



Master's studies 2017

Innovate yourself at KTH



A brighter tomorrow begins here

Welcome to KTH, an illustrious university with a rich history of pioneering ideas and innovation that dates back to 1827. Our talented researchers and academics continue to work in our state-of-the-art facilities to discover new advancements that will benefit industry and, more importantly, society as a whole.

Our extensive, international student body and partnerships with universities around the world make KTH an inspiring environment with a global perspective, where Master's students are able to discover the full potential of their chosen field of study.

I'm proud to be part of such an outstanding institution.



Prof. Peter Gudmundson
President, KTH Royal Institute of Technology



KTH is Sweden's largest and most prestigious technical university, and emphasises practical, real-world solutions to global challenges. As part of this philosophy, the university maintains close relationships with industry and the community.



KTH has a global reputation for excellence and an internationally diverse student body. Over 12,000 full-time students from around the world study at KTH.

Innovate yourself at KTH

KTH is Sweden's largest and most respected technical university. Being a KTH student involves more than just engaging in studies. By choosing KTH, you will gain access to a vibrant student life and a prestigious academic environment.



Master's programmes at KTH cover nine fields of study with over sixty degree programmes available.



190 years of excellence

KTH was established in 1827 as the Technological Institute and began to offer education in technology subjects with a strong professional focus. Since the start, KTH has been at the centre of many of the technological advances in Sweden. In the early 1950s the country's first nuclear reactor was installed on campus, at the same time as Sweden's very first TV station went on the air across the street. Over the last 190 years KTH has gone on to become one of the most prominent technical universities in Europe.

International at the core

KTH is truly an international university where different perspectives from around the world meet to create a brighter tomorrow. Sweden in general, and KTH in particular, has a long-standing tradition of welcoming students from all corners of the world. A large number of the 12,000 full-time students have come to KTH from outside of Sweden for degree or exchange studies. At KTH you will have the opportunity to meet a diversity of people with different experiences, who will widen your horizons and challenge you to excel.



KTH provides one-third of Sweden's technical and engineering research at university level.

Fit for a king

In 1917, the main KTH campus with its courtyard building was constructed in the northern part of central Stockholm on the edge of the Royal National Park, which has been at the disposal of the Swedish monarch since the 15th century. The reigning King Carl XVI Gustaf is the guardian of the university, and the royal crown has been a part of the university seal since 1827.

The mother of invention

Sweden is a nation known for its advances and innovations, from the lifesaving seatbelt and the pacemaker to modern services like Spotify and Skype. The father of Swedish innovation was the inventor of dynamite, chemist Alfred Nobel. His legacy of contributions for humanity can be seen in the Noble Prize awards, and is the same spirit that drives KTH forward. Following in the footsteps of Nobel and other Swedish innovators, KTH inspires students to look for invention in challenges and real-world problems, contributing to a brighter tomorrow.

Breaking new ground

KTH conducts world-class research in an array of technology and engineering fields. Its strong research reputation has reinforced the university's position as one of the most prominent technical universities in Europe and a force to be reckoned with globally. KTH was placed number 19 in the world among technical universities in the latest THE World University Rankings and number 16 in the latest equivalent QS ranking. To meet tomorrow's challenges, KTH offers education and research that attracts talent from all over the world.

KTH world ranking

- Ranked among the world's top 100 universities.
- Ranked 36 in the world within the faculty Engineering and Technology.
- Recognized as Sweden's most prestigious technical university.

Source: QS World University Rankings 2015

Master's programmes

Master's programmes at KTH are organised into nine main fields of study. Within those fields, prospective students may choose from more than sixty degree programmes. KTH also offers around 15 joint Master's programmes given in collaboration with other prominent technical universities. *Some of the Master's programmes are listed in multiple categories. All information current at time of print are subject to change. Visit our website for more information.*

Architecture and Civil Engineering

The field of Architecture is concerned with the engineering, design and analysis of buildings, while Civil Engineering is devoted to techniques for designing, constructing and maintaining roads, railway tracks, bridges and tunnels. Both areas depend on the successful integration of the latest technology with the goal of societal improvement. KTH is ranked 24 in Architecture/ Built Environment in the QS World University Rankings by Subject 2016.

