



AALBORG UNIVERSITY

Aalborg Universitet

Fibigerstræde 15 - 13 - 11

Fibigerstræde 4 - 2

Fibigerstræde 5 - 3 - 1



Welcome to **AALBORG UNIVERSITY**

The Faculties of **ENGINEERING, SCIENCE** and **MEDICINE**

Welcome from the Dean

Dear prospective student,

Thank you for taking an interest in the opportunities at Aalborg University. I am pleased to introduce you to the international postgraduate programmes (Master's) at the Faculties of Engineering, Science and Medicine. The faculties stand for innovation with a constant focus on current developments within the areas of education, research, networking and internationalisation.

We connect with the world, but the world most certainly connects with us too.

With an international perspective as a firm and prominent part of our vision, we are strongly committed to encourage and enable international collaborations within education and research. We co-operate with more than 350 universities and research institutions.

The University's main campus is situated in Aalborg but you will also find campuses in Copenhagen and Esbjerg.

As an international student, you can pursue a Bachelor's degree, a Master's degree or a Ph.D. Furthermore, you have the opportunity to enrol as a guest student or an exchange student for one or more semesters. We offer a great number of educational programmes and our wide-ranging curriculum provides students with a high quality portfolio and allows opportunities for choice and flexibility of study.

Whichever programme you choose, you will become part of an internationally involved university, and it is my pleasure to extend a very warm welcome to future students at our faculty.

Frede Blaabjerg
Dean of the Faculties of
Engineering, Science and Medicine



Welcome to Aalborg University

Aalborg University is a young and modern university which over the years has grown to become a large, well-established research and teaching institution. Aalborg University offers a range of both traditional and untraditional educational programmes and research in the fields of Humanities, Social Sciences, Medicine, Natural Sciences and Engineering.

Since its foundation in 1974, Aalborg University has extended to include Esbjerg Engineering College (integrated in the University in 1995), which was followed by the establishment of the School of

Architecture & Design in 1996, the inauguration of the Copenhagen Campus in 2003, the establishment of the School of Medicine in 2006 and, most recently, the integration of the National Building Research Institute in 2007.

Close to 14,600 students are enrolled at Aalborg University, ranging from students undertaking preparatory courses, Bachelor's and Master's to candidates studying professional programmes as well as Ph.D. students. Of these, 12 percent are international students from all over the world.

Aalborg University has all the facilities that define a modern university. The laboratories are state-of-the-art. The university libraries provide access for students to English-language journals and technical books. A unique feature of the university is that most students have their own group room. The group room is your base where you can work on your project without interruptions. For many students, the group room also serves as a social venue.



Welcome to Aalborg

Aalborg is an old Danish city dating back to around the year 1040. With approximately 123,000 inhabitants (and 200,000 in the municipality of Aalborg), it is the fourth largest city in Denmark and the regional capital of North Jutland. With more than 600,000 inhabitants, North Jutland is the third largest

region in Denmark. With its 14,600 students (approximately 12 percent of the city's inhabitants), Aalborg University plays a considerable part in Aalborg's daily life highlighting Aalborg's position as a university town. Additionally, our own Student House, run entirely by students, offers a venue for many happenings (for example concerts and theatre) and get-togethers.

In Aalborg, a rich variety of entertainment is within short reach of the University's main campus. In the heart of Aalborg, there is a wide range of museums and exhibitions (Kunsten, Utzon Center and Nordkraft); theatres

and cinemas; two idyllic pedestrian streets with ample shopping opportunities; a thriving sports scene; a vibrant restaurant and café life; a well-established local, national and international art and music scene; a charming waterfront with parks; and a renowned nature scene with forests and the finest sandy white beaches Denmark has to offer only half an hour's drive away. You can always find a place to go, whether you are in the mood for lunch at a small bistro, a quiet afternoon in the sun with friends, a trip to the theatre or the movies or simply wish to party after a concert. And with Aalborg Airport you are no more than a 35-minute flight from Copenhagen.

In Aalborg, there is a great variety of sports and leisure activities often enjoyed in the unique natural surroundings. Regardless of the weather or the season, the Danish people are to be found outdoors bicycling, running, walking, swimming and enjoying their surrounding nature. But don't just take our word for it, come see for yourself.



