BTH’s vision is to conduct education and research in which engineering and IT can be integrated with other disciplines such as industrial economics, design and health science to contribute to solving society’s complex challenges.

BTH is one of the most distinctly profiled universities in Sweden, focusing on applied IT and innovation for sustainable growth. We conduct education and research at a high international level. We have two faculties – the Faculty of Engineering and the Faculty of Computing. What distinguishes BTH is its close cooperation with industry and society which permeates both education and research at the regional, national and international levels.

EDUCATION

We stand for quality and innovation and want to be perceived as an open, exciting and creative higher education institution. We want to provide students with an education that is centred on them and connected to research to satisfy their needs for a good degree and employment after graduation. The goal is that our courses and programmes will give students opportunities to build a career within their chosen field. Therefore, our focus is not only on what happens during the studies, but also what happens after. We have close contacts with business and industry, and cooperate with wider society. This way, the students will gain insight into their
future profession and contacts with potential future employers already during their studies. Studies at BTH will provide students with valuable skills for future careers, while gaining an exciting study experience with memories for life.

RESEARCH

Despite its relatively small size, BTH has a great deal of research. Today, research and research studies account for one-third of our activities, and we intend to increase that share even further. We offer research within a large number of areas, all connected under the profile of applied IT, which researchers approach from different perspectives. We are world-leading in at least a couple of our research areas. Research at BTH is characterised by the fact that it is applied, i.e. our research is to search for new knowledge with a specific application in mind. In addition, we often conduct our research projects in cooperation with wider society and always with a clear focus – that the research results will contribute to solutions to society’s challenges. The research is also to ensure that the students’ education is of a high scientific standard. We are keen to highlight our international character, but we also appreciate our ties to and presence in the region, where the environment inspires us to continue to conduct world-class research.

Our main campus is located in the naval city of Karlskrona, which was founded in 1680. The marine tradition currently exists side by side with the new direction the city is taking, towards IT expertise, ideas and innovation. Karlskrona is listed as a World Heritage Site by Unesco. Karlskamm, where our second campus is located, is one of the largest ports in Sweden. It is also a city with many cultural gems and well-preserved buildings that reflect its colourful history.

Anders Hederstierna
VICE-CHANCELLOR OF BTH
COOPERATION

BTH’s vision is to be leading within our profile, strongly rooted in an innovative and growing region. We represent quality and innovative thinking and are perceived as open, exciting and creative.

BTH has close contacts with business and industry, and we cooperate with wider society. During their studies, the students gain insight into their future professions, and develop contacts with potential future employers.

QUALITY AND BENEFITS TO SOCIETY
BTH is characterised by cooperation and co-production with surrounding society. It is of great importance that research and education is conducted in cooperation with community stakeholders, which increases the students’ connections to professional life during their studies. This adds to the quality of the activities and the students become more attractive on the labour market. Research and education at BTH are conducted in cooperation with business and industry as well as society.

STRATEGIC COOPERATION PARTNERS
BTH has a number of strategic cooperation partners. These include e.g. a number of internationally active business partners such as Volvo, Ericsson, Telenor, ABB, Alfa Laval, SAAB and Kockums; public partners such as Blekinge municipalities, Blekinge County Council, Region Blekinge, the National Board of Housing, Building and Planning (Boverket), the Navy, the Coast Guard, the Swedish Transport Administration and the Environmental Protection Agency; and academic partners such as the Royal Institute of Technology, Luleå University of Technology and higher education institutions within the cooperation Lärosäten Syd. The latter is a strategic cooperation between universities in southern Sweden: BTH, Halmstad University, Kristianstad University, Lund University, Malmö University and the Swedish University of Agricultural Sciences/Alnarp.

INTERNATIONAL NETWORKS
BTH offers an international environment, with an open atmosphere that provides the opportunity to make contacts and build networks. BTH has about 30 bilateral agreements with universities around the world and cooperates with around 70 European partner universities within the European Erasmus programme. Approximately 70 different countries are represented at BTH through its staff and students.

“There is a unique cooperation here, between the University and business and industry. I often say that if all of Sweden would work like here in Blekinge, then we would have much higher growth and more jobs in Sweden.”

Mikael Damberg, Minister for Enterprise and Innovation
BTH IN CLOSE COOPERATION WITH INDUSTRY AND SOCIETY

» BTH takes part in strategic research on IT and mobile communication together with other universities.

» BTH cooperates with Telenor within several fields, for example in shared research projects and with regard to professional development.

» BTH runs projects where companies, counties, regions and other partners work together for sustainability transformation of transport and energy systems. The projects combine guiding sustainability research with practical demonstrations.

» BTH cooperates with Ericsson and Compuverde within the field of cloud data storage. The aim is to develop virtual server capacity for effective system testing.

» BTH, together with the Ministry of Health and Social Affairs, Blekinge County Council and the Municipality of Karlskrona, conducts research on health, nursing and care for the increasing number of elderly people in the population.

» BTH cooperates with the Swedish Transport Administration to reduce train delays.

