### LINKÖPING UNIVERSITY

# **BORNELLE**

8

Groundbreaking international programmes at Linköping University 2022



# HAVE YOU GOT WHAT IT TAKES?

Do you want to be involved in shaping the world? Do you place innovation above tradition, and results above prestige? Do you prioritise lab time above sleeping in? Do you want to take your personal passion to a new level, delivering benefits to far beyond your own sphere? Can you embrace collaboration? Do you feel like smashing some boundaries?

If this is you, we'd like to invite you to join us on a journey towards new discoveries. Let us introduce you to our 30 international programmes. Each of them is a springboard to an important career – and a life full of challenges and meaning. Today and tomorrow, for you and the world.

### WELCOME TO LINKÖPING UNIVERSITY.

# THEN WE HAVE WHAT N E E

#### Engineering and Computer Sciences Environmental studies

- 14 Aeronautical Engineering
- 15 Biomedical Engineering
- 16 Communication Systems
- 17 Computer Science
- 18 Electronics Engineering
- 19 Industrial Engineering and Management
- 20 Mechanical Engineering
- 21 Sustainability Engineering and Management
- 22 Statistics and Machine Learning
- 23 Intelligent Transport Systems and Logistics

### Design

24 Design

#### 25 Ecology and the Environment 26 Science for Sustainable

Development

#### Natural sciences

#### 27 Applied Ethology and Animal Biology

- 28 Chemistry
- 29 Experimental and **Medical Biosciences**
- 30 Materials Physics for Nano and Quantom Technology 31 Protein Science

### Education

32 Adult Learning and Global Change 33 Outdoor and Sustainability Education

### Social sciences and humanities

- 34 Ageing and Social Change
- 35 Applied Ethics
- 36 Business Administration Strategy and Management in International Organisations
- 37 Computational Social Science
- 38 Child Studies
- 39 Ethnic and Migration Studies 40 Gender Studies
- Intersectionality and Change 41 International and
- **European Relations**
- 42 Strategic Urban and **Regional Planning**

#### Natural sciences, bachelor

43 Experimental and Industrial Biomedicine



### The spirit of innovation

OVER THE YEARS our graduates and researchers have developed ideas that have led to successful spinoff companies. And we're sure there will be many more. The purpose of LiU Innovation is to ensure that ideas based on knowledge from LiU advance and benefit society. LiU Innovation assists students. researchers and teachers in the development from concept to fin-

### Key to the industry

LINKÖPING UNIVERSITY (LIU) was founded because the Swedish business sector required a bettertrained labour force. And to this day, we are driven by carrying out research and offering education that satisfies genuine needs.

A natural result of this ambition is our close collaboration with major international companies such as Saab, ABB and the Swedish National Road and Transport Research Institute. This means that you, as a student, get to address the challenges facing society and the business sector, and contribute with new solutions from day one.

Working with ABB Corporate Research, industry-based doctoral



Naveen and Abhishek have developed a tool to cross language barriers between personnel and patients in the medical care system.

### New ideas for the market

TWO MASTER'S STUDENTS realised that language barriers cause problems in the medical care system. By chance, Naveen Sasidharan and Abhishek Jacob Chethicatt came into contact with LiU Innovation, and the innovation advisers there helped them give their ideas a more concrete form and provided impetus in the right direction.

Their company Worldish currently employs 27 people, several of them students who work part-time. Their app contains a large number of medical questions and answers in several languages. It is now being used in a variety of settings through out Sweden.

The company is now housed in the Lead company incubator in Mjärdevi Science Park, close to Linköping University. Here, Worldish and other start-ups obtain help in making the transition to successful commercial enterprise.

"We've received a great deal of support from Linköping University and the innovation office there", savs Naveen Sasidharan.

The new method includes the automatic and rapid design of robot fingers for different types of task. A robot hand formed as a simple gripper with just two fingers is enough for many different jobs in industrial applications.

to construct rapidly a new configuration of robot fingers designed for a new task.

daz has made it possible for nonexperts to construct a robot-based assembly system in one day. A task that previously took at least six months and required a wide range of expertise.



ished product or service. In 2017,

20 new companies were founded.

developed a method for producing

printed organic solar cells, and has

created the world's most scalable.

resource-efficient and competi-

tively-priced solar cell. The tech-

nology is based on more than 20

years of research into organic

electronics at LiU.

The company Epishine has

Mohammadali has developed a method

# SKILED SCHLED

### Furkan

Turkey – Science for Sustainable Development

#### Different for me

Be ready to read and write! As an engineering graduate, writing long essays was the biggest challenge for me. We generally don t have in-class exams, and our exams were writing essays during a few weeks. Another challenge was "discussion with friends". At all the lectures, we always discussed the topics with our classmates. This was also very different for me!

#### Freedom

My favourite part of my pro gramme is the freedom. Climate change is a really broad topic, and we were all free to decide our topics in all our essays. For example, Sustainable Resource Manage ment can contain all kinds of resource such as water, solar energy and biogas.

Friends from six different continents I really like the corridor life with all the international students. I have friends from six different conti nents! This network can provide much more than being a student!

### Iris

Austria - Experimental and Medical Bioscience

### **Research rather than industry**

Apart from the fact that I always wanted to study abroad and this was definitely less focussed on theory the ultimate chance, the programme and memorisation. There are a lot was attractive due to its focus on research rather than industry, and its programme-based learning elements.

#### Up-to-date and relevant

This programme provides a general mentor who can guide you through finding your research interests, as well as specific mentors for different parts of the courses. In my opinion, it is best to learn from people who are still working in the field of your interest, as their advice is up-to-date Since we already lived together, we and relevant.

#### Changing the stereotype

Research means change. Changing ways of doing and thinking. Chang ing our view on who is allowed to do research. A lot of people imagine a white man in a lab coat when they think of science and research, but research is diverse. Now I am active ly trying to revise that stereotype.

### Rebecca

Portugal / Germany - Applied **Ethology and Animal Biology** 

### Less focussed on theory

Compared to Portugal, it is of assignments and group work, sometimes these replaced exams entirely, which I very much appreci ated. I noticed that the focus was more on being able to do things well practically, instead of just knowing a lot of things in theory.

#### **Corridor mates**

Student life is very lively when the world is not being taken over by a pandemic. However, I was incredi bly lucky with my corridor mates. did not have to social distance from each other and so we had our own parties and thematic dinners.

### Not my sole passion

I strongly believe that humanity and wildlife can share the world in a healthier way. But animal behaviour is not my sole passion, I also like science communication and man agement. I'm hoping to be able to combine them all in in the future.



## WITH A FOCUS ON CLIMATE CHANGE

After working for environmental organisations in Rome, New York and Brussels, Emily Rodriguez, originally from the US, decided to pursue a doctoral degree at Link ping University. She is now conducting research about how Sweden can reduce its carbon dioxide emissions.

**EMILY RODRIGUEZ** has a long history of environmental engagement. She attended the United Nations climate change conference in Copenhagen in 2009, and it was partially as a result of her impressions from there that she decided to study a master's degree in environmental science.

After graduating, she worked for environmental organisations in Rome, New York and Brussels. And then one day, she heard about a position available as a doctoral student at Linköping University.

"Sweden has long been a leader in environmental work", she says.

Emily Rodriguez describes how she had always imagined that it would be exciting to get into research, so when the chance arose, she thought it was best to take it. "I was ready for a new challenge, and I felt that working towards a doctoral degree would suit me fine."

Her thesis will discuss climate change and look at ways in how Sweden can reduce carbon dioxide emissions.

"More than half of the carbon dioxide emitted from large point sources in Sweden come from the use of biomass, including sources such as the pulp and paper industry, energy utilities and waste incineration."

Her research has concentrated on a technology known as bioenergy with carbon capture and storage, abbreviated BECCS.

"First, carbon dioxide is captured from an industrial process. The carbon dioxide is then transported by ship or pipeline to a storage site. It is Sweden's goal to become climate-neutral by 2045, and this technology could help reach this."

Emily Rodriguez is enjoying life as a doctoral student.

"The work is very varied, and I have opportunities to be creative. I have a lot of freedom, which means that I have to exercise discipline. Doctoral students take some courses during the first two years, so now I'm studying as a student again. At the same time, I do some teaching, which I thoroughly enjoy." She describes Linköping Univer-

sity as a truly international place.

"This is important to me. I have worked in international workplaces for the past 10 years."



### STEP INTO OUR GLOBAL SOLUTIONS PLANT



### Sweden's fastest supercomputer for AI now online

"OUR NEW SUPERCOMPUTER is a powerful addition to the important research carried out in such fields as the life sciences, machine learning and artificial intelligence. It's very gratifying, but also a major challenge, that Linköping University is taking a national responsibility to connect all initiatives within high-performance computing and data processing", says Jan-Ingvar Jönsson, vice-chancellor at Linköping University.

The new supercomputer has its name after the renowned scientist Jacob Berzelius, who came from Östergötland, the region of Sweden in which Linköping is located. The supercomputer has a processing speed of 300 petaflops for AI. This makes Berzelius the fastest supercomputer in Sweden by far, and an important resource in the development of the AI research carried out in collaboration between the academic world and industry.

A donation of SEK 300 million from the Knut and Alice Wallenberg Foundation has made the construction of the new supercomputer possible.



### An ion pump in the treatment of brain cancer

DESPITE SURGERY AND SUBSEQUENT treatment with chaemotherapy and radiation, patients often experience recurrence of malignant brain tumours. Researchers at Linköping University with colleagues in Austria have shown in cells in culture that an ion pump can deliver drugs to the brain more accurately, which gives less severe adverse effects in chaemotherapy.