Welcome to Esbjerg

When a bill was introduced in 1868 concerning the establishment of a harbour in Esbjerg, the base of the fifth-largest city was founded. Esbjerg is today the heart of West Denmark, and as the local capital, Esbjerg is the area's most dynamic town. The expansion of the town reads like a fairytale. In just 125 years, Esbjerg has developed from a barren sand dune to Denmark's fifth largest city with approximately 80,000 inhabitants. Esbjerg can also lay claim to being one of Denmark's largest ports for shipping, fishing, and oil and gas industries.

With a thriving business scene and rich cultural life creating a big city atmosphere, Esbjerg is a modern and lively city too. On the cultural scene, Esbjerg has many culture centres, art and interactive museums, as well as a rich array of cafes and restaurants. If music is your interest, Tobakken and Musikhuset Esbjerg are great venues. The city itself offers great shopping opportunities with specialty shops and shopping malls. Esbjerg is brisk and exciting - full of memorable experiences for students.

Aalborg University Esbjerg is located in the northern part of Esbjerg, 3 to 4 km from the town centre. There are currently plans to develop Esbjerg campus by expanding facilities such as cafes, Friday bars, sport venues, common rooms and study spaces in a beautiful and natural setting.

The city of Esbjerg is strategically located at the North Sea and the Wadden Sea, and the area offers beaches, dunes, woodland, islands, small towns of historical interest, a farming heritage, nature parks and amusement parks such as Legoland close by.

In Esbjerg everything is within reach.

Welcome to Copenhagen

Copenhagen is the capital of Denmark with approximately 1.7 million inhabitants. It is a dynamic and internationally oriented city while at the same time proud of its old, cultural heritage. With a rich history that is evident in its historical buildings and ancient streets, dozens of world class museums and galleries, the enchanting Tivoli Gardens, and a resident monarchy that is the oldest in the world, the Danish capital has a host of attractions to suit all tastes.

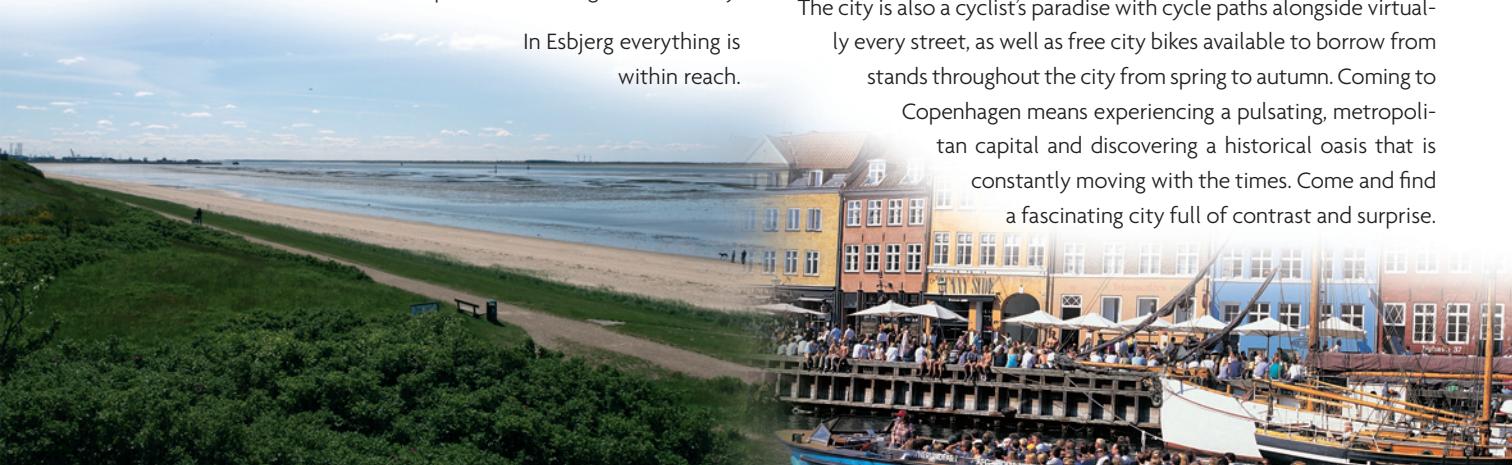
In Copenhagen you will find the Queen's Palace, the Danish Parliament, the national Royal Theatre, the national Opera, an IMAX planetarium and an abundance of other interesting national and cultural attractions. Copenhagen is also home to the largest cinema in all of Scandinavia, the Imperial.

