

10 reasons to choose DTU

- **01** DTU is one of the highest ranked technical universities in Europe.
- **02** More than 100 nationalities are represented at DTU, making student life at DTU a truly international experience.
- **03** The academic life is challenging and you get hands-on access to world-class research facilities.
- **04** Active researchers conduct all teaching and supervision, and all academic activities are based on the latest scientific knowledge.
- **05** 92 per cent of all international students at DTU are 'very satisfied' with all aspects of their institution experience and would encourage others to apply to the University.

- **06** DTU focuses on supporting student innovation and entrepreneurship. At DTU, you can turn your ideas into reality.
- **07** DTU has a close collaboration with industry, benefitting both research and learning activities.
- **08** All professors and lecturers are easily accessible to students.
- **09** At DTU, there is never a dull moment. Join one or more of the many clubs and activities, or sign up for one of the cross-disciplinary student projects.
- **10** The campus is safe and secure and a site of great natural beauty.

www.dtu.dk

BSc in General Engineering



Bachelor of Science in General Engineering

DTU's Bachelor of Science in General Engineering is a cross-disciplinary, English-taught BSc programme, conducted in an international atmosphere where you will study alongside students from all over the world.

The programme is specifically designed to give you

- Broad and generalist engineering competencies.
- An in-depth technical-scientific foundation in mathematics, physics, and chemistry. You learn to work cross-disciplinary with the three subjects and use them as tools for forward-thinking engineering, science, and technology.
- Specialist knowledge in a research area where DTU and the Danish business sector are world-leading.
- Experience with real-world engineering assignments as you work on interdisciplinary design-build projects from the 1st semester onwards.

- A head start in the global labour market. Experience with working crossdisciplinarily with industry-related issues and a strong international profile will make you highly attractive to potential employers.
- The best starting point for applying for a wide range of MSc programmes.

Upon graduation, you can either apply for admission to a number of MSc programmes at DTU or another university—depending on your choice of specialization—or you can embark on your career by applying for a generalist job position.



Recognized as an elite technical university, DTU is renowned for its close collaboration with industry. The BSc in General Engineering has been developed in close consultation with industry to ensure that graduates meet the exacting requirements of future employers.

Programme structure and content

During the course of three years, you will gain a profound understanding of the interaction between the natural and the technical sciences.

On the first two semesters, you follow a number of mandatory courses, where you will get an in-depth understanding of the pillars of engineering: mathematics, physics, and chemistry.

During the second and third semesters, you must choose courses that will introduce you to two of four subject areas. This will contribute to giving you broad engineering competencies and equip you for selecting your fourth semester specialization.

Choose between

- Living Systems
- Cyber Systems
- Cyber Materials
- Future Energy

On the fourth semester, you focus on one of the above specializations. Your choice determines which MSc programme you can apply for later—at DTU or another university.

During the fifth semester, you can choose to either study abroad at another university or work on a project in a Danish company. In your sixth semester, you will conclude the programme with a bachelor's project.

Design-build projects

A unique feature of the BSc in General Engineering is that you work on design-build projects throughout the entire programme. A design-build project is a practice-oriented cross-disciplinary group project in which your team solves a specific problem, going through the problem-solving phases typically experienced by engineers. Thus, you learn to adopt an engineering approach; you learn to communicate, to work in teams to solve specific challenges, and to come up with viable solutions to real-life problems. In essence, you learn to think and work like an engineer.



The study programme

1st SEMESTER	2nd SEMESTER	3rd SEMESTER	4th SEMESTER	5th SEMESTER	6th SEMESTER
Advanced Engineering Mathematics 1 with cases from various engineering topics		Advanced Engineering Mathematics 2 with cases from various engineering topics	Design-build project	Study abroad at a foreign university or work on a project in co-operation with a Danish company	Elective courses
		Design-build project	Specialization within one of the following areas: Living Systems Cyber Systems Cyber Materials		
Introduction to physics and chemistry 1 with cases	Introduction to physics and chemistry 2 with cases	Theory of science in engineering	─ Future Energy		
Introduction to statistics		Introduction to numerical algorithms	-		BSc project
Introduction to programming and data processing	Select two of the four courses: Introduction to Living Systems Introduction to Cyber Materials Introduction to Future Energy Introduction to Cyber Systems				
Design-build project with cases	Design-build project				

Future prospects

Depending on your choice of specialization, the BSc in General Engineering enables you to apply for admission to a wide range of MSc programmes at DTU or another university in Denmark or abroad. At DTU, relevant programmes include

- Advanced and Applied Chemistry
- Aquatic Science and Technology
- Bioinformatics and Systems Biology
- Biotechnology
- Chemical and Biochemical Engineering
- Digital Media Engineering
- Environmental Engineering

- Food Technology
- Materials and Manufacturing Engineering
- Mathematical Modelling and Computation
- Medicine and Technology
- Petroleum Engineering
- Physics and Nanotechnology
- Sustainable Energy
- Wind Energy

Entering the labour market

If you continue your studies with a Master's degree, you will obtain a combination of broad technical-scientific and specialized qualifications that are in great demand by

high-tech companies in Denmark and abroad. Your experience with real-life cross-disciplinary projects allows you to handle projects from start to finish. Thus, you will be ready to work as a consultant or a project or systems engineer in any job where your role is to serve as the crucial link between colleagues with different professional backgrounds.

No matter what you choose, the international BSc in General Engineering provides you with a unique profile that will give you a head start in the global labour market.







Admission and deadlines

You can apply for the BSc in General Engineering programme with a Danish or an international qualifying exam.

Admission requirements

In addition to having an upper secondary education exam, you must meet specific entry requirements in English, mathematics, physics, and chemistry.

Danish qualifying exam

Students holding a Danish qualifying exam are required to have

- English B
- Mathematics A

either:

- Physics B and Chemistry B
- Physics B and Biotechnology A
- Geoscience A and Chemistry B

International qualifying exam

International students must meet the specific entry requirements that apply to this study programme, i.e. have competencies equivalent to the above.

Application for admission

Apply for admission on www.optagelse.dk from 1 February.

Deadline for application

- 15 March (quota 2) or 5 July (quota 1) if you hold a Danish qualifying exam
- 15 March if you hold an international qualifying exam

Please note that all non-EU/EEA applicants are required to pay an application fee of €100.

Tuition fees

Higher education in Denmark is provided free of charge for all EU/EEA citizens and for students participating in exchange programmes. All other students have to pay tuition.

For further information on admission to the BSc in General Engineering, please visit www.dtu.dk/GenEng

