

CHALMERS UNIVERSITY OF TECHNOLOGY

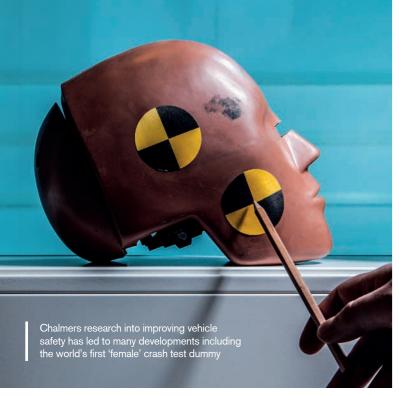


AVANCEZ - FORWARD SINCE 1829

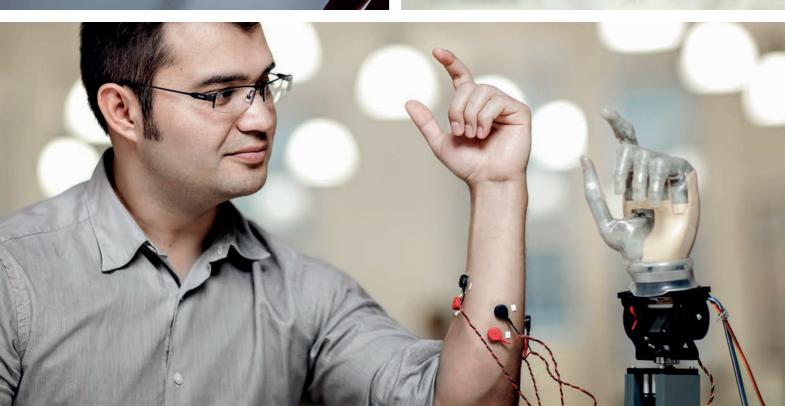
Chalmers University of Technology in Gothenburg conducts research and education in technology and natural sciences at a high international level.

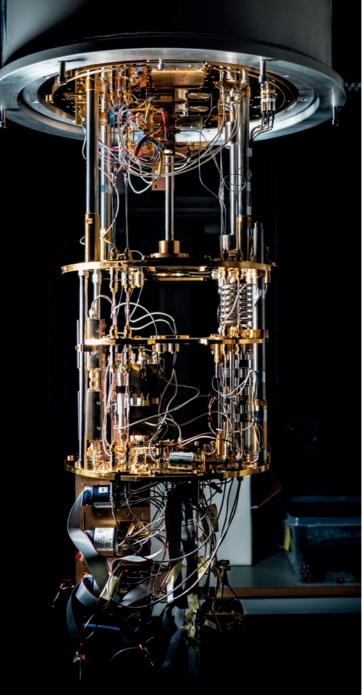
With scientific excellence as a basis, Chalmers promotes knowledge and technical solutions for a sustainable world. Through global commitment and entrepreneurship, we foster an innovative spirit, in close collaboration with wider society.

Chalmers was founded in 1829 and has the same motto today as it did then: Avancez – forward.

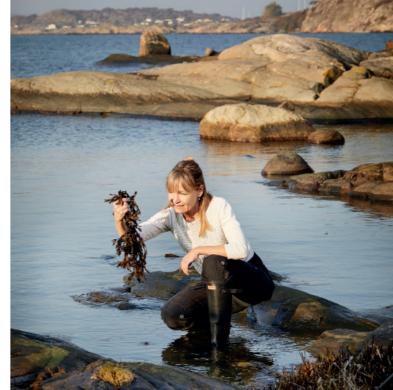








The quantum revolution: Chalmers is the hub for a billion kronor research programme which aims to turn Sweden into a world leader in quantum computing







We welcome you to join us on our journey to a sustainable future!

"We live in a rapidly changing world. The great challenges we face require collaboration across boundaries of many different kinds. We at Chalmers have a vital role to play – producing and spreading knowledge, expertise and solutions for the benefit of everyone.

In this respect, the education we provide is one of our most important contributions to society – alongside our top-class research, and close partnerships with key players in industry and the public sector.