Copenhagen is a vibrant, modern city whose fascinating past coexists with the very latest trends in architecture, design and fashion. Bars, cafes and restaurants are abuzz long into the night and by day the city is a shopper's paradise. The main pedestrian street known as Strøget has many high street shops and the surrounding streets offer plenty of opportunities to find exactly what you are looking for.

Aalborg University Copenhagen is located in Ballerup in Greater Copenhagen, but accommodation will most likely be found in Copenhagen. With the Metro (rapid transit) and an efficient bus and train system, transportation is fast and easy.

Even though Copenhagen is a major city, it is easy to find your way around.

The city is also a cyclist's paradise with cycle paths alongside virtually every street, as well as free city bikes available to borrow from stands throughout the city from spring to autumn. Coming to Copenhagen means experiencing a pulsating, metropolitan capital and discovering a historical oasis that is constantly moving with the times. Come and find a fascinating city full of contrast and surprise.





Wherever you come from, you'll feel at home at Aalborg University

Student life

In Denmark, Aalborg University is renowned for having the best study environment in the nation, mainly due to the study method. The close collaboration between the group members allows you to get to know your fellow students quickly. This provides a perfect basis for establishing professional relationships. Moreover, it provides an equally important means of finding someone to talk to about issues that are not professionally related.

We are home to 1,750 international students from over all over the world. They come to follow one of our approximately 70 international degree courses (Bachelor's and Master's) or our programmes for guest and exchange students. Additionally, we have a great variety of Ph.D.s – counting 460 Ph.D. students at the Faculties of Engineering, Science and Medicine alone.

Outside “office hours”, there are a variety of leisure activities you can participate in such as sports, culture, student cafés and different student networks provided for international students. You'll find plenty

of opportunity to get involved in sports as a student at Aalborg University. The University has its own sports club (AASI), where it is possible to play football and badminton, to swim and do aerobics. The purpose of these networks is to establish academic and social ties between Danish and international students.

As an international student, you will get a Danish buddy – a student at the university – who will introduce you to life as a student in Denmark. Often international students and their buddies form friendships and get together outside of the university.

Most Danish students are well-trained in English and some of them speak German, Spanish and French as well. Therefore, it is not a problem if you don't speak Da-

nish. Nevertheless, you will be given the opportunity to learn the language by signing up for the Danish language course, which is offered to all international students for free.

Our International Office does its utmost to ensure that international students are comfortable and happy during their stay in Denmark. There is always someone to help you if you feel lost or simply confused. Therefore, you should not hesitate to apply – we will take good care of you here at Aalborg University and provide you with the best possible education – for your life and for your future.

Read more about the many aspects of student life at Aalborg University on the webpage studyguide.aau.dk.



A unique **teaching** method

A trademark of Aalborg University is our unique pedagogic model of teaching: namely the problem-based, project-organised model known as Problem-Based Learning (PBL). With this method a great part of the semester teaching and student work revolves around complex, real-life problems. You will work on solving problems within your choice of study with other students in a group. An evaluation from OECD has shown that this form of teaching is close to optimal for the learning process.

With this teaching method you will quickly get to know your fellow students. A unique feature is also that all groups have their own group room where they can meet and work whenever they want.

Additionally, the teaching at Aalborg University is based on research and the University continuously works on adapting the content and structure of the educational programmes to meet the present and future demands from soci-

ety. Everything is done with the objective of enhancing the competencies of our graduates in order to further their job opportunities.

Project work

A supervisor is appointed to each project group. The role of the supervisor is to advise and encourage students as well as contribute to the group's project work with her or his knowledge, expertise and experience. Note however that the project group is entirely and solely responsible for the successful completion of the project.