- Architecture
- Architectural Lighting Design (60 credits)
- Civil and Architectural Engineering
- Environmental Engineering and Sustainable Infrastructure
- Environmental Engineering (Joint Nordic Master's Programme)
- Real Estate and Construction Management
- Sustainable Urban Planning and Design
- Transport and Geoinformation Technology
- Urbanism Studies (60 credits)

Electrical Engineering

Electrical Engineering is a discipline that has had a huge impact on the technologies that define modern-day life and society. KTH has a strong reputation for innovative research in this field and offers students the opportunity for study and research in a wide variety of subjects. KTH is ranked 17 in Electrical & Electronic Engineering in the QS World University Rankings by Subject 2016.

- Electric Power Engineering
- Electrophysics
- Embedded Systems
- Energy for Smart Cities (Joint EIT Programme)
- Information and Network Engineering
- Renewable Energy RENE (Joint EIT Programme)
- Smart Electrical Networks and Systems SENSE (Joint EIT Programme)
- Medical Engineering
- Nanotechnology
- Systems, Control and Robotics

Engineering Physics and Mathematics

Engineering Physics involves a profound knowledge and understanding of physics, as well as experience with analytical and computational tools. Mathematics furthers knowledge of mathematical concepts and methods that are fundamental to many technical and scientific subjects. Both areas allow the student to customize their selections depending on individual career objectives.

- Applied and Computational Mathematics
- Computer Simulation for Science and Engineering (Joint Programme)
- Engineering Physics
- Mathematics (Joint programme)
- Medical Engineering
- Nanotechnology

Energy and Sustainable Development

Both Energy and Sustainable Development are of increasing global importance, and KTH is a leader in these burgeoning fields. Programme focus can range from nuclear and environmental engineering, sustainable technology, energy innovation, to those involving the field of Life Science Technology.

- Energy for Smart Cities (Joint EIT Programme)
- Environmental Pathways for Sustainable Energy Systems SELECT (Joint EIT Programme)
- Innovative Sustainable Energy Engineering (Joint Nordic Master's Programme)
- Management and Engineering of Environment and Energy (Joint Erasmus+ Programme)
- Nuclear Energy Engineering
- Nuclear Energy EMINE (Joint EIT Programme)
- Renewable Energy RENE (Joint EIT Programme)
- Smart Electrical Networks and Systems SENSE (Joint EIT Programme)
- Sustainable Energy Engineering
- Sustainable Technology

Industrial Management and Innovation

This is a collection of programmes for those who wish to take leadership positions in industrial and technology-based organizations. Courses can focus on management, entrepreneurship and the economics of growth – from the industry, functional and individual levels – to management and engineering of energy and environment.

- Economics of Innovation and Growth
- Entrepreneurship and Innovation Management (60 credits)
- Industrial Management

Information and Communication Technology

A recognized leader in this field, KTH offers a full range of Information and Communication Technology and Computer Science programmes, from focus on software engineering, theory construction, media technology, computerized implementation and simulation, to associated enabling technologies.

- Communication Systems
- Computer Science
- Embedded Systems
- ICT Innovation
- ICT Innovation (Joint EIT Programme)
- Machine Learning
- Media Management
- Interactive Media Technology
- Security and Mobile Computing (Joint Programme)
- Software Engineering of Distributed Systems

Life Science Technology, Chemistry and Chemical Engineering

The field of Life Science Technology, Chemistry and Chemical Engineering can involve a large selection of programmes, across multiple platforms of study. This is an interdisciplinary area that can include courses in engineering, computational chemistry, environmental biotechnology, medical engineering and more, depending on the student's individual area of focus.