Stefan BengtssonPresident and CEO

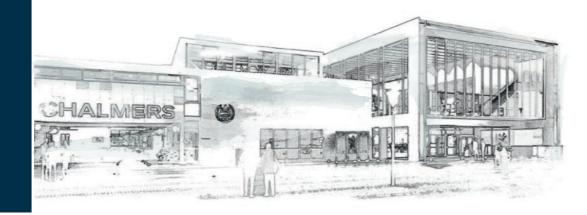
AN EDUCATIONAL SMORGASBORD

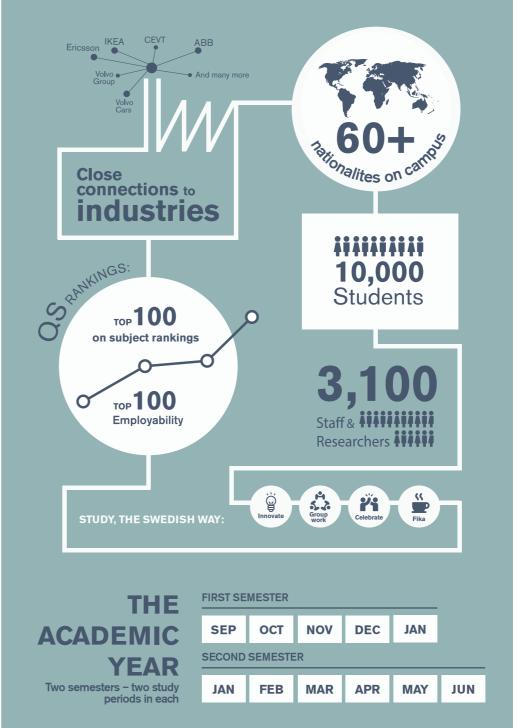
Chalmers offers a comprehensive technological and scientific education, from bachelor's level to master's and doctoral degrees.

When you study at Chalmers, you learn to think independently, and to use engineering methods to tackle future challenges. We encourage your creativity, and believe in the importance of free thinking, letting you test your own ideas for real.

To facilitate openness and cooperation between students and teachers we pursue a truly informal atmosphere, with a non-hierarchical structure. Sustainability, entrepreneurship and equality are essential aspects of everything we do.

Through project-based assignments, we provide hands-on, collaborative experience, focusing on applying theoretical knowledge to solve current and future problems. We have excellent connections with many relevant industrial and social partners, ensuring that our research and education is always closely linked to real-world challenges and applications.









TIMELINE



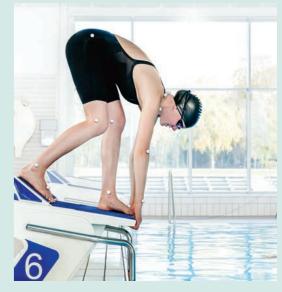
BACHELOR'S STUDIES

Chalmers is one of the best-known and highest-rated universities in Sweden. We offer around 30 bachelor's programmes, and each year thousands of the best students from around the country begin their studies here.

With a full range of programmes in engineering, science, shipping and architecture, Chalmers is a key player in providing Swedish industry with the talent it needs. Multiple generations of prominent Swedish engineers, scientists and CEOs have been educated here since the founding in 1829. All the bachelor's programmes are conducted in Swedish, and therefore fluency in Swedish or another Scandinavian language is required.

The fifth semester of bachelor's programmes is done in English, and students have an opportunity to take an exchange period abroad.





Chalmers is one of several 'Riksidrottsuniversitet', or National Sports Universities, in Sweden. This arrangement offers elite athletes the chance to combine their studies with the flexibility needed for training and competitions. Many top athletes in different kinds of sports study at Chalmers.



MOVE

I knew already that Chalmers was a good school. In Norway, it has a strong reputation – people usually say 'if you study in Sweden, you should go to Chalmers!'. As a member of the Norwegian national orienteering team, the sporting setup is really important for me – I need a lot of time for competitions and training. This year I've travelled to Switzerland, Denmark, and even China for the World Cup, and I've been able to plan my exams around these commitments. The arrangement also offers support through sports psychologists and nutritionists, for example.

I really enjoy studying here. The teaching is high quality, and very effective. It is challenging, and fast paced, but things are always introduced in a smooth way, connected to what we have already studied.