The project work generally accounts for 50 percent of the study time, while the other 50 percent is devoted to lectures, seminars and laboratory work. This kind of project work allows for a deeper understanding of the subject than you would gain through lectures and seminars alone. OECD describes this method of study as an almost perfect way of learning.

In recent years, Aalborg University has exported the model to several universities abroad.

At the beginning of each semester, several suggestions for project subjects are presented to the students. When the group formation is completed and the subject for the project is chosen, each group is required to write a project description which will be discussed with and consequently approved by the assigned supervisor. Furthermore, the students are given the chance to work with relevant industries and consequently with real-life problems.

The time allocated to group project work will normally increase as the semester progresses. Thus, during the final third of your semester, you can work more or less full-time on your project.

For further information on Aalborg University in general, as well for the entire list of our degree programmes, see en.aau.dk.





Accommodation

Aalborg University has an International Accommodation Office (IAO) which assists the University's international students in finding a place to live when you arrive in Aalborg. The accommodation that is offered is e.g. a single room in a private house, a dormitory room or a bigger flat shared with other students. Unfortunately, the University is unable to assist in finding accommodation with a Danish family, but the International Accommodation Office can tell you whom to contact if you are interested in this.

The rent and location vary according to the type of housing. Most apartments are located in or in the vicinity of downtown Aalborg, approximately 5-6 km from the University's main campus, while the dormitories are located relatively closer to the main campus. If you want further information about prices, application, deadlines etc. visit:

**[internationaloffice.aau.dk/
international_accommodation_office](http://internationaloffice.aau.dk/international_accommodation_office)**

Upon acceptance at Aalborg University Copenhagen or Aalborg University Esbjerg, you will receive a notice with details of accommodation. If you keep the International Accommodation Office's application deadlines, you are almost certainly guaranteed accommodation when you arrive.

Study programmes

At Aalborg University, we ensure that our students have access not only to the best academic support and facilities possible, but also have the opportunity to enhance their employability and acquire the skills that will allow them to make the maximum contribution to their chosen field of work. As a student you will not only benefit from studying in a dynamic research environment with state-of-the-art equipment and facilities, you will also have the opportunity to work with distinguished academics who are leaders in their field.