"This is the first time an ion pump has been tested as a possible method to treat malignant brain tumours. We used cancer cells in the laboratory in the experiments, and the results are very promising. However, it will probably take five to ten years before we see this new technology used in treatment for brain tumours", says Daniel Simon, associate professor in the Laboratory of Organic Electronics, Department of Science and Technology at Linköping University.

### How to use comics in school

MANY CHILDREN READ COMICS, but they are hardly used in teaching. LiU researcher Lars Wallner has written a textbook about comics and how they can be used in various subjects in school.

In the past 30 years, comics have progressed from being short jokes in a comic strip in the national dailies to cover many different genres, including graphic novels thousands of pages long. Further, the comic format today can appeal to a wider audience, and has readers of all ages. Comics are broad popular fiction, but are even so nearly absent from the school syllabus.

"I think the reason that comics are used so little in school is that they are considered to be of less value. I think we value text higher than images. But comics, with their combination of text and images, can offer a great deal in education", says Lars Wallner, senior lecturer at Linköping University, and previously an upper secondary teacher.

Comics have been a constant feature of his life. His bookshelf is full of graphic novels, he has used comics in his teaching career, and is now conducting research into comics.

As fiction, the comic format may be most closely related to teaching Swedish, but the book shows how comics can be used also in technology, English, art, science subjects and civics. It suggests how comics can be used as a basis for discussing climate change, developments in technology, and topics of fundamental values related to power, gender and exclusion.

### MORE ABOUT OUR RESEARCH THAT MAKES A DIFFERENCE!



# BRINGGRIT BGLORRY

### Tina & Mikael

We chat with two of our supportive teachers about what it takes to make it.

Challenging established ways of thinking to address global challenges requires a strong focus and plenty of ambition.

"COME WITH AN OPEN MIND, be curious about new issues, be prepared for an interdisciplinary approach and for working as a team. And most importantly, remember that your own level of ambition will deter mine your result, as there is high proportion of independent work. That s my best advice for anyone applying to our international mas ter s programmes, whatever their academic background," says Tina Simone Neset, senior lecturer at the Department of Thematic Stud ies – Environmental Change.

In other words, completing a master s at Linköping University with good grades requires serious commitment – to say that it s full time studies is not an exaggeration. The interaction with fellow stu dents is also significant for studies at LiU.

We work a lot in project groups, where the students get together to address a challenge or an issue from the industry. To work in a group, you have to plan your time well, and be able to cooperate with others. This method is new to many of our students, but it also develops skills that are valued by potential employers", says Mikael Segersäll, who teaches in the master s pro gramme Mechanical Engineering.

**oF COURSE** the teaching staff, includ ing the professors, are present and very much available throughout the process, both as support and as a sounding board, but its the stu dents themselves who ensure that progress is made. Therefore, suc cess relies on being able to commu nicate well within the group, as well as on the ability to immerse oneself in new fields and to solve problems. This problem-solving ability is one of the traits that has brought LiU alumni success and a good reputation worldwide.

Many of the masters programmes

relate to current and important issues – such as Science for Sus tainable Development. It includes subjects like global resource use, climate science and policy, and other issues that span over social and natural science. And it requires an interdisciplinary approach – again, a LiU hallmark. Most teach ers at LiU are active researchers involved in national or international research projects, which means current issues in research are addressed in courses and often picked up in master s theses.

ALL OF MY COLLEAGUES are very involved in the students' successes, while also managing their own research projects. This means that we give our students the tools to succeed with their studies, as well as the knowledge that s relevant right now, and in your life after graduation. But it s important that you have a strong first degree when you come here", says Mikael Segersäll.

Yes, it s a tough, but an incredi bly fun and rewarding time, many alumni report. Tina Simone Neset concludes: "For your master s, choose a topic that you're genuinely interested in, add some hard work and you'll do fine. Mikael Segersäll teaches in the master's programme Mechanical Engineering.

Tina Simone Neset is senior lecturer at the Department of Thematic Studies – Environmental Change.

### Aeronautical Engineering



Degree: Master of Science with a major in Aeronautical Engineering Credits: 120 Duration: Two years Pace of study: Full-time Campus: Linköping More info: liu.se/aeronautical Tuition fees: Approx. USD 13,500/EUR 12,000 (SEK 126,000) per academic year (for non-EU citizens)

### Learn the intricacies of aeronautics in the aviation capital of Sweden.

Linköping is one of few places in the world where aircraft are designed and manufactured. There are several aeronautical and military aviation businesses in the city, such as Saab, the producer of the Gripen aircraft. As a student, you will benefit from our location through close research collaboration between the university, the aero-space industry and our industry-affiliated teachers.

This master's programme offers a holistic perspective on the intricacies of aircraft design, covering the entire process from the conceptual to the detailed design phase. An aircraft represents a complex integration of systems from various technologies and disciplines, including aerodynamics, structure, propulsion, actuation, and other on-board systems. All these disciplines come together during the latter stages of the programme, when students are challenged to design, build and fly an aircraft.

The programme has three specialisations:

- Aircraft Aerodynamics
- Aircraft Structures
- Aircraft Systems Design

Modelling and simulation, including extensive use of contemporary engineering design tools, are fundamental elements in all these profiles.

After graduation you will be prepared for a career within the aerospace industry, ranging from conceptual aircraft design to aircraft engineering. You will be capable of taking on leading roles and working independently. Alternatively, you can work in related fields such as vehicle or wind turbine engineering, or you may opt to continue your career within academia.

### André da Luz Moreira

### Brazil - Research engineer at Linköping University

To me the educational system in Sweden greatly differs from most other countries, due to the focus on self development and critical thinking. The majority of courses in the Aeronautical Engineering programme require the students to work in groups and pairs, such that collaboration and team work are key to performing well. This prepares us for working in teams, learning how to allocate tasks, discuss, plan and ultimately contribute to common results.



### **Biomedical** Engineering



Degree: Master of Science with a major in Biomedical Engineering Credits: 120 Duration: Two years Pace of study: Full-time Campus: Linköping More info: liu.se/biomedical Tuition fees: Approx. USD 13,500/EUR 12,000 (SEK 126,000) per academic year (for non-EU citizens)

### Improve human health through innovative technology.

Biomedical engineering is often referred to as engineering for a good life. It is a field in which your creativity and problem-solving skills will benefit humanity and make a difference.

The intersection of the natural sciences, medicine, and technology is a dynamic place. This programme combines fundamental concepts and knowledge in engineering, biology, and medicine. Based on solid mathematical and physical foundations, useful medical knowledge, and a vibrant engineering spirit, you will learn how to develop sustainable and innovative technologies, materials, and systems that improve healthcare.

The first year is a broad compulsory segment, with courses in anatomy and physiology, medical information systems, biomedical signal processing, and signal theory, creating the strong knowledge base required for your further studies.

The second year offers in-depth specialisation along one of three tracks:

Biomedical Signals and Instrumentation, an • area in which multidimensional signals are

### Alfredo Miguel Ordinola Santisteban

### Peru - Current Student

LiU has given me the opportunity to flesh out the skills needed to contribute to a team and lead it in different scenarios. The education is very problem solving centered and tailored to be interactive which requires independence and critical thinking from students. I was not used to this type of learning environment, but I enjoyed it wholeheartedly.

used to model and simulate anatomy and physiological process in medicine

- Medical Imaging, in which advanced technology and theory unveil the inner secrets of humankind
- Medical Informatics and eHealth, in which you study the acquisition, processing, and utilisation of information to support health related decision-making

During the final semester, you will write a master thesis within biomedical engineering, at the department, in a hospital, or at a private company. After graduating, you will have the skills required to formulate and solve engineering problems in the biomedical domain, implement and operate processes and systems, and evaluate engineering tools applied

A considerable number of alumni have used these skills to pursue careers as researchers in industry and academia.

in medicine.



### Communication Systems



Degree: Master of Science with a major in Electrical Engineering Credits: 120 Duration: Two years Pace of study: Full-time Campus: Linköping More info: liu.se/comsys Tuition fees: Approx. USD 13,500/EUR 12,000 (SEK 126,000) per academic year (for non-EU citizens)

### Cutting-edge research into 5G network technology and beyond.

The exponential growth in the use of communication devices in our increasingly connected society needs skilled engineers to drive technological development and inspire new inventions, such as new applications for the Internet of Things, or ways to achieve higher user performance despite limited wireless resources.

Linköping University is at the forefront of communications research. We are known for our seminal research on massive MIMO systems, in collaboration with Ericsson and Nokia Bell Labs, among others. We have a popular YouTube channel and are members of the Swedish government's strategic initiatives ELLIIT and Security-Link. Our campus is conveniently located near Swedish high-tech companies Ericsson and Saab, as well as several exciting start-ups.

This master's programme offers students a broad

curriculum in communication systems, focusing on the fundamental principles of systems engineering and the design of digital and wireless communications systems. Topics covered include communication theory, coding, modulation, signal processing, artificial intelligence, and the design and optimisation of communication systems and networks. In the latter stages of the programme students will be challenged to build a communication system.

Our graduates are prepared for a career in engineering within different branches of communications. They work in diverse areas as senior software developers, technical coordinators for product development, and researchers on defence communications. Alternatively, you may continue conducting research leading to a doctoral degree.

### Computer Science



Degree: Master of Science with a major in Computer Science Credits: 120 Duration: Two years Pace of study: Full-time Campus: Linköping More info: liu.se/compscience Tuition fees: Approx. USD 13,500/EUR 12,000 (SEK 126,000) per academic year (for non-EU citizens)

### Shape the forefront of modern software and computer systems technology.

Computer science and technology play a key role in every part of the modern world. It is also one of the most dynamic and expansive fields of science.