VICTORIA HÆSTAD BJØRNSTAD is a Norwegian student from Oslo studying industrial economy. Students fluent in a Scandinavian language are able to study at Chalmers alongside Swedish students at the bachelor level. Victoria was attracted to Chalmers by its location, good reputation, and – as an elite level orienteer who competes for the Norwegian national team – the National Sports University setup was also particularly attractive for her.

I find Swedish people friendly, but people tell me that it is particularly true in Gothenburg! There is a great atmosphere in the city. It is a good size – I ride my bike everywhere, but the tram system is great too, and everything always feels close. I would definitely recommend coming to study at Chalmers!"

EXCHANGE STUDIES

Every year, students from all over the world come to Chalmers through exchange programmes. Studying abroad, experiencing a different educational culture and another way of life can be one of the most valuable experiences you can have as a student. Join us at Chalmers and exchange your world.

The process starts by contacting the exchange student coordinator at your home university to check if they have a relationship with Chalmers. All of our exchange programmes are based on bilateral agreements. The exchange period is usually for one or two semesters.

Chalmers participates in many different frameworks for exchange opportunities, from major international programmes such as Erasmus, to individual scholarships with specific partner universities. In total we have relationships with hundreds of institutions worldwide.

I had an amazing time studying at Chalmers! I really enjoyed it and learnt a lot during the programme. I made many new friends, increased my knowledge and experience, and really gained new perspectives on the world. And I got to discover how beautiful Gothenburg and Sweden are, I had such a great time, and I definitely plan to come back again someday for further study, to work or to travel."

MARIZAL FANANI was an exchange student at Chalmers from Gadjah Mada University in Indonesia, studying food science within the area of biotechnology for 6 months. He hugely enjoyed his time at Chalmers and in Sweden.



AFONSO ANJOS is a student from Instituto Superior Técnico in Lisbon. Portugal, who came to Chalmers through the Erasmus programme and studied geotechnical and structural engineering. He found his time here very beneficial and it offered an interesting and favourable contrast with his experiences back home.

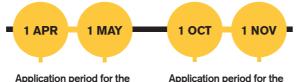
> I think Chalmers puts a lot more emphasis on collaboration and teamwork than other universities. as well as on learning through practical work - it is a lot more applied, less theoretical. I think this has helped make me a more independent and proficient student and future engineer.

> The quality and expertise of the professors here was extraordinary too. And they were so helpful with the students, they were always available to answer questions, even outside of university hours. The infrastructure at Chalmers is outstanding, with so many places to work and study. The campuses are so well-organised and tranquil."



TIMELINE

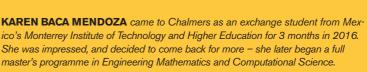
first semester



Application period for the second semester



Chalmers offers a fantastic preparation for your career. There's a great balance between academia and business - you have strong connections to research and industry here. The education is challenging, and you have a lot of independence, so you need to be on top of your work. But at the same time, I have had a lot of fun. It's a really international environment and I have made a lot of friends from around the world. And Swedish people are very open and international too. They are very happy to share their traditions and culture - to show off the Swedish way!"





MASTER'S STUDIES

Qualify for a global career with a master's degree from Chalmers. You'll be right at the cutting edge of your field, taught by people who are highly active in both research and industry.

Chalmers has excellent links with the business world, including local giants such as Volvo, SKF, and AstraZeneca. You'll receive guest lectures from important industry figures and make study visits to relevant workplaces.

We offer around 40 master's programmes taught entirely in English. We prepare our master's students for a truly international career, with our global focus attracting students from over 60 countries.

Chalmers is an exciting and dynamic university, where sustainability, innovation and an entrepreneurial outlook are vital parts of all that we do.



Whenever I read about new medical innovations at school, everything seemed to be coming out of Sweden. I knew it was a great place for innovation and that Chalmers would provide a lot of opportunities, both academically and in industry. Swedish people are so welcoming and friendly. I was asked to 'fika' or go on study dates all the time. Everyone speaks excellent English, which really helps!"

ILSA JUHLIN from Seattle, USA, studied

APPLICATION

75%) 100%) Scholarships available for fee-paying students



General Entry Requirements:

A bachelor's degree, or ongoing studies, with a major in science, engineering or architecture.