» BTH cooperates with European universities, research organisations, companies and associations of next of kin to develop technologies to support elderly people with mild dementia.

» BTH works together with the technical university IIT-M in India, with the aim of changing and improving public healthcare through the innovative use of mobile technology.
BTH’s vision is to offer student-centred and research-based education, resulting in students who are satisfied with their education and in demand on the labour market. Our aim is that students become creative, knowledgeable and independent, acquiring a sound basis for their future success after graduation.

Our courses and programmes provide students with the opportunity to build a career in their chosen field. Therefore, many of our courses and programmes include student projects tied to real life demands and conducted together with industry. This way the student will form valuable contacts with future employers, already during their studies. Our teaching staff conduct research which strengthens and keeps their skills up to date in the area in which they teach.

CLOSE COOPERATION WITH WIDER SOCIETY
At BTH we have close contacts and cooperation with business and industry and the public sector. This takes place at all levels – from undergraduate education to advanced research projects. Our students and researchers are actively involved in community development, and BTH has become a driving force in IT and telecommunications in Blekinge.

“ I think BTH is a small and fine university in a lovely coastal town. Here I have found a great education that suits me.”
Albin Nilsson, student, Master of science in Mechanical Engineering

THE GREAT THING ABOUT BEING SMALL
Our students quickly get to know one another, and the study groups are small. Students can easily get in contact with teaching staff and other employees. This creates a rewarding, interesting and safe study environment.

BTH AND THE WORLD
Students at BTH are part of an international environment that provides them with the opportunity to make connections and build networks for the future. We offer training with international elements, and the opportunity to study abroad. We have a network of more than 90 universities worldwide.

BTH’s international students are offered continuing professional development designed to enhance their employability on the Swedish labour market. Continuing professional development includes hands-on skills training, training in the Swedish language and workplace culture, as well as job interviews and internships within various businesses in the region.
RESEARCH

BTH’s vision is to be a university where the research is applied, i.e. the purpose of the research is to seek new knowledge with a view to a definite application. Research is conducted in cooperation with wider society and contributes to solving the challenges facing society.

Our profile is applied IT and innovation for sustainable growth, which permeates all our education and research. Despite its relatively small size, BTH conducts a considerable amount of research. Today, research and research studies account for onethird of our activities. Research is conducted at two faculties within the fields of engineering, computing, spatial planning, industrial economics and health sciences, all connected under the profile of applied IT, which researchers approach from different perspectives. BTH is world-leading in at least a couple of its’ research areas.

RESEARCH THAT SOLVES CHALLENGES OF SOCIETY

Our research is applied, i.e. it is to search for new knowledge with a specific application in mind. In addition, we often conduct our research projects in cooperation with wider society and always with a clear focus – that the research results will contribute to solutions to society’s challenges. The research is also to ensure that the students’ education is of a high scientific standard.

WORLD CLASS

BTH has two research environments with funding from the Knowledge Foundation (KK-Stiftelsen). One focuses on the production of methods and tools to develop the next generation of sustainable products in the manufacturing industry. The other focuses on creating resource-efficient systems for the analysis of large amounts of data. The research is conducted in cooperation with a number of companies including Ericsson, Telenor and Volvo.

BTH is considered to be one of the six in the world in software development. The area is of great importance in today’s society, given the extent to which we rely on computers and functioning software.

BTH takes advantage of the benefits of being a small university, with close contacts between researchers and students, and between different research groups. We are keen to highlight our international character, but we also appreciate our ties to and presence in the region, where the environment inspires us to continue to conduct world-class research.

RESEARCH STUDIES

In 1999, BTH was granted the right to award doctoral degrees in engineering. Today we run doctoral level study programmes in “IT with applications” and “Planning and Management”.

“For me, BTH stands for a clear focus on applied research in collaboration with industry. It has given me and my colleagues excellent opportunities to conduct high quality research with high industrial importance in software development.”

Claes Wohlin, researcher in Software Engineering
Both of BTH’s campuses are located by the sea, which creates a special atmosphere. On campus there are of course lecture halls and libraries, but also restaurants and cafes, student housing, a students’ union, and the unique opportunity to swim in the sea; in other words – an inspiring study environment.

BTH offers a campus with an international and multicultural environment. BTH’s strong technical profile and image attracts more than 3100 FTE students, of whom 430 from all corners of the world. About 70 different countries are represented at BTH through our international students and staff.

CAMPUS GRÄSVIK
All of BTH’s courses and programmes in engineering, computing, healthcare, economics and spatial planning are offered at BTH’s main campus in Karlskrona – Campus Gräsvik. Campus Gräsvik is BTH’s largest campus with a big, modern library and a swimming pier. Nearby is a recreational area with trails cutting through the beautiful coastal scenery. Campus Gräsvik is located at the centre of TelecomCity – a business network within the IT and telecommunications industry. This provides great opportunities for cooperations within both education and research.

KARLSKRONA – AT THE CENTRE OF THE ARCHIPELAGO
Karlskrona offers a wide variety of businesses, sustainable development, and a vibrant rural community and city. Close cooperation between BTH and business and industry has turned several businesses in Karlskrona into leaders in a number of new fields of knowledge.