- Chemical Engineering for Energy and Environment
- Industrial and Environmental Biotechnology
- Macromolecular Materials
- Polymer Technology (Joint Nordic Master's Programme)
- Medical Biotechnology
- Molecular Science and Engineering
- Molecular Techniques in Life Science (Joint programme)

Mechanical Engineering

KTH offers a variety of programmes that inhabit the field of Mechanical Engineering, these can include aerospace engineering, integrated product design, naval engineering and sustainable technology. Mechanical Engineers are always in demand and KTH is internationally recognized, providing exceptional career opportunities for those focusing in this area. KTH is ranked 25 in Mechanical, Aeronautical & Manufacturing in the QS World University Rankings by Subject 2016.

- Aerospace Engineering
- Engineering Design
- Engineering Mechanics
- Integrated Product Design
- Maritime Engineering (Joint Nordic Master's programme)
- Naval Architecture
- Production Engineering and Management
- Railway Engineering
- Turbomachinery Aeromechanic University Training (Joint programme)
- Vehicle Engineering

Materials Science and Engineering

Materials Science and Engineering draw on materials design, engineering and nanotechnology among other areas. The latter emphasises microelectronics and photonics, specialization in materials chemistry, biomedical applications or basic materials physics. KTH has a strong track record of successfully integrating both of these fields with business and industry. KTH is ranked 30 in Materials Science in the QS World University Rankings by Subject 2016.

- Engineering Materials Science
- Medical Engineering
- Nanotechnology



European Institute of Innovation and Technology, EIT

KTH forms a part of four consortia of the prestigious EU collaboration, European Institute of Innovation and Technology, that will make Europe a global leader for innovations in ICT (KIC EIT Digital), sustainable energy (KIC InnoEnergy), raw materials (KIC EIT Raw Materials) and healthy living and active ageing (KIC EIT Health). Within the consortia, there are research institutes, major engineering companies and several leading technical universities in Europe. The consortia were selected in tough competition by EIT's board.

Entry requirements and funding

Admissions requirements

Admission to a Master's programme requires:

- A completed Bachelor's degree, corresponding to a Swedish Bachelor's degree (180 ECTS credits), or equivalent academic qualifications from an internationally recognised university. A Bachelor's degree in Science or Engineering is required for most programmes.
- Proof of English language proficiency equivalent to the Swedish upper secondary school English course B/6. For example TOEFL iBT 90 or IELTS 6.5.
- Programme specific requirements are listed in the programme descriptions.

Selection process

KTH recruits talents from all over the world. Students who meet the admission requirements compete for a limited number of places based on merit.

Tuition fees

Citizens of an EU/EEA country or Switzerland are not required to pay application and tuition fees, with the exception of some joint Master's programmes. Non-EU/EEA/Swiss citizens are generally required to pay application and tuition fees. The tuition fee for most two year Master's programmes is 310,000 SEK.

Scholarships

For students required to pay tuition fees there are a range of KTH and external scholarships available. Every year KTH awards over 30 scholarships and the award process is based on academic excellence. KTH offers three different types of scholarships; KTH Scholarship, KTH One-Year Scholarship and KTH Joint Programme Scholarship.

Complete admission requirements, selection process and tuition fees for each programme are available at www.kth.se/studies

Your application to KTH – step by step

The application deadline for most programmes is **16 January** and applications are carried out through **University Admissions in Sweden**. Some joint Master's programmes may have later application deadlines, but no application rounds close before **16 January**.



Find a programme

All programmes are available in the programme catalogue by 17 October. Programmes applied for through University Admissions in Sweden open for applications between 17 October and 16 January 2017. The application opening dates for other programmes vary, and applicants are advised to check their specific programme for more information.



Check the admission requirements

Before applying, be sure to check the admission requirements for your preferred programmes. General and programme specific requirements can be found under *Entry requirements* on each programme page.



Gather your required documents

There are both general and programme specific documents, all of which are described on the same page as the admission requirements.



Submit your application

Regardless of whether your programme is applied for through University Admissions in Sweden or another university or consortium, information on how to apply and support for applicants is provided in the relevant application system.



Apply for scholarships

Various scholarships are available through KTH, depending on your preferred programme.



Await selection results

Once you receive your selection result you can apply for residence permit and accommodation. If you are accepted for a programme, you will receive further information about preparations for your studies at KTH.