Specific Entry Requirements:

All programmes have specific entry requirements which candidates must meet.

TIMELINE



JAN Application

APR Notification of selection results

MAY Payment of tuition fee

Welcome and

TOEFL iBT: 90 min 20 on the written part IELTS: 6.5

no parts below 5.5

Language Requirements:

OUR PROGRAMMES

Sustainability is an extremely important part of everything we do at Chalmers, and we always strive to address it as a vital perspective in our education. All programmes last 2 years, are taught 100% in English*, and are worth 120 ECTS credits,

ARCHITECTURE

ARCHITECTURE AND PLANNING BEYOND SUSTAINABILITY

Design real-life projects with a holistic and sustainable approach in close contact with local stakeholders and actors.

ARCHITECTURE AND URBAN DESIGN

Anticipate urban challenges using advanced technologies and sharpen your critical thinking with a research-oriented approach.

AUTOMATION AND MECHATRONICS

SYSTEMS. CONTROL AND MECHATRONICS

Contribute to a future where functions for sensing, monitoring and control integrate with a range of mechatronic and robotic products. systems and services.

CIVIL ENGINEERING

DESIGN AND CONSTRUCTION PROJECT MANAGEMENT

Solve the many emerging challenges in the construction industry in a project-based environment together with stakeholders.

INFRASTRUCTURE AND ENVIRONMENTAL ENGINEERING

Find sustainable solutions for global challenges such as climate change and rapid urbanisation through real case scenarios provided by industries and society.

SOUND AND VIBRATION

Diminish the negative effects of noise and vibration and support sustainable natural and urban environments in this unique and interdisciplinary programme.

STRUCTURAL ENGINEERING AND BUILDING TECHNOLOGY

Model, analyse and design structural systems, complex buildings and performances, based on a deeper understanding of physical and mechanical behaviour.

BIOTECHNOLOGY AND CHEMICAL ENGINEERING

BIOTECHNOLOGY

Analyse and manipulate biological systems at the interface between chemical engineering, food technology, molecular biology and medicine.

INNOVATIVE AND SUSTAINABLE CHEMICAL ENGINEERING

Make modern chemical processes more energy efficient, compact, environmentally friendly and conducive to the rapid commercialisation of new products.

MATERIALS CHEMISTRY

Design and develop the materials of tomorrow in this broad engineering programme that aims at deepening the understanding of materials properties.

COMPUTER ENGINEERING

COMPUTER SYSTEMS AND NETWORKS

Gain hands-on experience with new technologies and research within areas related to algorithm design, programming languages and computer systems engineering.

COMPUTER SCIENCE - ALGORITHMS, LANGUAGES AND LOGIC

Develop the computer applications of today and tomorrow in a programme that prepares you for research and development in the industry.

HIGH-PERFORMANCE COMPUTER SYSTEMS

Drive the development of future's high-performance computer systems by designing software and hardware that meet demanding power and energy constraints.

*With the exception of Learning and Leadership, which is taught in Swedish.

FEES

Non-EU/EEA Applicants: Application Fee: SEK 900

All subjects except architecture: SEK 140,000/year | Architecture: SEK 190,000/year. Cost of living: SEK 8370/month; proof required to obtain a residence permit.



period opens period closes

Chat with our students

Attend pre-departure

Attend pre-departure

semester begins

SEPT

ELECTRICAL ENGINEERING

BIOMEDICAL ENGINEERING

Improve healthcare delivery and medical practice in a programme that closes the gap between engineering and medicine.

EMBEDDED ELECTRONIC SYSTEM DESIGN

Design, implement and verify advanced embedded electronic systems based on hardware, software and firmware.

INFORMATION AND COMMUNICATION TECHNOLOGY

Rethink, design, and build the communication systems of the future to enable the interconnected world that is bursting with information services and applications.

SUSTAINABLE ELECTRIC POWER ENGINEERING AND ELECTROMOBILITY

Design electric power systems and solve future challenges in how electricity is produced, transmitted, distributed and consumed.

WIRELESS, PHOTONICS AND SPACE ENGINEERING

Gain knowledge in satellite TV, lasers, 5G and radio astronomy and deepen your skills in a sub-field in world-class facilities like our Onsala Space Observatory.