Linköping University is home to one of the most important centres of computer science and engineering in Northern Europe; with 26 full professors, it is renowned for top-quality research and education. Additionally, neighbouring our main campus is Linköping Science Park, an incubator with 300 knowledge-intensive companies where many of our alumni are now employed, or have gained experience.

This master's programme offers you the knowledge required to master the theoretical foundations of the field and be able to apply and integrate them with other technologies.

- The programme has five specialisations:
- Visualisation and Computer Graphics
- Artificial Intelligence and Data Mining

- Computer Networks, Distributed Systems and Security
- Embedded Systems
- Programming and Software Methods

It is not mandatory to follow a specialisation; you may tailor your own combination of courses.

Our graduates are prepared for careers at the forefront of modern software and computer systems technology, as operating system designers, internet security or AI specialists, or working with visualisation in fields such as medicine, business, or social sciences. You may also opt for a career in research via continued studies towards a doctoral degree.

### Ching-Hsiang Yang

#### Taiwan – Alumn

Most people go for exchange to the US; I just wanted to go see how it is and experience living in Northern Europe. I have different experiences and they are very valuable. The professors always gave us information on further research and that helped a lot. They have experience in the field and give us an insight into what is going on right now and what will be the future innovations.



### Edward Nsolo

### Tanzania - Lecturer at Mkwawa University College of Education

The majority of courses in the programme relied on problem-based learning (PBL). This enables students to be innovative and competent graduates. We learned to be independent thinkers, problem-solvers, and good decision-makers. Swedes are very dedicated, organised, and hard-working people. I am eager to live that example in my whole career.



### **Electronics** Engineering



Dearee: Master of Science with a major in Electrical Engineering Credits: 120 Duration: Two years Pace of study: Full-time Campus: Linköping More info: liu.se/electronics Tuition fees: Approx. USD 13,500/EUR 12,000 (SEK 126,000) per academic year (for non-EU citizens)

### Advance far beyond the curriculum of traditional electronics education.

Modern society depends on reliable and efficient elec-ENGINEERING tronics supporting a wide range of application areas such as broadband communications, high-speed computing, healthcare, automotive, artificial intelligence (AI), the internet of things (IoT), and more. This means that the demand for engineers with the knowl-AND COMPUTER SCIENCES edge required to lead the design of complex integrated circuits and systems will remain high for the foreseea-

ble future. The programme provides you with a competitive education in digital, analogue and radio frequency (RF) integrated circuits (IC) and system-on-chip (SoC) design, combined with in-depth knowledge in signal processing, application-specific processors, embedded systems design, modern communications systems, and radio transceiver design.

The first year offers courses in digital and analogue integrated circuits, digital systems design, digital communication, and an introduction to radio electronics.

Later in the programme, you choose between two specialisations:

- System-on-chip, with a focus on digital systemon-chip design and embedded systems.
- Analogue/digital and RF IC design, with a focus • on the design of mixed analogue/digital and radio-frequency integrated circuits.

The programme is organised by several strong divisions with excellent teaching experience, worldclass research activities, state-of-the-art laboratories and design environments, and close research collaboration with many companies worldwide.

Our graduates can expect excellent career opportunities in major research and development centres, both in the industry and in academic institutions worldwide. You will be specifically trained and qualified to work as an IC design engineer in major semiconductor, IC and telecom companies. You will also be well prepared for further studies towards a doctoral degree.

### **Industrial Engineering** and Management



Dearee: Master of Science with a major in Industrial Engineering and Management Credits: 120 Duration: Two years Pace of study: Full-time Campus: Linköping More info: liu.se/industrial Tuition fees: Approx. USD 13,500/EUR 12,000 (SEK 126,000) per academic year (for non-EU citizens)

### Prepare for a leading role by integrating engineering, management and mathematics.

Linköping University has been a pioneer in industrial engineering and management education since the 1970s. Thanks to our qualified teachers, we can offer you interesting challenges and personal development to help you reach success.

Besides lectures and laboratory work, we expect you to actively participate in projects, writing papers, essays and reports, and presenting minor research tasks. This is demanding, and for good reason. We take education seriously and want your time with us to be as meaningful as possible.

This master's programme provides knowledge in industrial engineering and management through a multidisciplinary approach, giving you the skills to adopt changes in the industrial environment in a responsible and efficient manner. Core courses in project management and organisation, production planning and control, and quality management will help put your engineering skills in an industrial management context.

### Deepika Dronamraju

### India - Method & Parts Engineer, Scania Group

This master's programme exceeded my expectations and I am very glad that I chose LiU for my master's in Sweden. The education at LiU is very structured and practical. I got the opportunity to do my Six Sigma Green Belt Certification through my 12 credits project course which boosted my passion towards Quality Management.

Choose between three profiles:

- Innovation Management: Focuses on the development and commercialisation of resource-efficient and sustainable products and solutions.
- Operations Management: Effective management and utilisation of resources such as machinery, materials, and information, while meeting customer demand.
- Quality Management: A set of concepts and practices characterised by core principles such as customer focus, process management, fact-based decisions, and committed leadership. .

Our graduates are enjoying interesting careers as R&D managers in tech-intensive companies, or as CTOs in smaller companies and start-ups. You will be qualified for engineering positions with businesses and authorities involving consulting, investment strategies, production planning and control, Lean, quality, and supply chain management. You will also be prepared for an academic career beginning with doctoral studies.

### **Bo Sun**

### China - Software Developer, VECTOR Sweden

I like the way the university is set up, there is not too much pressure and the emphasis is on knowledge. If you fail an exam there are chances to try again. It's about improving your knowledge, not about simply passing tests. The software we used to design the chips is the same software that companies like Intel use. I can start working immediately because I already know the software.





18

ENGINEERING AND COMPUTER SCIENCES

### Mechanical Engineering



Degree: Master of Science with a major in Mechanical Engineering Credits: 120 Duration: Two years Pace of study: Full-time Campus: Linköping More info: liu.se/mechanical Tuition fees: Approx. USD 13,500/EUR 12,000 (SEK 126,000) per academic year (for non-EU citizens)

### Realise complex technical products and industrial processes.

Mechanical engineers are expected to be creative, have broad knowledge and work as members of multidisciplinary teams. With this master's programme, you will become a problem-solver with a holistic perspective, ready to take part in today's product development to create tomorrow's sustainable society. Choose among the following specialisations:

- Applied Mechanics classical and modern applied mechanics with a strong focus on the modelling and simulation of solid mechanics, fluid dynamics and thermodynamics.
- Engineering Design and Product Development modern and advanced approaches in CAD, design optimisation and product development.
- Engineering Materials deep knowledge about the behaviour of classical metallic engineering materials, but also about plastics and new emerging materials.

- Manufacturing Engineering covers aspects from supply chain level down to automation and manufacturing processes. Also learn about the factories of the future.
- Mechatronics how to design and analyse controlled mechanical systems such as hydraulic systems.

After graduation, you will have excellent opportunities for employment in almost all sectors of the engineering industry. You will be able to take part in multidisciplinary design processes where technical as well as economic, environmental and sustainability requirements are satisfied. You could be involved with the generation, distribution and use of energy; the design and development of machines, vehicles and transportation systems; or the processing of materials. In addition, you will be prepared for a research career.

### Sustainability Engineering and Management



Degree: Master of Science with a major in Energy and Environmental Engineering Credits: 120 Duration: Two years Pace of study: Full-time Campus: Linköping More info: liu.se/suseng Tuition fees: approx. USD 13,500/EUR 12,000 (SEK 126,000) per academic year (for non-EU citizens)

### Create innovative sustainable solutions in one of the fastest growing business sectors.

The ability to develop sustainable solutions will be crucial for companies and organisations in the future. An urgent need for rapid change within many technical fields has increased the demand for new management strategies. This programme will provide you with the ability to lead production, engineering and society in a sustainable direction. Today, energy and sustainable engineering is one of the fastest growing sectors.

Our current exploitation of natural resources has severe environmental implications, such as the emission of hazardous substances and resource scarcity. This programme teaches you how to combine an interdisciplinary systems perspective with skills in modern environmental and energy engineering. This holistic and proactive approach is essential to limit, prevent and solve environmental problems. The programme unites the perspectives of two departmental research groups that are developing systems solutions and producing internationally renowned research in renewable energy, circular economy, energy efficiency and corporate environmental management.

Linköping University is hosting a national research excellence centre on biogas production and utilisation. We are also coordinating the Mistra REES (Resource-Efficient and Effective Solutions) programme. This means that you will have plenty of opportunities to see how modern environmental technology works in action. Throughout the programme you will participate in lectures, seminars, student projects and labs. You will learn how to develop, evaluate and manage sustainable systems.

As a graduate, you are qualified for a wide range of leading environmental engineering positions: in energy consulting, energy distribution and generation systems, renewable energy, clean technology, environmental consulting, or waste management and recycling. You can also choose a career within academia, pursuing a doctoral degree.

### Sabari Raj

ENGINEERING AND COMPUTER SCIENCES

### India - Sales Support Engineer, Eaton

I've never regretted studying at LiU. I really like that we had a lot of group work; this helped us to understand different perspectives and working styles of people from different nationalities and helped us to investigate more in depth about the topic. The professors are really informal and are very open to plenty of doubts and discussions.