16 January
2017

The first application
deadline for Master's
programmes at KTH



Other levels of study

Bachelor's programme in Information and Communication Technology

KTH offers a Bachelor's Programme in Information and Communication Technology taught in English. This programme is based at the Kista campus, a major international technology hub. Students are exposed to the latest advances in the field and work with prominent researchers and professors from all over the world.

The programme is three years (180 ECTS credits), at the end of which the student is awarded a Bachelor of Science degree. This degree qualifies the student to move on to Master's studies or directly into their working life.

Complete information on the application process, admission requirements and programme content are available at www.kth.se/studies/bachelor

Doctoral (PhD) studies at KTH

KTH's dynamic international research environment and world-class facilities make it an excellent choice for those working towards their PhD. Currently, there are 2,000 doctoral students enrolled at KTH.

To pursue a doctorate at KTH, you must dedicate yourself to a research project under the guidance of an experienced researcher. You will also be expected to take doctorate level courses and write a thesis. Typically, KTH doctoral students are employed by the university and receive a monthly salary.

Admission to PhD studies

Vacant doctoral positions are announced five times a year, in February, April, June, September and December. Be advised that the selection process is highly competitive and only the most qualified candidates will be offered positions.

Applicants must meet the following general admissions requirements:

- An advanced level degree, such as a Master's, or at least four years of university studies (240 ECTS credits), of which at least one year (60 ECTS credits) must be at the advanced (Master's) level.
- All applicants must possess the necessary skills in both written and spoken English.
- In addition, each position has its own specific requirements, listed in the vacancy announcements.

For more information and vacancy announcements, visit: www.kth.se/en/studies/phd

Ask a KTH student

Ask KTH students from all over the world about their life in Sweden. You can ask them about anything from course literature to the availability of your national cuisine in Stockholm. You can also follow our student blogs to get an insight to life at KTH. Read more at www.kth.se/studies



 KTH International Students

 KTH University

 KTH International Students



KTH campuses are strategically placed to promote cooperation with industry in defined areas. For example, our campus for ICT education is located in Kista, the largest ICT cluster in Europe with companies like IBM, Ericsson and Microsoft as neighbours.



After KTH

A KTH degree is a sign of academic excellence, ambition and an innovative mind-set. KTH alumni are highly attractive on the job market and have excelled in a wide range of fields.

A reputation that precedes you

A degree from KTH is a springboard to a successful career. KTH alumni are quickly established on the job market. Over 40 percent of KTH alumni have jobs before receiving their degree. In the QS World University Rankings 2015 KTH ranked as number 81 in the world for employer reputation.

Each year, over 500 degree project proposals are posted on the KTH project portal by companies like Ericsson, SAAB and Scania. Over 20 percent of the students get their first employment through their degree projects. KTH Career service helps students achieve their future plans through career planning, career development seminars and job application support.

The innovative mind-set

As the home of the Nobel Prize, Sweden is known for its innovation and entrepreneurship. Swedes have invented everything from the steam turbine and dynamite to Bluetooth and Skype. At KTH Innovation students get support to commercialise their business ideas and over 14 percent of KTH alumni go on to start their own company.

A life-long relationship

There are around 80,000 KTH alumni world-wide and the alumni community enables you to maintain and widen your social and professional network. Every year KTH invites alumni to take part in a wide range of events both on campus or hosted by one of our international alumni chapters.

International alumni chapters

New York, Norway, Germany, Switzerland, India, Thailand, Singapore, Indonesia, Beijing, Shanghai and Spain.



KTH and Stockholm

KTH Master's students and alumni discuss life at Sweden's largest technical university.



The people of Stockholm are doing a great job in preserving the green areas in the city. Everything is surrounded by green meadows, parks and woodlands. If you enjoy natural landscapes, then Sweden is the place for you! The city seems to be huge, but once you get to know it, everything is at walkable distance.