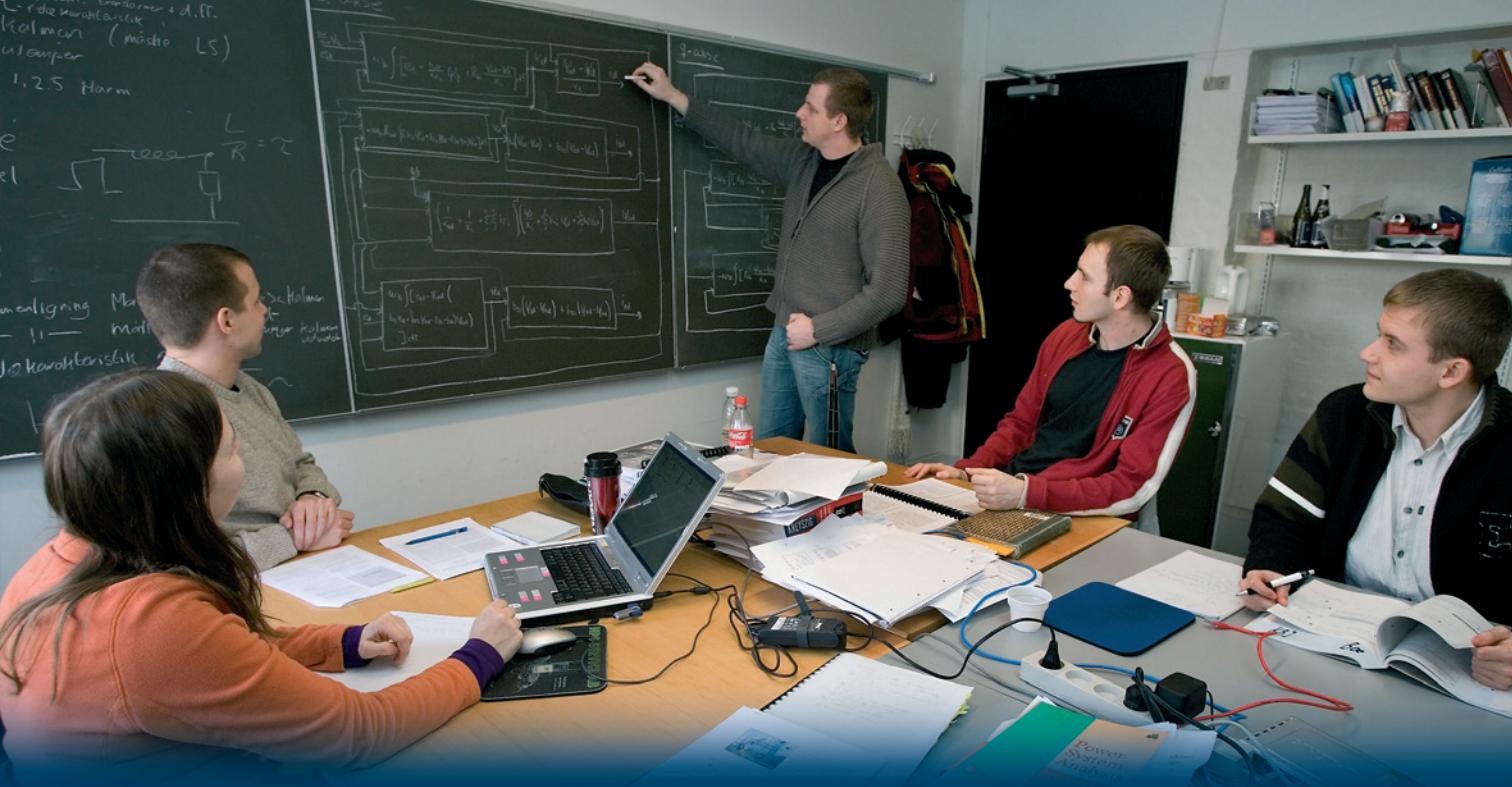
Aalborg University stands for tradition and innovation. The combination of basic science and professions-oriented science gives the study programmes at Aalborg University a dynamic and professional flexibility, which is a trademark of the university. Aalborg University has placed itself at the international forefront of research within several fields.

We offer a wide range of English taught Master's programmes within all relevant areas of Engineering, Science and Medicine.

On the adjacent page, you will find an overview of the areas in which we offer Master's programmes. We keep a constant eye on developments within education and research and we advise you to consult our webpage for a complete and updated list and detailed description of all our programmes.

For specific information on programmes see studyguide.aau.dk/programmes





Main fields of study

- Architecture & Design
- Sustainable Energy
- Environmental Engineering
- Chemical Engineering
- Nanotechnology
- Civil Engineering
- Mechanical Engineering
- Materials Engineering
- Electrical Engineering
- Information and Media Technology
- Computer Science
- Infrastructure Engineering
- Life Sciences
- Natural Sciences
- Chemistry and Biotechnology
- Manufacturing Engineering
- Surveying and Planning
- Global Business Engineering
- Biomedical Engineering
- Industrial Medicine
- Learning
- Energy Engineering
- Integrative Geography
- Medicine

Tuition free studies

Students from inside the EU/EEA do not have to pay a tuition fee. However, all students must pay all other costs related to studying in Denmark: for example costs related to books, living expenses and accommodation.

NB: With the exception of students from partner universities outside the EU/EEA, a student from a non EU/EEA country will need to pay a tuition fee.

For more information please see: studyguide.aau.dk/apply/tuition.

Testimonials



“I like the group work at AAU. It is very interesting to work with problem-based projects. I have made an interesting project, but I cannot tell you about it in detail, since our supervisor is considering taking out a patent for it!”

Sara, Poland



“I have found the project-oriented study form rewarding, as you work on entire projects similar to those in the industry instead of solving exercises that are just fragments of a project.”

Jannie, Denmark



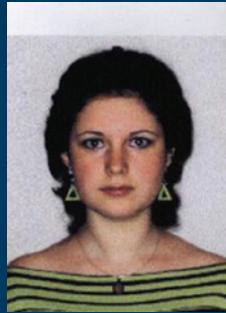
“I chose to study at AAU because of the strength of their research. The professors here are pioneers within their fields. In addition, AAU offers the best possible resources, and the facilities are just fantastic. Everything works, and graduates from AAU are very successful.”