### Hanna Zanatta

### Sweden - Research Assistant, Linköping University

I want to work with developing countries to build efficient and sustainable energy systems to power future technologies. I believe that my studies at LiU will give me the required tools to address global problems such as affordable and clean energy and make a direct impact on people's lives by changing the ways products are manufactured and consumed.



### **Statistics and Machine Learning**



Dearee: Master of Science with a major in Statistics Credits: 120 Duration: Two years Pace of study: Full-time Campus: Linköping More info: liu.se/statistics-machine-learning Tuition fees: Approx. USD 10,500/EUR 9,000 (SEK 95,000) per academic year (for non-EU citizens)

### Unleash the power of data and statistics to help you make the right decisions.

The rapid development of information technologies has overwhelmed society with enormous volumes of information generated by large or complex systems from telecommunications, robotics, medicine, business and many other fields. This master's programme meets the challenges of learning from these complex volumes by means of models and algorithms from machine learning, data mining and other computer-intensive statistical methods.

By joining us, you will increase the efficiency and productivity of the systems and make them smarter and more autonomous. We integrate statistical modelling and analysis with machine learning, data mining and data management to give you unique skills.

The programme focusses on modern methods from machine learning and database management that use the power of statistics to build efficient models and make reliable predictions and optimal decisions.

You will gain deep theoretical knowledge as well as practical experience from extensive amounts of laboratory work.

Depending on your interests, you will work towards your thesis at a company, a governmental institution or a research unit at LiU. There you can apply your knowledge to a real problem and meet people who use advanced data analytics in practice or you can go deeper into the research.

There is a rapidly increasing demand for specialists who are able to exploit the new wealth of information in large and complex systems. Business, telecommunications, IT and medicine are just a few examples of areas where you will be wanted for advanced analytical positions. You will also be well prepared for an academic career, should you choose to continue into research and pursue a doctoral degree.

### Intelligent Transport Systems and Logistics



Dearee: Master of Science with a major in Transportation Systems Engineering Credits: 120 Duration: Two years Pace of study: Full-time Campus: Norrköping More info: liu.se/transport Tuition fees: Approx. USD 13,500/EUR 12,000 (SEK 126,000) per academic year (for non-EU citizens)

### Join our world-leading research into future transport systems and smart cities.

Transport systems are undergoing a huge transformation. Autonomous driving is becoming a reality, and the electrification of roads has begun. Vehicles are connected to each other and to the infrastructure in smart cities, enabling the collection of all sorts of data for the analysis and management of the movements of people and goods.

This programme requires strong mathematical and analytical skills - programming experience is a distinct advantage. Focus is on the integration of IT and data science into transport and logistics systems, with the aim of increasing efficiency, safety, mobility and customer satisfaction while reducing environmental impact. The programme provides the tools to understand, develop and control future transport and logistics systems using optimisation, simulation, data analytics, and communication networks. You will study traffic network modelling and prediction, logistics, supply chain modelling, mobile telecommunications, road traffic safety, and project management.

As the programme progresses you may specialise towards Traffic or Logistics.

Thanks to your engineering profile and transport systems expertise, you will have a wide choice of challenging career opportunities. You may become a traffic engineer or a logistics manager or develop systems for traffic monitoring or autonomous driving. You will also be prepared for an academic career beginning with doctoral studies.

ENGINEERING AND COMPUTER SCIENCES

### Alejandro García Alvarez

### Spain - Co-founder of a startup named Foxrane

What I really liked about the academics is that the courses were very practical, we learnt a lot by doing it ourselves which I really enjoyed. The quality of the studies was exceptional. Moreover, the student life in Linköping is truly unique. There's always students around you, you meet tons of new people from all over the world, make new friends and learn new things.



### **Rohit Muralidharan**

### India - Business Porcess Consultant, IFS AB

The way certain courses are designed helps you to build skills like working in groups and time management, but also planning, which I can relate to in my current job. *Courses like six-sigma, supply-chain logistics, logistics* networks and transport, GIS and Positioning systems involved very practical project work and assignments. The teachers conducting these courses were industry experts.



### Design



Degree: Master of Science with a major in Design Credits: 120

Duration: Two years Pace of study: Full-time Campus: Linköping/Norrköping and Online More info: liu.se/mscdesign Tuition fees: Approx. USD 13,500/EUR 12,000 (SEK 126,000) per academic year (for non-EU citizens)

### Tackle societal challenges, ranging from food waste to collaborative welfare using interdisciplinary design.

Linköping University is one of Sweden's leading design universities, with world-class research in areas such as design for services, sustainability and visual media. We welcome applicants from different educational backgrounds, with a desire to develop design beyond materials and disciplines.

This master's programme incorporates established and innovative design concepts in a unique interdisciplinary setup. Studio courses form the backbone of the programme, providing the fundamentals of working with societal challenges. The programme features three design tracks, allowing you to develop your skills within an area of speciality:

- Service Design design and innovation for the service sector
- Sustainable Design design of sustainable systems, with accompanying business models, products, and services.

• Visual Media Design – design and conceptualisation of interactive visual environments beyond screens and handheld units. You will learn to navigate complex contexts and create sustainable solutions, developing skills and knowledge in participatory design and co-creative practices.

You will interact with companies, organisations and entrepreneurs, in collaborations across professions and campuses.

Our graduates are prepared for advanced careers as designers in interdisciplinary design environments. You may find employment as an interaction designer or product designer, designing for service or policy, in the public or voluntary sector, as an entrepreneur or with start-ups. You will also be qualified to continue postgraduate education at doctoral level.

### Ecology and Sustainable Development



Degree: Master of Science with a major in Biology Credits: 120 Duration: Two years Pace of study: Full-time Campus: Linköping More info: liu.se/ecology Tuition fees: Approx. USD 13,500/EUR 12,000 (SEK 126,000) per academic year (for non-EU citizens)

### Make a difference – contribute to an ecologically sustainable future.

In a world facing complex environmental problems, ecological understanding and a systems perspective are fundamental to finding sustainable solutions. If you are interested in nature and want to address global challenges, this programme is the right choice.

By applying ecological theories and quantitative methods, you will learn how to identify crop management strategies for biological control, evaluate the preservation status of nature reserves, and analyse regional ecosystem services and how they interplay with social and economic systems.

Ecology courses at LiU have a research perspective and are based on cases where you work closely with fellow students, teachers, and researchers in a collaborative atmosphere. As a student, you take part in outstanding research in, for example, conservation ecology and sustainable development.

You will sharpen your skills in experimental design,

theoretical thinking, modelling, systems analysis, and scientific communication. During a six-week internship and in your one-year thesis project, you will have the opportunity to go deeper into areas of your interest and to establish a professional network for your future working life. Possible thesis subjects include biodiversity, species interaction in food webs, and nutrient cycling.

As a graduate, you can work with environmental and nature conservation issues such as the management of ecosystems, ecological communities, and populations to conserve life on land and below water. You may find employment with consultancy firms, government agencies, forestry companies, or international environmental organisations. You will also be well prepared for further postgraduate studies towards a doctoral degree.

### Lyn Cao

### China - Service Designer, Svea Ekonom

Design is about making things work better. It's about understanding people and creating empathy for what individuals need and want. In service design, we try to understand the big picture of holistic service systems and create solutions with the stakeholders to improve the current services or create new ones. This is a quite new major and it includes knowledge from many disciplines. Also, the process is great fun and full of unexpected surprises!



### Maja Bradarić

### Bosnia and Herzegovina - PhD candidate, Netherlands

I really enjoyed that the courses were in depth and were always organized in form of individual or group projects. In my opinion, this is the best way to learn. You are working on something and unconciously getting all the knowledge. Thinking outside of the box was always encouraged. And I liked the international atmosphere in Linköping, the people, the city and how easy it was to meet people or find events to attend."



### Science for Sustainable **Development**



perspective on environmental issues, and at the same

time, provide opportunities to deepen your theoretical

fields. Field trips, laboratory and GIS exercises, spatial

analysis in the Norrköping Decision Arena, role-play

activities, study visits to authorities and businesses in

the environmentally-progressive Östergötland prov-

ince are just some of the ways in which you will learn

about sustainable solutions in practice. Sustainability

issues bridge academic disciplines and require diverse

expertise. Few universities offer such an interdiscipli-

The programme provides a strong basis for a career

related to sustainable development and environmen-

tal sciences. Our graduates have positions in research

institutes, universities, environmental organisations,

businesses, NGOs, river basin commissions, consul-

tancies, power companies, intergovernmental envi-

ronmental agencies, and doctoral programmes.

nary perspective in environmental sciences as LiU

knowledge and practical skills on specific scientific

Dearee: Master of Science with a major in Environmental Science Credits: 120 Duration: Two years Pace of study: Full-time Campus: Linköping More info: liu.se/sustainabledevelopment Tuition fees: Approx. USD 12,000/EUR 10,500 (SEK 110,000) per academic year (for non-EU citizens)

does.

### Be part of the solution for a sustainable future.

The future needs sustainable solutions to societal challenges. This programme offers a holistic interdisciplinary approach to current societal problems, such as climate change, natural resource exploitation, increasing energy demand and inequality. The master's programme allows you to explore the complexity of creating sustainable societies in alignment with the principles of sustainable development and Agenda 2030.

The programme addresses global environmental changes and societal transformations. It will challenge you to undertake critical analysis of present and future environmental concerns, apply scientific knowledge across academic disciplines, and develop interdisciplinary competence. Your training will enable you to develop skills to interpret, design, communicate, and implement solutions to sustainability and environmental challenges, which will be indispensable for your future career as a sustainable development expert.