More than half of Chalmers graduates have job offers lined up before they even finish their degree. In the QS Graduate Employability Ranking 2020, Chalmers is ranked 25th in Europe.

ENGINEERING FOR SUSTAINABLE DEVELOPMENT

INDUSTRIAL ECOLOGY

Solve environmental challenges such as climate change by contributing to sustainable technical solutions in the industry, governmental agencies and research.

SUSTAINABLE ENERGY SYSTEMS

Undertake energy engineering tasks that assess technical, environmental and financial aspects in the bridge between the technologies of today and tomorrow.

ENGINEERING PHYSICS, MATHEMATICS

COMPLEX ADAPTIVE SYSTEMS

Get a broad introduction to complex systems and their applications in a programme that is largely based on numerical calculation and simulation projects.

ENGINEERING MATHEMATICS AND COMPUTATIONAL SCIENCE

Gain a solid foundation in mathematics and the skills to formulate and solve many of the problems that are posed by industry, business and research.

NANOTECHNOLOGY

Work in our world-class cleanroom and attain knowledge of the nanoscale systems in a programme that focuses on physics and chemical engineering.

PHYSICS

Prepare for unknown future challenges, foster your creative thinking and problem-solving skills in a programme based on the principles of physics.

INDUSTRIAL ENGINEERING AND MANAGEMENT

ENTREPRENEURSHIP AND BUSINESS DESIGN

Develop your entrepreneurial skills through a combination of lectures, simulated business scenarios and the development of real innovation projects.

MANAGEMENT AND ECONOMICS OF INNOVATION

Train to understand, analyse and skilfully manage innovation processes in companies and other parts of the society.

QUALITY AND OPERATIONS MANAGEMENT

Acquire the knowledge and skills required to improve organisational processes that are crucial for staying competitive in today's global markets.

SUPPLY CHAIN MANAGEMENT

Get an overall perspective on supply chains and train to understand, analyse and manage the processes which will enable you to work across company borders.

INFORMATION ENGINEERING

DATA SCIENCE AND AI

Tackle a wide variety of challenges in handling and analysing various kinds of data to develop software in complex data-intensive and Al-related applications.

INTERACTION DESIGN AND TECHNOLOGIES

Design interactive digital products, environments, systems and services in a programme that focuses on user behaviour and human-computer interaction.

SOFTWARE ENGINEERING AND TECHNOLOGY

Deliver reliable and high-quality software, in a programme that offers a unique combination of advanced technical knowledge and required management skills.

MARITIME MANAGEMENT

MARITIME MANAGEMENT

Become a competent leader, both onboard ships and in onshore organisations in a programme that will prepare you to guide your industry into a new era.

MECHANICAL AND INDUSTRIAL DESIGN ENGINEERING

APPLIED MECHANICS

Advance in modelling, computational and experimental issues in applied mechanics and prepare for a professional career in any area of engineering.

INDUSTRIAL DESIGN ENGINEERING

Enhance your ability to handle complex industrial and societal design problems and design innovative, user-centred, sustainable solutions.

MATERIALS ENGINEERING

Become an expert on materials and a developer in theory and practice. You will also represent a bridge between researchers and constructors.

MOBILITY ENGINEERING

Develop sustainable, high-performance mobility solutions in the ever-changing transport industry.

PRODUCT DEVELOPMENT

Master multi-disciplinary product development while taking user's needs and all phases of the product life cycle into consideration.

PRODUCTION ENGINEERING

Learn about the latest advances in digital production and gain skills to improve manufacturing processes and high-performing sustainable production systems.

TECHNOLOGY AND LEARNING

LEARNING AND LEADERSHIP - taught in Swedish

Train to become a secondary school teacher in a unique programme that combines your engineering skills with communication and collaboration.

Some graduates even go on to found their own companies. A strong entrepreneurial focus exists at Chalmers – Chalmers Ventures, our university business incubator, is in fact ranked top 10 in the world in its category.

DOUBLE MASTER'S DEGREE

Chalmers has agreements with several universities around the world to give students the opportunity to graduate with a double master's degree – one from Chalmers and one from the partner university.