Matteo Gamba, Italy
Master's Programme in Computer Science



The cleanliness and the greenery all around is what surprised me the most. Also the fact that everyone around you are always ready to help and speak excellent English is pretty surprising.

Nishita Vegi, India
Master's Programme in Aerospace Engineering



Stockholm is a beautiful city, its mix of nature and urban landscape makes it one of the nicest places I have ever been to. Sweden's society is well organized and has a lot to offer.

Carlos José Arias Bandry, Venezuela
Master's Programme in Electric Power Engineering



In my opinion, Sweden in general, and Stockholm in particular, is the place where everyone can find what he or she wants. This multicultural and open country provides thousands of opportunities if one is ready to explore them.

Alexey Titov, Russia
Master's Programme in Economics, Innovation and Growth



Whenever I'm asked about my academic background, I'm proud to say I studied at KTH. Studying at KTH not only advanced my academic and professional goals but also gave me new ways of looking at life, new insights into my culture, and a better understanding of myself. The friends I made at KTH will be my friends for life.

Lalita Siriboon, Thailand
*Alumnus, Master's Programme in Real Estate Management
Owner & Managing Director at Stitchery and Brides & Pride*



Sweden is a peaceful, beautiful, industrial country with people who treat you kindly. The equality of men and women in all fields was so impressive for me. Moreover, something special about Stockholm is that you can have beautiful nature beside modern city at the same time.

Khadijeh Jafari, Iran
Master's Programme in Engineering Materials Science



The best thing about being a former KTH student is recognition. KTH is a prestigious, worldwide well-known university, and our KTH education constantly helps us former students make a global impact with local solutions.

Raquel Bohn Lima, Brazil
*Alumnus, PhD in Fiber and Polymer Technology
Research Scientist at VTT*



Be confident when you speak to other people even if your English might not be very good at first. Try to take part in some student activities and make local friends.

Yusi Cai, China
Master's programme in Medical Engineering



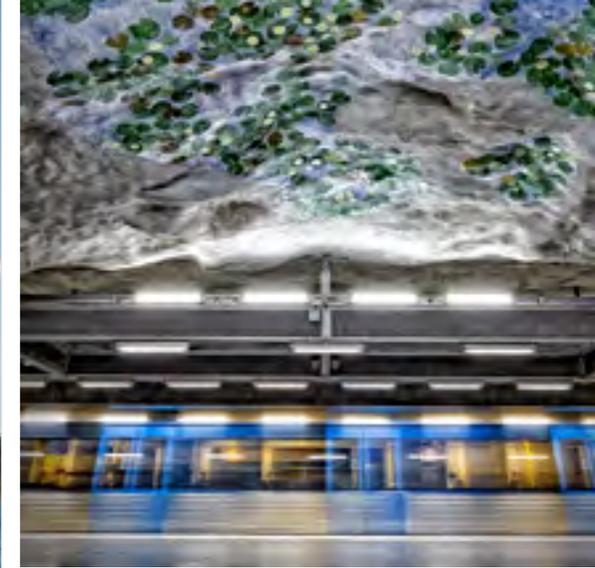
KTH is recognised as one of the top engineering schools in Europe. To be a KTH alumnus is an honour, and you can see that in the way people respect and value you. Personally, KTH was a life-changing experience, in a really good way. If I am doing well today in my line of work, it is mainly because of the work ethic and learning culture I experienced at KTH.

Arun Subramanian Venkataraman, India
*Alumnus, Master's programme in Systems, Control and Robotics
Senior Associate, FormulatelP*

Stockholm is among the safest cities in the world and is considered one of the world's most liveable cities



With its fresh air, pristine waterfronts and cultural institutions, Stockholm offers a unique blend of nature and urban living



KTH degrees are awarded at Stockholm City Hall, site of the annual Nobel Prize celebrations



KTH's main campus, an architectural landmark



Stockholm – a beautiful, cutting edge capital

Stockholm, home of KTH, consistently ranks as one of the greenest, most high-tech, and most enterprising cities in Europe. Its rich intellectual heritage and entrepreneurial environment make it the ideal place for international students to put their learning into action.

Closer than you think