Core courses have been designed to give you a wide

Anna Häger

#### Åland – Citizent Engagement manager at the Flexens

The programme was an eyeopener for me. It enabled me to view sustainable development from several perspectives, such as what sustainable development is from a social and an economic perspective. I went through an amazing development at LiU, both academically and as a person. What really impressed me at LiU is the way in which it promotes free discussion, making space in which the students can exchange knowledge and experience.



### Applied Ethology and Animal Biology



Dearee: Master of Science with a major in Bioloav Credits: 120 Duration: Two years Pace of study: Full-time Campus: Linköping More info: liu.se/ethology Tuition fees: Approx. USD 13,500/EUR 12,000 (SEK 126,000) per academic year (for non-EU citizens)

### Improve animal welfare – investigate animal behaviour and biology, up close.

For good animal welfare and husbandry, an understanding of animal behaviour and biology from an applied perspective is important. If you are interested in the well-being of animals and want to preserve biodiversity, this programme is for you.

The programme is conducted in collaboration with Kolmården Wildlife Park, the largest and most renowned zoo in Scandinavia. Several teaching sessions are held at the zoo, where you acquire first-hand knowledge from experienced staff. You will gain in-depth understanding of the biology of stress and its role in animal welfare, the effects of domestication on animal behaviour, the physiology of behaviour, problems associated with keeping animals in captivity, and conservation biology. The courses are closely connected to ongoing research performed by teachers on, for example, how various genes influence animal behaviour, well-being and personality, the sensory world of mammals, and human-animal interactions.

In addition to classroom lectures and seminars, you participate in several hands-on projects. A key part of the programme is a one-year degree project (60 ECTS), which allows you to specialise in a subject based on your interests. You will have the opportunity to perform your degree project at a zoo, government agency, organisation or company, in Sweden or abroad.

As a graduate, you will be well-acquainted with animal behaviour and its underlying mechanisms. Career opportunities include animal welfare inspector, wildlife conservationist, or advisor for zoos, private businesses, and animal or environmental agencies, to name a few. You will also be qualified to pursue PhD studies.

### **Torbjörn Sievert**

#### Germany - PhD Student

This programme gave me a good overview of ethological topics. It was interesting and fun to get hands-on experience with various species ranging from farm animals to more exotic ones in Kolmården Wildlife Park. The extensive work on the thesis project provided me with in-depth knowledge and opened the door to my current doctoral degree project. Having a full year to work on your thesis is one of the key characteristics of this programme.



### Chemistry



Dearee: Master of Science with a major in Chemistry Credits: 120 Duration: Two years Pace of study: Full-time Campus: Linköping More info: liu.se/chemistry Tuition fees: Approx. USD 13,500/EUR 12,000 (SEK 126,000) per academic year (for non-EU citizens)

### Join us on a journey from materials science to medicine with the molecule in focus.

Skilled chemists will play a key role in solving the great challenges we are facing concerning the environment and the health of an aging population. The complexity of issues as diverse as climate change, energy storage, cancer and antibiotic resistance requires a broad chemical knowledge.

This programme has a modern, molecule-centred approach, beyond traditional branches of chemistry. By studying the details of the chemical bond, followed by synthesis and analysis of both molecules and materials, you will learn why molecules with a certain structure are suited for a given application within nanotechnology, medicinal chemistry and materials science. Throughout the programme, our experienced teachers, who are all active researchers, will describe how molecular properties are understood, designed and used

A key feature of the programme is its experimental

focus. From the second semester, you will spend a lot of time in our labs, getting hands-on experience of chemistry and applying theories covered in lectures. Linköping University has a strong research environment in chemistry and related areas, such as the development of hard and soft materials, molecules for pharmaceutical and diagnostic purposes and methods for forensic investigations. You will have the option to do your thesis either in an academic research group or in industry.

After graduation, you will have proficiency in "thinking chemistry" from a molecular perspective. The job market for chemists is excellent. You may find work in the pharmaceutical or materials science industries, or with environmental agencies. The programme also makes you well prepared for further studies towards a doctoral degree.

### Experimental and Medical Biosciences



Dearee: Master of Medical Science in Medical Biology Credits: 120 Duration: Two years Pace of study: Full-time Campus: Linköping More info: liu.se/biosciences Tuition fees: Approx. USD 15,000/EUR 13,000 (SEK 136,000) per academic year (for non-EU citizens)

### Join the frontline of knowledge in the field of biomedicine and kick-start your scientific career.

The high level of cooperation within research groups at LiU sets us apart. Our master's programme prepares you for breaking new ground within the broad field of life sciences, with particular emphasis on understanding cellular and molecular mechanisms related to health and diseases.

Different areas such as stem cells and applied regenerative medicine, neurobiology, immunology, cardiovascular biology and pharmacology, virology and infectious diseases are covered. The programme unites theoretical knowledge with practical skills, particularly in the individual experimental projects that you will carry out.

Courses are taught using regular lectures, but also tutorial groups that apply problem-based learning (PBL), laboratory work and seminar discussions. The laboratory classes use powerful model systems to illustrate modern concepts of medical biology, while PBL promotes lifelong learning.

Individual projects are key parts of the programme. During the second year, you will conduct your degree project in a research laboratory either at Linköping University, at another Swedish or international university, in industry or in the public sector.

An extra feature of the programme is the possibility for a limited number of students to study the second year at the University of Applied Sciences, Technikum Wien or at the University of Applied Sciences Krems, both in Austria. If you pursue this opportunity you will earn an additional degree - Master of Science in Engineering. The studies in Austria have a strong link to the industry.

Our programme is the highest rated biomedicine programme in Sweden. As a graduate you will be well prepared for careers in the pharmaceutical and healthcare industries, in the public sector or within academia.

### Pentti Niiranen

### Sweden - Current Student, Sweden

To study in Linköping is a decision I will never regret! The professors are so friendly and helpful, and the student life is fun. I'm really enjoying this master's programme so far due to its content and structure - it incorporates all fields of chemistry. It has helped me to obtain in-depth knowledge about bonding, synthesis, reactivity, and analysis, but also how chemistry is used in applications.



### **Damon Frampton**

### United Kingdom - PhD Student

LiU was very welcoming. Maybe it was the lack of restrictive and esoteric traditions, maybe it was the bonding with classmates during the reception period. This programme is one of the better ones in Sweden as it allows you to do two major projects as part of your education. Check out the International Students Association (ISA) at the university. They're great if you love to travel or if you're looking for a guide to the city and student life.



### Materials Physics for Nano and Quantum Technology



Dearee: Master of Science with a major in Applied Physics or Physics Credits: 120 Duration: Two years Pace of study: Full-time Campus: Linköping More info: liu.se/materialsphysics Tuition fees: Approx. USD 13,500/EUR 12,000 (SEK 126,000) per academic year (for non-EU citizens)

### Gain specialist knowledge to engineer new materials on an atomic scale.

Advancements in modern technology are dependent on research and development in materials science. Solar cells, smartphones, quantum computers, biomedicine, and space telescopes are examples of applications using materials engineered on the nano scale. With specialist knowledge in materials physics, nano and quantum technology, you will be highly competitive in this rapidly developing field.

Research and development of new materials is based on a broad range of techniques, such as experimentally growing and controlling materials on an atomic scale and making supercomputer calculations for the prediction and analysis of new materials. This master's programme offers theoretical and experimental courses with applications in advanced materials physics, as well as nano and quantum technology. You will begin your studies with a solid foundation in

quantum mechanics, experimental physics, computational physics, solid state physics, and optics and photonics. Later in the programme, you may specialise by selecting more courses in a particular subfield that interests you, such as experimental nanophysics, computational physics or quantum technology. In the final semester, you will take part in cutting-edge research while writing your thesis.

After graduation, you will be prepared for a career in materials-related research and development within industry or academia. Materials science is a research priority at Linköping University, and we have two multidisciplinary graduate schools where many of our graduate students continue their path towards a doctoral degree.

### **Protein Science**



Degree: Master of Science with a major in Chemical Biology Credits: 120 Duration: Two years Pace of study: Full-time Campus: Linköping More info: liu.se/proteinscience Tuition fees: Approx. USD 13,500/EUR 12,000 (SEK 126,000) per academic year (for non-EU citizens)

### Tackle health challenges with in-depth knowledge of protein structure and function.

Detailed knowledge of proteins and other biomolecules is crucial to our understanding of living processes. By studying protein science, you will be prepared for challenges such as unveiling the molecular causes of disease, designing tools for early and reliable diagnosis, and finding effective therapies.

This master's programme will give you deep insights into mechanisms of protein action, based on complex structural aspects and mediated through binding dynamics, selectivity, and catalytic function. You will also study pharmacology and drug development. The education is offered in an internationally successful research environment focusing on the behaviour of misfolded proteins causing neurodegenerative diseases, interaction patterns of cancer-related proteins, and design of antimicrobial peptides for replacement of traditional antibiotics. The courses are taught by teachers who are all active researchers, and are just as eager to share their expertise as they are responsive to student ideas.

You will have access to large instrument facilities, giving you the opportunity to develop extensive lab skills and participate in exciting projects. You will also practice your communication and teamwork abilities. The programme concludes with a degree project carried out in close collaboration with researchers in academia or at a company.

After graduation, your lab experience and thorough understanding of molecular interactions will open career doors to the life science industry and the growing area of biological pharmaceuticals, as well as to hospital laboratories and chemical analysis companies. You will also be qualified to continue your academic education towards a doctoral degree.