There are also double degree opportunities available through the Nordic Five Tech partnership –a framework which includes the leading technical universities in Denmark, Norway and Finland, and KTH and Chalmers in Sweden.

Double degree students take one year at Chalmers and one year elsewhere.



MOOCs

An education for everyone

As part of our commitment to offering lifelong learning opportunities, Chalmers has a variety of free MOOCs – Massive Open Online Courses. See the full offering at our digital campus, ChalmersX.



DOCTORAL STUDIES

28
GRADUATE SCHOOLS

Today an increasing number of industrial and social challenges call for specialised and high-level research skills. A PhD can lead to significant future opportunities in both academia and industry and represents recognition from the international scientific community.

Chalmers provides a strong research environment with an international atmosphere. Our vision is to help contribute to a sustainable future, and that goal forms an essential part of all our activities in research, education and innovation.

Doctoral studies enable you to develop a research specialty and your own scientific concepts. Pursuing a doctoral programme helps you gain skills that are sought after by employers in all fields. You will develop your analytical skills, become a team player and a problem solver, and improve your communication and presentation abilities.

At Chalmers, we offer a highly attractive and competitive form of doctoral education. As a doctoral student you are hired by Chalmers. A doctoral position is a full-time temporary employment, generally limited to a maximum of five years. The position includes a monthly salary and doctoral studies are free of tuition fees.

Doctoral studies at Chalmers nurture your ability to carry out research of the highest international standards, for the benefit of a sustainable society. Our close connections with industry, and emphasis on applied research ensure that the education remains highly focused and relevant.

Research, learn, educate

Doctoral studies at Chalmers are a combination of individual research, studying on courses, and teaching. The work is carried out through well-established research groups, with a supervisor

wolfgang kropp is a Professor in Applied Acoustics at the Department of Architecture and Civil Engineering, who has acted as PhD supervisor for around 25 different candidates over the years.

A very important principle for us at Chalmers is that our PhDs are employed. They are not just students – they are employees. They have the same rights as anyone else. That's very different from some places, where PhDs are often unpaid. All of our PhD positions are fully paid.

There are so many opportunities for industry collaboration, strongly linked to applied projects. In our department for example, we have people working with high speed trains together with Trafikverket (the Swedish transport authority), and people researching low-frequency sound in collaboration with major Swedish building companies. Chalmers' links to industry are a real strength.

It is very international too, among all the students and researchers. We try to get people from everywhere, to be very open and welcoming.

team led by an experienced researcher. Candidates choose their own range of activities with the help of their supervisors. Chalmers' research groups are highly international, providing great opportunities for carrying out part of your doctoral studies abroad.

Doctoral education in Sweden leads to a licentiate degree after around two and a half years, and a full doctorate after four to five years. The degrees are taken in scientific subjects linked to Chalmers' departments.

APPLICATION

The requirement for admission to doctoral studies at Chalmers is a degree awarded at advanced level (for example a master's degree), with a specialisation suitable for the doctoral subject. In addition, each graduate subject may have special course entrance requirements.

All of our doctoral student positions are advertised on Chalmers' website. View our Vacancies page to see all currently available positions. Before coming here, I was working for two years, so I wanted to remain more hands-on, more practical. Chalmers seemed to offer that opportunity, and I certainly got a lot of that experience here.

There are so many connections to industry. I spent my summers working at ABB and have an ongoing relationship with them. When I started my PhD, Stefan Bengtsson, the University President, gave a speech and talked again about the importance of relationships with industry. Hearing that said at every level shows how it's really a central theme here.

Doing a PhD at Chalmers has been really interesting. There is a difference in how you perceive your work, and how you are perceived. You are more like a member of staff – there's definitely a distinction between being a student and being an employee here."







STUDENT LIFE

Outside of your studies, you'll find a rich and varied student life at Chalmers. The student body is very active here and organises masses of events all year round. Our two campuses are safe, welcoming places with plenty of opportunities to get involved in clubs and societies of all kinds.

The Swedish concept 'lagom' means roughly, 'just right', or 'in moderation', and is an essential approach to life here. Sweden is known for having a strong focus on work-life balance, and students are encouraged to keep a healthy balance between studying and enjoying social activities in their free time.

