped to meet the increasing global demand for more sustainable, connected and user-driven technologies, and to provide our students with the know-ledge and skills they need in order to succeed within their chosen field.

About Lund University

Lund University was founded in 1666 and is repeatedly ranked among the world's top 100 universities. The University has 41,000 students and 7,500 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 Sweden's most attractive study destination. 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 clear international profile, with partner universities in over 70 countries.

Funding of more than SEK 5 billion a year goes to research at eight faculties, which gives us one of Sweden's strongest and broadest ranges of research activity. Over 30 of our research fields are world-leading, according to independent evaluations.

Two of the world's leading materials research facilities are currently under construction in Lund: the MAX IV Laboratory, inaugurated in June 2016, is the leading synchrotron radiation facility in the world, and the European research facility ESS, which will house the world's most powerful neutron source. The two facilities will be of decisive importance for future scientific and industrial development in both materials science and life science.

Learn more at www.lunduniversity.lu.se

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CONTACT

Programme webpage

www.lunduniversity.lu.se/water-resources

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