### Samiran Bairagi

### India - PhD student

At LiU students are getting world-class education with emphasis on learning. Teachers devote considerable amount of time to design lectures and lab tasks in a way that encourages students to think and come up with solutions. I think this helps with better understanding of physical concepts and with development of problem-solving abilities both in the real life and in academia.



### Linda Sjöstrand

### Sweden - PhD student in Medical Science, Sweden, LiU

I have always heard good things about Linköping University and this programme interested me, so it was a natural choice. I appreciate that courses are offered by two faculties, as this gives me a wider perspective on the role of proteins and how they are studied. What I like the most is the opportunity to do a 60 credits master's thesis. I'm writing mine in collaboration with two research groups, and I'm having the time of my life!



### **Adult Learning and Global Change**



Dearee: Master of Arts with a major in Adult Learning Credits: 60 Duration: Two years Pace of study: Part-time Campus: Online (distance learning) More info: liu.se/globalchange Tuition fees: Approx. USD 11,000/EUR 9,000 (SEK 96,000) per academic year (for non-EU citizens)

### Be part of an award-winning adult learning global network initiative.

Governments all over the world are urging citizens to train and educate themselves in order to stay competitive in a connected world. Critical discourses on globalisation require the ability to learn in situations that span vast cultural and geographic divides. Our programme is for those who wish to understand adult learning in the framework of global change within a unique digital learning format that has won international acclaim.

This master's programme enhances students' ability to work in a globalising world and to challenge the traditional perspectives on globalisation. Our programme is an equal collaboration with universities in Canada and South Africa. All course activities will be done within a digital learning platform, where you will learn together with students from the partner universities in a global class, making the programme

truly international. The courses contain topics such as, for example, locating oneself in global learning, adult learning: contexts and perspectives, global/local learning, and understanding research. In the end of the programme, the students will also write a MA thesis.

Our graduates are able to learn and teach globally, use global connective asynchronous technologies, understand knowledge-based societies and their implications for learning, understand globalisation discourses, develop cultural sensibilities and sensitivities and develop an equality perspective for learning and reframing their own professional practices. They may also continue their academic careers in further projects.

### **Outdoor and Sustainability Education**



Degree: Master in Didactics with emphasis on Outdoor Education Credits: 60 Duration: One year Pace of study: Full-time Campus: Linköping More info: liu.se/susedu Tuition fees: Approx. USD 12,000/EUR 10,500 (SEK 110,000) per academic year (for non-EU citizens)

### Discover the educational potentials of leaving the classroom and exploring the surroundings.

All children deserve the opportunity to learn and reach their full potential. This master's programme will increase your knowledge about learning processes in a school context, with a focus on experience-based learning, using different outdoor modes and methods. In these advanced courses in educational science, theory and experiential learning increase teachers and other educators understanding of how a variety of outdoor environments can be used as resources for learning and knowledge.

Outdoor education is a diverse field of research and practice. This programme derives from the Scandinavian perspective on outdoor education - the concept of "uteskola", literally meaning outdoor school. Here the school syllabus is taught outdoors on a regular basis, supported by indoor learning. You will broaden your professional expertise as a teacher by training to use outdoor environments for teaching and learning.

You will improve your theoretical and practical knowledge on how to take your school subjects and teach them outdoors, in natural as well as urban environments. Learning theory and theory about place are the underpinning rationales for practical experience. We explore the city, nature reserves and other green settings, play-grounds and school grounds as learning environments. Examples of educational settings come from pre-school up to secondary school. You will have the possibility to focus on your particular interest and field of practice.

One essential question in societies worldwide is how to sustain our planet's functions and resources and at the same time improve well-being for a growing population. Environmental and sustainability education focusses on possible ways to work with the knowledge, skills and values needed to contribute and participate in a sustainable society. Furthermore, the programme explores what research reveals about the role of nature for learning and well-being.

As a graduate, you will be able to work with pedagogical development in schools or other educational fields in society. The programme also prepares you for future PhD studies and research.

Kamila Hoffman

#### New Zealand - Learning and Development Consultant, Vodafone

I absolutely loved becoming part of the global community, learning and sharing knowledge and experiences. Critical reflection is essential and really encourages students to develop a thoughtful perspective on their learning and practice in order to develop professionally. In order to keep up to date as a professional you need to continuously learn, reflect and review your practice.



### Deepti Bhat

#### India - Co-founder of Happily Outdoors/Independent Researcher

This programme turned out to be one of the best decisions of my life. We were not just outdoors doing activities, the course was well designed. Now I organize nature camps for urban kids based out of Bangalore; I take them to the forests in Western Ghats. Additionally, I raise funds to conduct research on integrating outdoor pedagogy in government primary schools located in rural and tribal areas.



### Ageing and **Social Change**



Degree: Master of Science with a major in Ageing and Social Change Credits: 60/120 Duration: One/two years Pace of study: Full-time Campus: Norrköping or online distance learning with periods of instruction on campus Tuition fees: Approx. USD 9,000/EUR 8,000 (SEK 80,000) per academic year (for non-EU citizens) More info: liu.se/age

### Let's build a sustainable society for an ageing population.

A longer living population presents global challenges and opportunities that affect every aspect of our lives such as welfare, the environment, health, finance, housing, and employment. Gaining a profound understanding of the potentials and challenges of ageing, is crucial for the well-being of mankind and the sustainability of society. Skilled experts to tackle the global social, economic, health, political and cultural issues of ageing will be needed to support public agencies, civil society and private corporations in addressing the challenges of an ageing population.

The interdependencies between policies, welfare institutions, populations' dynamics and individual lives are at the heart of this programme. It offers a broad curriculum in policy-oriented ageing research and addresses several policy areas such as the welfare state, life-course policies, pensions, health and care, family, and intergenerational relations. Teachers from a range of academic backgrounds will enable you to acquire a globally attractive and unique education. Together we will seek answers to the complex ques-

tions facing society today with regards to both individual and population ageing, through a truly interdisciplinary perspective, combining up-to-date research and methodology.

The approach taken during the programme emphasises interactive teaching and communication, based on a hybrid model of digital learning that includes both classroom teaching and distance learning. You can choose either on-campus learning or distance learning with two on-campus periods each year. The programme is offered as a one-year option, 60 credits, and as a two-year option, 120 credits.

Regardless of whether you are about to start a career or to further develop your professional expertise, the programme will offer you the ability to generate social impact. You will be well-prepared for a professional career in either the public or the private sector, and for further studies and research at PhD level and beyond. The programme will lead you, and your fellow students, to become the next generation of managers, advisors, decision-makers, experts, and researchers,

### Applied Ethics



Degree: Master of Arts with a major in Applied Ethics Credits: 60 Duration: One year Pace of study: Full-time Campus: Linköping More info: liu.se/applied-ethics Tuition fees: Approx. USD 9,000/EUR 8,000 (SEK 80,000) per academic year (for non-EU citizens)

### Tackle life's big questions with applied ethics.

Modern societies face many new challenges. Globalisation raises questions of global justice, new technology has implications for decision making in healthcare concerning life and death, climate change and environmental hazards challenge our responsibility for future generations. Applied ethics is a growing interdisciplinary field that strives to tackle the moral issues surrounding these challenges. If these questions engage you, this master's programme will meet your aspiration.

The programme offers a complementary education at the master's level in applied ethics for you who already hold a bachelor's degree in one of various academic fields, from philosophy to health and technology, or a professional degree. The subject has its disciplinary basis in moral philosophy and ethics and requires knowledge and expertise in the various fields of application.

LiU's centre for Applied Ethics (CTE) is a leading

centre in applied ethics in Sweden. We are devoted to research and teaching on globally relevant topics with collaborative partners worldwide.

You will gain knowledge of ethical theories and methods and examine ethical debates in different fields of application. You will acquire the skills to provide analysis of moral problems and ethical debates and be able to make critical assessments of ethical arguments and policy documents. In the latter half of the second semester, you will concentrate on a selected area of specialisation.

When you graduate, you will have a unique competence that you can add to your professional or disciplinary competencies; doctor or nurse, teacher, minister, civil servant or economist, many professionals need the ability to manage ethical issues. A great number of our graduates continue to doctoral studies in different areas of applied and professional ethics.

### Andreas Motel-Klingebiel

#### Sweden - Professor, Head of Division

Age matters! How to meet the challenges of the longevity society in a changing world? The answer to this question is crucial for the well-being of mankind and the sustainability of contemporary societies. LiU's new and innovative Ageing and Social Change master's programme is the first of its kind in Sweden, giving our students a head start in an important area that affects all parts of society.



### **Rosalie Waelen**

### The Netherlands - PhD Candidate in ethics of technology

I realised that being an ethicist is more than just applying theories to practice. I recommend that you think ahead about what practical issues interest you most. You can really use all the assignments to create your own specialisation or profile. LiU offers a great environment to study in. There is a vibrant student life, great study facilities, and a lot of opportunities to enjoy nature and Swedish culture.



### **Business Administration** - Strategy and Management in International Organisations



Dearee: Master of Science with a major in Business Administration Credits: 120 Duration: Two years Pace of study: Full-time Campus: Linköping More info: liu.se/business-administration Tuition fees: Approx. USD 10,500/EUR 9,000 (SEK 95,000) per academic year (for non-EU citizens)

### The world needs leaders with good knowledge and judgement, who can make well-balanced decisions

The international environment presents a series of opportunities and challenges in scale, uncertainty, ambiguity and complexity. Navigating these waters requires not only analytical skills in management, but also a reflective and creative mindset and good judgement.