There is a wide variety of activities for students to participate in, whatever their interest. There are sports and fitness groups of all kinds, but also cultural and social activities. At Chalmers, we want everyone to feel welcome, and we pursue an open and inclusive atmosphere, where equality is an essential part of the culture.





As soon as I received my acceptance letter, I started looking for accommodation, and through a friend of a friend, I found this room, living with 6 other housemates. They were all Swedish, so it was the perfect opportunity to make friends and learn more about Swedish culture. We spent a lot of time together making food, playing sports, and having movie or game nights.

I feel like I have known my roommates a lot longer than I have! Moving into the collective was one of the best decisions I made since I came to Chalmers.

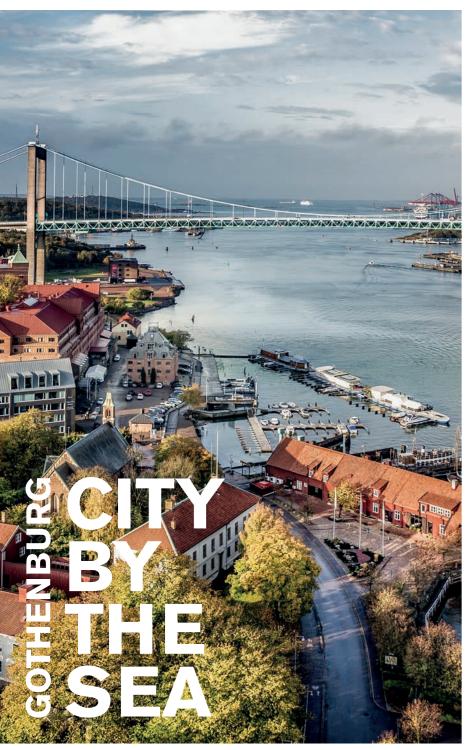
When it comes to socialising within the university, there are so many different options and activities available. I want to join the sailing club – I tried sailing for the first time this summer out in the archipelago, and I really want to learn more!

I would say Chalmers has a really strong sense of community, at all levels of the organisation. You really feel valued and recognised as an individual, not as just another student among thousands."

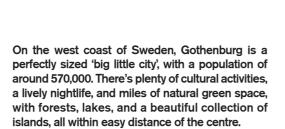


All fee-paying students are guaranteed an offer of accommodation in a student residence in Gothenburg. Non-fee-paying students will need to find their own accommodation.









Chalmers' two campuses are right in the heart of Gothenburg, one on either side of the river, making the university well embedded into the life of the city.

The friendly, welcoming attitude here will ensure you quickly feel at home – Gothenburg has previously been voted 'the world's most sociable city'. And the locals speak excellent English, so everyday life is usually pretty straightforward here. It's easy to get around, with the famous blue and white trams covering the whole city. And with more than 800 kilometres of bike lanes, cycling is also a popular and safe option.

Known for its musical and artistic history, the city hosts many major events every year, including Scandinavia's largest film festival, its largest book fair, and even the world's biggest football tournament – the Gothia Cup.







*Global Destination Sustainability Index

12 TRAM LINES covering nearly 200 kilometres of the city

313
Square metres of GREEN SPACE per inhabitant

800 KILOMETRES of BIKE LANES











When you study at Chalmers, you'll experience the Swedish way of doing things. Sweden is known for its open, progressive thinking, its commitment to equality and inclusivity, and for its innovative approach to business and technology.

THE SWEDISH WAY

Sweden has a unique business culture, which yields impressive results. Despite a small population of just over 10 million, it is home to an impressive number of globally recognised companies, including Ericsson, IKEA, Spotify, and H&M. The working culture is very open, and non-hierarchical. This is as true at Chalmers as it is in Sweden overall. Sweden's way of doing business has seen it ranked 2nd in the Global Innovation index 2020, and 9th in the Global Competitiveness index 2019.

But it's not all about work. Balance is important here. When you study at Chalmers, you'll see how seriously Swedes take their fun, how they value their social lives just as much as their work, and – what's more – you'll discover the true meaning of a Swedish fika...

If you are interested to find out more, don't hesitate to get in touch. We at Chalmers University of Technology look forward to welcoming you.

Come and join us!