Karlskrona has an amazing environment, filled with culture, entertainment, shopping, wooded areas and opportunities for swimming. The proximity to the sea gives the opportunity for sailing, sea kayaking, scuba diving or fishing during the summer and long-distance ice skating, or ice yacht sailing during the winter. There are plenty of associations that offer both musical and cultural experiences.
Karlskrona is a calm and pleasant city. My friends here had about the same lifestyle and focus as I did. This made it easier to concentrate on one’s studies. ”

Sara Ghorbanian, alumni, Master of Science in Computer Security

The city has a marine history, represented by the ubiquitous archipelago and various forms of naval activities. Karlskrona is considered to be so unique that UNESCO has placed the city on the World Heritage List.

**CAMPUS KARLSHAMN**

Campus Karlskrona is beautifully located by the sea, within walking distance from the city centre. This is where most of BTH’s courses and programmes in digital media take place. At Campus Karlskrona there is also the NetPort Science Park, with businesses within the digital experiential industry. Campus Karlskrona is characterised by its creative and friendly atmosphere.

**KARLSHAMN – CLOSE TO NATURE**

Karlskrona offers a wide range of retail, culture and entertainment. The focus of the business community here includes digital experiences, and intelligent logistics. Several of the businesses within digital experimental were founded by former BTH students.

Water is a salient feature in Karlskrona. The city is located right by the sea and a chance to experience nature is never far away. A bit to the west is the river Mörrumsån offering opportunities for exciting salmon fishing, and the inlands offer southern Swedish deciduous forests interspersed with lakes and streams. There are plenty of charming pedestrian streets, shopping and cosy cafes, pubs, restaurants, as well as plenty of theatre and music. The city offers a wide range of associations and leisure activities.

Karlskrona has something of a decadent past with a history of producing brandy, Swedish punsch, tobacco, snuff, and card games.
AWARDS

PLANNING STUDENTS IN SECOND PLACE IN A UN COMPETITION
BTH’s spatial planning students came in second place in the international UN Habitat Competition on Urban Renewal of Mass Housing, held at the World Urban Forum in Medellin, Colombia, 2014.

BTH STUDENTS WON INTERNATIONAL GAMING COMPETITION
The winner of the competition “Make Something Unreal 2013” was the team Dead Shark Triplepunch composed of students from the study programmes in digital games and digital audio production at BTH. The winning game is called Epigenesis. The competition was held at The Gadget Show Live 2013 which was broadcast live from Birmingham.

STUDENTS RESOLVED A MESSY PORT TRAFFIC SITUATION
BTH students from the study programme in Spatial Planning came in second place in the international student competition PEMA, which was organised by the Port Equipment Manufacturers Association, and held in London in 2014. The task was to improve the flow and minimise congestion in ports.

URBAN MINING
The Savings Bank Foundation Kronan awarded a grant to BTH students for their degree project Urban Mining. The project was made in cooperation with Volvo Construction Equipment. The students came up with a solution on how to recycle concrete in an effective and sustainable manner.

STUDENTS IN SECOND PLACE IN A LOGISTICS COMPETITION
The BTH team made it to the finals of the international student competition PEMA, within the area of logistics, organised by the Port Equipment Manufacturers Association and held in Rotterdam, 2015. The task was to improve the allocation of dock spaces for large ships.

STUDENT WON NATIONAL ACADEMIC PAPER COMPETITION
A Spatial planning student wrote a paper about flooding, and won a competition organised in 2014 by the Swedish Civil Contingencies Agency (MSB).

BTH HIGHEST RANKED IN THE COUNTRY
The independent organisation for ranking universities in Sweden, Urank, ranked BTH as number one in Sweden for its undergraduate programme in engineering.

OUTSTANDING RESEARCH
BTH is among the world’s most outstanding higher education institutions within software engineering and sustainable development. In systems and software engineering, BTH is ranked sixth in the world and first within the EU, according to the Journal of Systems and Software. BTH is also deemed to be the best in Sweden and in third place within Europe for sustainable development, according to a report from the Alliance for Global Sustainability.
BTH IN NUMBERS

» Employees: 472
» Professors: 40
» Turnover: SEK 456 million
» Undergraduate programmes: 20
» Master’s programmes: 14
» Some 10 PhD programmes
» Registered students: 6600
» International students: 430
» Active doctoral students: 110
» 38% of the students are women
» 64% of the students study at the Faculty of Engineering
» 36% of students study at the Faculty of Computing
» More than two thirds of the activities at BTH consist of undergraduate and Master’s education

BTH CONDUCTS RESEARCH AND EDUCATION WITHIN THE FOLLOWING RESEARCH SUBJECTS:

» Applied Health Technology
» Applied Signal Processing
» Computer Science
» Industrial Economics and Management
» Mathematics and its Applications
» Mechanical Engineering
» Software Engineering
» Spatial Planning
» Strategic Sustainable Development
» Telecommunication Systems