The programme combines fundamental academic knowledge (thinking and reasoning) and experiential knowledge (skills) to prepare students to go beyond applying known solutions to known problems. It also encourages them to grow as a human being. We train for analytical excellence, for reflection and creativity, and for personal growth. As a Strategy and Management in International Organisations (SMIO) student you will be expected to work hard. You will join an exclusive and diverse group of students from all corners of the world.

Upon successful completion of the programme, students will have acquired excellent analytical skills, the ability to think strategically, and relevant experience for work in international organisations. Our graduates are competent analysts and competitive candidates for employment in international organisations in general. Among our alumni we find consultants, business analysts, innovation strategists, marketing and brand executives, HR specialists and project managers. Some alumni have started their own businesses, while others have chosen to pursue an academic career through doctoral studies. As a graduate you will join an alumni network of around 400 individuals in all parts of the globe.

### Computational Social Science



Degree: Master of Science in Computational Social Science Credits: 120 Duration: Two years Pace of study: Full-time Campus: Norrköping More info: liu.se/css Tuition fees: Approx. USD 10,500/EUR 9,000 (SEK 95,000) per academic year (for non-EU citizens)

### Use statistical and computational methods to understand society and human behaviour.

The increased integration of technology into our lives has created unprecedented volumes of data on everyday human behaviour. Troves of detailed social data related to choices, affiliations, preferences and interests are now digitally archived by internet service providers, media companies, other private-sector firms, and governments. New computational approaches based on predictive modelling, agent-based simulations, text analysis, and network science make it possible to analyse these data in insightful and novel ways.

This is a chance to develop skills in cutting edge computational techniques alongside a strong grounding in the principles and practice of contemporary social research. The programme's quantitative methods training will help you harness complex data and use them to explore social theories and fundamental

questions about human societies. The programme's theoretical and substantive training will introduce you to the principles of social inquiry and theories of human behavior, and help you apply your technical skills to pressing social issues such as ethnic segregation in schools, income inequality, entrepreneurship, political change, and cultural diffusion.

The skills you develop in social theory and data analysis during the programme are relevant for careers within the private and public sectors alike. Graduates will be qualified to pursue social science research in a number of different roles: data analyst, marketing analyst, sales researcher, data-driven policy support and analyst, etc. After graduation, you will also qualify for many doctoral programmes.

### **Kristina Liepone**

Lithuania - Sales representative at the Finnish company Lindström Group in Stockholm, and simultaneously running her own business LieponEvent AB.

SMIO matched my interests perfectly! The courses were planned in a structured way and time was given for both lectures, self-reflections, individual studies and teamwork. The atmosphere was fantastic with individuals of different ages and from different regions of the world. We became like one big family helping, supporting and encouraging each other.



### **Elida Ibrahim**

### Malaysia - PhD Candidate in sociology

Moving to Sweden to me was like moving to the future! Here, instructors respect and value students' input, and this is reflected in the way they teach and interact with students. Take advantage of the access you have to your instructors! The combination of having international faculty who are experts in their field and small class sizes meant that we had a lot of opportunities to discuss ideas and have meaningful one-on-one interactions.



### Child Studies



Degree: Master of Social Science with a major in Child Studies More info: liu.se/child-studies Duration: One/two years Credits: 60/120 Pace of study: Full-time Campus: Online distance learning with periods of instruction on campus Tuition fees: Approx. USD 9,000/EUR 8,000 (SEK 80,000) per academic year (for non-EU citizens)

### Challenge conventional views on children and childhood.

This master's programme is interdisciplinary and focusses on the critical study of questions related to children and childhood.

Courses explore various areas: children's rights, parents and the family, education and school, migration, culture, the media, and health. You will deepen your knowledge of methodological approaches and theoretical perspectives in child studies. Our core focus is how to apply the latest research findings in order to critically review, develop and improve policies and practices related to children and childhood.

The programme is hosted by an internationally renowned research department, which has conducted research in child and childhood studies since 1988. The teachers are active researchers, which guarantees that cutting-edge knowledge is presented. The programme can be taken in one or two years and will prepare you for designing, planning and conducting research that concerns children, childhood and families. Each year is concluded with a 15-credit master's thesis. The programme is primarily taught online with the aid of a digital learning platform, but there are three on-campus periods of duration 2-5 days in the first year and two in the second. This allows for some flexibility as to where and when you conduct your studies. The programme has high academic standards, however, and requires students to commit full time to their studies.

After graduation, you will be well prepared for doctoral studies and research tasks within governmental authorities or local organisations, both governmental and non-governmental, whose activities affect children and their living conditions.

### Ethnic and Migration Studies



Degree: Master of Arts with a major in Ethnic and Migration Studies Credits: 120 Duration: Two years Pace of study: Full-time Campus: Norrköping More info: liu.se/ethnic-migration-studies Tuition fees: Approx. USD 9,000/EUR 8,000 (SEK 80,000) per academic year (for non-EU citizens)

### Make your commitment matter.

You are dedicated to help tackling some of the most challenging issues in today's world. This unique master's programme relates ethnicity and migration to global economic and cultural change, and to systems of domination and resistance movements.

You will sharpen your skills in analysing the causes of migration, as well as its consequences for emerging formations of race, gender, labour, citizenship, healthcare, welfare and culture.

The programme is interdisciplinary, integrating the humanities and the social sciences. In true LiU spirit, there is a strong commitment to problem-solving, critical and innovative approaches.

You will learn how migration shapes society, from a historical and sociological point of view. Our dedicated students reach in-depth knowledge in the field of intersectional migration studies.

You can tailor your education towards a special interest, profession or field of expertise, by choosing

elective courses, studies abroad and internships.

The studies take place on our beautiful Campus Norrköping. Ethnic and migration studies is a strong interdisciplinary research field at LiU. It is pursued at different institutes, departments and units, notably REMESO – the Institute for Research on Migration, Ethnicity and Society, one of Europe's top institutions in ethnic and migration research.

In your courses you will meet teachers who are all doing research in the areas that they teach in. This means that courses provide an in-depth orientation of knowledge and analysis of each field and insights into the production of new knowledge. The programme offers direct contact with ongoing research.

When you graduate, you'll be qualified for positions in local, national and international organisations, administration, business, government, media and the cultural sector, as well as for further postgraduate studies and research.

### Ronja Ulvfot

Sweden - Project coordinator for Child Helpline International, Netherlands.

The programme is focused on critical thinking and reflection rather than just learning facts. I got to understand the concept of children and childhood from many different theoretical perspectives. It really broadened my horizons, and has been very useful in my current career. it was superb to get to know so many people from different countries who were also taking the course – the discussions were always very dynamic.



### Hannah Atkins

### South Africa - Research Intern at the Studies in Poverty and Inequality Institute

I enjoyed the interdisciplinary nature of my degree. We covered everything from history, literature and culture to labour market relations, gender, health and nationalism. It was a fascinating MA that gave us a broad knowledge in so many different facets, and exposed us to a wide range of thinkers - not just those of Europe. And I received such fantastic support from my lecturers, which really made a difference in my enjoyment and success.



he car emer, ip, he gratin iU sp olving ety, fr r dedi e fielc

### **Gender Studies -Intersectionality and Change**



Dearee: Master of Arts with a major in Gender Studies, specialisation Intersectionality and Change Credits: 60/120 Duration: One/two years Pace of study: Full-time Campus: Online distance learning with periods of instruction on campus. More info: liu.se/gender-studies Tuition fees: Approx. USD 9,000/EUR 8,000 (SEK 80,000) per academic year (for non-EU citizens)

### Become an agent for change.

This one-of-a-kind master's programme makes you highly skilled in analysing how social and cultural change can be initiated or sustained by integrating a critical understanding of gender and intersectionality.

The programme focusses on intersectional gender, i.e gender and its interplay with other social categorisations and power differentials such as sex, ethnicity, class, nationality, sexuality, age, and (dis)ability.

If you are attracted by the idea of challenging existing norms and structures in society - this is the programme for you. A key ambition is to develop an understanding of the links between activism, theory, professional development and career paths. Students taking the programme usually have a wide range of educational and professional backgrounds, for example in sociology, pedagogy, philosophy, media studies, psychology, political science, and business administration. The programme is offered as a oneyear option, 60 credits, or a two-year option, 120 credits.

To give you the latest update on current research, we invite you to take part in seminars at the internationally renowned Unit for Gender Studies. This is one of the largest interdisciplinary research and teaching units for intersectional gender studies in the Nordic countries.

The programme combines online distance education with three mandatory on-campus gatherings per academic year. You will interact with your teachers and fellow programme members in a digital classroom. The forms of instruction, which are based primarily on the use of the internet, place greater demands on your own activity than a purely campus-based programme.

You will be equipped for a career in higher education and research as well as professional work with intersectional gender in organisations, media, communication and politics. This programme is also appropriate for you who want to boost your current career through further training within gender work.

### International and **European Relations**



Dearce: Master of Social Science with a major in Political Science, specialisation International and European Relations Credits: 120 Duration: Two years Pace of study: Full-time Campus: Linköping More info: liu.se/international-relations Tuition fees: Approx. USD 9,000/EUR 8,000 (SEK 80,000) per academic year (for non-EU citizens)

### Investigate Europe's role in world politics and global governance.

This programme approaches issues related to European relations in the context of an international society and global governance, with a special focus on Europe's role in world affairs. The double focus on international and European relations makes this a unique master's programme, offering you a competitive edge.

The curriculum consists of a wide range of topics, covering the latest updates from this intriguing field. You will get an excellent grasp of topics like international law and security, European institutions and Europe's external relations, theories of international relations, contemporary issues of international governance, and research design and methodology. During the third semester, students have the option of either taking courses focussed on global governance or pursuing a guided internship with an organisation of relevance for international or European relations. Throughout the programme you will develop the

capacity to understand the history, theory and contemporary implications of international and European relations, as well as the forces that drive developments.