Massih, Iran



“Here, there is much more freedom, and the students actively participate in directing their own studies. I value the fact that students have a say regarding their own education and future.”

Suraj, Nepal



“So far, I love it here! AAU is very different from my home university, but in a good way. The facilities here are great – very good indeed. The laboratories where I work on my project are very well equipped.”

Veronica, Romania



“As a student you have access to the university 24 hours a day and also in the weekends. The laboratories are very well-equipped and I like working there.”

Txema, Spain

From graduation to a career in **the fast lane**

When students at Aalborg University design and build their own race cars, it might not only prove to be educational and entertaining but also serve as a springboard for employment within the Formula 1 industry. Michael Christensen has gone straight from working on AAU's racers to Toyota's.

When engineering students at Aalborg

University year after year develop small racers, a great deal of the work is propelled by childhood dreams of fast cars and advanced toys. Those dreams are nourished further when the students themselves have the responsibility for designing, developing, testing and competing with their racers. However, for one member of the team this dream has

been taken yet another step further into the real world of Formula 1.

Michael Christensen finished his degree in engineering from Aalborg University and is today an employee at Toyota's Formula 1 technical centre in Cologne, Germany. His work with small racers on AAU's Unicorn-team sent him directly from Aalborg to a job as a design engineer at Toyota.

- I participated with the rest of the University team in an international competition for student racers on the Hockenheimring (the Hockenheim race track in Baden-Württemberg, Germany) where Toyota had a sponsor booth with a Formula 1 racer on display. I got into a conversation with some of their people and told them about my education and my Master's thesis. My four years of work experience with racers caught someone's interest and I was asked whether I had ever considered working in the Formula 1 industry, explains Michael Christensen from his office in Cologne.

Within a short time, Michael had written down the Toyota employee's contact details on a napkin with the promise to send an application as soon as he returned to Denmark. Two days later he was invited for an interview, another two



days later he was offered a job in Toyota's Car Design and Development Department. Fourteen days later he began his new life as a design engineer: all to his great thrill and not without a little jealousy from his colleagues on the Unicorn team in Aalborg that had been a crucial stepping stone to the Formula 1 industry for him.

- There are many similarities between my work experience with the student racers at Aalborg University and "the real world" of Formula 1. Things move fast and the focus is always on creating a better and ever increasing competitive product. Of course there are some great differences such as in the resources available. During our Unicorn work, many decisions were made on the basis of economic and technical limitations, while inevitably you are somewhat more uncompromising in the ultra serious F1 industry, Michael says.

His primary work assignment is the development of hydraulic systems and components, but he also works with the simulation, test and integration of a variety of other systems in the cars. In this connection, his work experience from building cars from scratch with his fellow students at Aalborg University has given him a practical background which he would not have acquired from books and lectures.

- The entire Unicorn project has given me a unique understanding of the car as an assembled system. I have a good overview of how the separate systems work together and which parameters are important with respect to optimizing the car's overall performance, and, actually, I have a good understanding of the entire development process, says Michael Christensen, who was one of the students present from the very beginning when the first racer project in Aalborg was initiated.



Practical information

When to apply

You can apply as a

- **Guest/exchange/Erasmus student:**

An international student wishing to study at Aalborg University for 1 or 2 semesters as an integral part of a study programme at an institution or higher education in another country

Or as a

- **Degree student:**

An international student wishing to pursue a degree from Aalborg University

Deadlines for applicants requiring visa:

- *15th of March when applying for the September intake*
- *15th of August when applying for the February intake*

Deadlines for applicants with EU/EEA citizenship and applicants from partner/co-operating institutions:

- *1st of May when applying for the September intake*
- *1st of October when applying for the February intake*

For entry requirements

- See web page studyguide.aau.dk/apply/entryrequirements

For further information:

Feel free to contact us directly or find us at en.ins.aau.dk.

Aalborg University

The Faculties of Engineering, Science and Medicine

Niels Jernes Vej 10

DK - 9220 Aalborg

Denmark

Tel.: + 45 9940 9940

Email: ins@adm.aau.dk