By the time you graduate you will have an independent, critical approach to complex global, and specifically European, issues. Furthermore, you will gain the skills and knowledge to contribute actively to important developments, either as practitioners or as researchers.

The programme prepares you for a career in governmental institutions and in international public organisations, as well as in the private and non-governmental sectors. Graduates from the programme can be found today in such institutions, working with various aspects from running policy programmes to scientific research. The courses also provide a solid foundation for further studies and research towards a doctoral degree.

### **Lisette Frandsen Albrechtsen**

Denmark - Gender Analyst at United Nations Development Programme, Jordan

The reason I chose Linkoping University is because of Sweden's track record in gender studies and being known for taking this area of study very seriously. The studies definitely helped me perform my job as a Gender Analyst with UNDP. I gained so much knowledge during my time at LiU and I appreciated to have enriching discussions between students and professors."



### **Chloe Beemer**

### **USA - Consultant and Research Analyst**

It was challenging, yet relaxed. My favorite part was the semester where they offered you the opportunity to seek an outside internship. This gave students access to a professional network prior to graduating. You should get to know your course mates, their success is your success. Also don't be afraid to try any of the gross foods, except sustromming, don't eat that.



### Strategic Urban and Regional Planning



Degree: Master of Science with a major in Urban and Regional Planning Credits: 120 Duration: Two years Pace of study: Full-time Campus: Linköping More info: liu.se/strategic-planning Tuition fees: Approx. USD 10,000/EUR 9,000 (SEK 95,000) per academic year (for non-EU citizens)

### Planning for the cities and regions of the future.

Our cities and regions are currently facing fundamental challenges related to climate change, globalisation, urbanisation, digitalisation and social inequality. Strategic urban and regional planning is one of the most powerful local instruments to (re)shape long-term urban and regional development and create sustainable cities and regions of tomorrow. The programme provides you with the opportunity to advance your knowledge about societal change and enhance your abilities to engage in complex planning processes and agendas, in collaboration with citizens and other stakeholders. It ranges across several fields and targets students wanting to develop an interdisciplinary perspective to current societal problems. The emphasis is on regional development challenges in European countries.

The programme offers training in urban and regional planning, with a focus on strategic urban and regional planning. Core elements are identifying and managing planning issues within complex social, environmental and economic realities. This helps you develop skills in conducting studies, formulating strategies and coordinating overall planning at various levels of society. Our teaching profile is integrated with advanced research in urban and regional planning. The programme offers direct contact with ongoing research and there is a close collaboration with public and private employers offering real-world learning opportunities. As a student you can tailor your studies in your area of interest, profession or field of expertise. During the third semester of the programme, you can choose elective courses, studies abroad and internships, at businesses, organisations, or research institutes in Sweden or abroad.

The programme prepares you for a career as a planner; strategic urban and regional planner, environmental strategist, plan manager, comprehensive planner, region developer, urban planner or external analyst. You will be qualified for positions in regional associations, county councils, various government agencies, private enterprises, and non-profit organisations. You will also qualify for doctoral programmes.

### Wenjing Wang

### China - Current student

Planning for cities and dealing with the challenges of sustainability and climate transformation is very important under the circumstance of globalization. I would like to play a role in this process and plan for smart cities in the era of digitalization. Linköping University support me in this ambition. It provides med with the academic and theoretical knowledge and I have learned how to corporate with others by participating in the group works.



### Experimental and Industrial Biomedicine



Degree: Bachelor of Science in Medical Biology Credits: 180 Duration: Three years Pace of study: Full-time Campus: Linköping More info: liu.se/biomedicine Tuition fees: Approx. USD 16,000/EUR 14,000 (SEK 147,000) per academic year (for non-EU citizens)

### Developing the biomedical research leaders of the future.

LiU offers the first international bachelor's programme in Sweden that combines project management skills with practical research techniques in the field of biomedicine. The programme has been designed in partnership with world-leading pharmaceutical and biotech companies to ensure that our graduates have the knowledge and skills required to work at the forefront of biomedical research and innovation.

This bachelor's programme provides deep theoretical knowledge and practical experience of state-ofthe-art research techniques in fundamental biomedical fields such as cell and molecular biology, medical biochemistry, physiology, and pharmacology.

It also presents novel areas such as drug discovery,

systems biology, bioinformatics and digital pathology. Throughout the programme, you will work in project-driven courses to apply your knowledge.

To ensure that you can translate research breakthroughs into clinical products and services, the programme trains students in the latest approaches in project management, clinical trial design, bioentrepreneurship, drug regulation and medical ethics. You will also have the opportunity to spend an entire semester carrying out research at LiU or at one of our industrial partners, in Sweden or abroad. By educating our students in the theory and practice of innovative biomedical research as well as research management, we aim to develop through this programme the biomedical research leaders of the future.

### Anna Fahlgren

### Sweden - Professor and Entrepreneur

I've been a medical researcher for many years as well as a teacher and an entrepreneur. Based on my own experiences as a medical researcher with close collaboration with the technical faculty and the life science sector, we designed a bachelor's programme in experimental and industrial biomedicine. Our aim is to prepare students with solid knowledge in the field of biomedicine together with skills in project management and bioentrepreneurship.



# THE PRACTICAL DOAD TO SUCCESS



### How to apply

The application must be made online, through the national application service: universityadmissions.se

 Application period: Mid-October 2021 - 15 January 2022.

### Admission requirements for master's programmes

- A bachelor's degree from an internationally recognised university.
- Proof of English language skills, e.g. TOEFL, IELTS.
- The specific requirements stated for each programme.

### Bachelor's programme

Information about application and admissions requirements for our bachelor programme is available on the **universityadmissions.se** website.

### **Doctoral studies**

Doctoral studies are free of charge and cover many disciplinary areas. Positions become available throughout the year and, in most cases, are remunerated.

### General entry requirements

- A university degree in the same area as the intended field of study
- study. • A degree thesis presenting the
- results of independent research
  Good command of English, for some subjects also Swedish.

### Specific requirements

As well as general entry requirements there are specific requirements for each available position. For more information on doctoral studies go to: **liu.se/en/research** 

### Scholarships

Every year LiU offers scholarships to new students with excellent academic results, usually representing a tuition fee waiver of 50%.

### To qualify you need to:

- Apply for an international programme in time – before 15 January.
- Choose the programme at Linköping University as your first priority (ranked as no. 1 out of 4).
- Apply for a LiU International Scholarship on our website once you have been admitted to your choice in the First Notification of Selection Results.

### Must be admitted

Only admitted students will be considered for scholarships. For more information go to: **liu.se/scholarships** 

### **Tuition fees**

Citizens from countries outside the EU/EEA and Switzerland must pay tuition fees for higher education in Sweden. For more detailed information please check universityadmissions.se

### Included in the fees

The Swedish state's insurance FAS+, including accident and property cover.

### Approximate fee levels

Generally, fees are between SEK 80,000 and 136,000 per academic year. Citizens of EU/EEA and Switzerland do not have to pay tuition fees.

### Accommodation

It is important to start looking for accommodation as soon as you seriously intend to study at LiU.

### Useful tips

- Register with different housing companies in order to gather queue points. The sooner you join
- the waiting lists the more accom-
- modation options you will have.Book alternative short-term
- accommodation if you arrive out of hours.

For more information on how to search for housing go to: **liu.se/en/article/accommodation** 

### **Our support**

Our university services can help you with:

- Student Health Care
- Language support
- Study guidance
- Student unions and organisations
- Study areas and group rooms
- Computer labs
- Equal opportunities policy
- University Chaplaincy
- Rooms for reflexion

And lots more that you can find easily at Studenthuset.



### **Linköping University Quick Facts**



### Location

Link ping and Norrk ping are situated in East Sweden, a couple of hours south of Stockholm. The region has lots to offer in terms of landscape, innovation and business opportunities, talent attraction and more.

One university, two cities

- Linköping is Sweden's fifth largest city with a well-developed business sector but also the charm of a smaller town.
- Slightly smaller, Norrköping has a lively cultural scene, including lots of live music venues.
- In both cities, everything is within walking distance and it is very easy to find something fun to do.

#### East Sweden

The region is home to several internationally well-known companies, including Saab, Toyota Industries Europe, IFS, Siemens, Holmen Paper and BT Industries. Stockholm

**Norrköping** Campus Norrköping

Linköping Campus Valla University Hospital Campus (US)

Getting here is easy! There are several flights between Amsterdam and Linköping every week.

\* Visit liu.se/en/article/rankinglistor for more information.

\*\* Numbers from UKÄ (Swedish Higher Education Authority) in 2019, which regularly follows up on how various student groups have established themselves on the labour market one and a half years after having finished their studies.

\*\*\* Numbers from UKÄ (Swedish Higher Education Authority) 2019 for all students registered at Linköping University.

All other data from Linköping University annual report 2019.

Published by the Communications and Marketing Division at Linköping University, Sweden in August 2021. **PHOTOGRAPHY** Anna Nilsen, Thor Balkhed, David Einar, Peter Nilsson, Monica Westman Svenselius, Magnus Johansson, Emma Busk Winquist, Lennart Falklöf. **COPIES** 1500.

All the information within is, to the best of our knowledge, correct at the time of printing.

### DO YOU WANT TO CHANGE THE WORLD WITH US?



#### Contact us

6

- +46 13 282887
- linkopinguniversity

