Aalborg Universitet



Civil Engineering

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Indoor Environmental Engineering Structural and Civil Engineering Water and Environment



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INDOOR ENVIRONMENTAL ENGINEERING

Master of Science in Engineering in Indoor Environmental Engineering

An engineer specialising in Indoor Environmental Engineering is responsible for creating an ideal environment for work as well as leisure: that is, an environment that considers the need for well-being and comfort of the individual. A good indoor climate is defined by the fact that air quality, temperature conditions, acoustics and quality of light in each room of the building are suitable for the activities and needs of the users. A healthy building with a good indoor environment is created by an optimal interplay between location of the building and microclimate, building design and layout of the building, structural engineering and materials, ventilation, heating and cooling systems as well as operation and maintenance.

Construction and operation of buildings are responsible for more than 40 % of the energy and material consumption in the world today. Therefore, construction and operation of buildings play a significant role in the environmental development in the future society. An engineer specialising in Indoor Environmental Engineering can reduce this consumption considerably by optimal design of the building and the building envelope; choice of materials; utilisation of different kinds of renewable energy such as daylight, solar cells, solar energy and natural ventilation; and optimisation of the operation of the building.

As an engineer specialising in Indoor Environmental Engineering, you will learn how to calculate and optimise the energy consumption of the building.

Design of modern intelligent buildings with complicated indoor environmental and energy systems demands advanced calculations and simulation tools that are able to simulate the future environmental performance of the building and, additionally, simulate the way in which individuals perceive the indoor environment throughout an entire year. Lectures are also given on advanced tools for calculation of airflows and transport of pollution inside and around the buildings.

Semester 1:

Advanced modelling of energy transport in buildings and HVAC systems

During your first semester, you will be introduced to the learning model officially practiced at Aalborg University: namely the problem-based, projectorganised learning model (PBL). The overall theme of the semester is numerical and experimental analysis of energy transport in buildings and HVAC systems under dynamic thermal loads. Moreover, the semester includes the application of advanced methods for analysis and simulation of temperature conditions and heat transfer in buildings and HVAC systems. Additionally, you will be introduced to the application of experimental methods including evaluation of results.

The focus of your project work for this semester could be, for example, on the need to analyse and simulate a building thermal system under dynamic loads. This includes formulation of mathematical models where you describe the dynamic thermal system and derive analytical and numerical solutions from these models.

Semester 2:

Integrated design of buildings and building services

During your second semester, the overall theme is integrated design of building systems that meet the needs for occupant comfort, energy efficiency and environmental demands. Lectures this semester include analysis of the interplay between building design, building use, outdoor climate and HVAC systems enabling you to estimate the operation and energy use of the integrated system. It involves the application of analytical methods for energy efficient design of building systems; application of passive energy technologies, such as passive cooling, natural ventilation, passive solar systems and day lighting; assessment of the robustness of the solutions; calculations by means of sensitivity analysis; and, lastly, the estimation of the uncertainty regarding key input parameters.

For inspiration, your project this semester may be based on an existing building, a preliminary design or an architectural concept for one single or multiple buildings where low energy consumption and applicability of passive energy technology are important aspects of the design.

Semester 3:

Ventilation, airflow and contaminant transport in buildings

On the third semester, you will primarily focus on indoor climate and the interaction between indoor climate, ventilation, airflow, energy flow and flow of substances: substances like contaminants, gas, smoke and viruses. The projects are based on theories of fluid dynamics, heat and mass transfer, and building geometry. Projects this semester cover both experimental work in the laboratory, either in model or full scale, as well as theoretical calculations such as computer simulation of flow, energy and mass transport.

Project examples include: Investigation of ventilation in an operating room; smoke management during a building fire; thermal comfort and ventilation in a theatre; optimisation of ventilation; and cooling of an office space.

Semester 4:

Master's Thesis on Indoor Environmental Engineering

This semester is devoted entirely to the Master's Thesis and, therefore, there will be no official courses for this semester. The Master's Thesis is often carried out by students individually or in small groups of two or three students. Examples of the range of thesis topics include: sustainable cooling system for an office building; air distribution around a person in a car cabin; energy efficient ventilation of a sports arena; risk assessment in building performance prediction; double skin facades modelling and design; local ventilation of a workplace in the paint industry; design of low energy school building; CFD prediction of indoor air quality, etc.

Specific information on courses and further details can be found on our webpage civilengineering.aau.dk.

OLENA KALYANOVA

Assistant professor (a former PhD and degree student at Indoor Environmental Engineering, AAU)

A long time before my arrival in Denmark, I had heard about the Master's degree programme in Indoor Environmental Engineering. At that time I was studying at Poltava Technical University in Ukraine, and one of the professors kept telling us that if we

wanted to learn from the best within this field, it was a good idea to study Indoor Environmental Engineering at Aalborg University.

Life is sometimes remarkable. As it happens, I did go to Denmark and began my Master's degree programme in Indoor Environmental Engineering. Here, I got the opportunity to learn about subjects I have always been interested in, e.g.

Natural ventilation

- A holistic approach to design and analysis of buildings and building systems
 To create a comfortable indoor climate and thus do something good for people
- Learn more about passive technologies and the zero-energy-house concept
- Global problems concerning energy consumption, and the efforts to reduce the CO₂ emissions

We were trained to independent thinking and to not just accept rules and words at face value. The project subjects were always up-to-date, and the course material included updates on the newest research results, exactly as my Ukrainian professor had told us.

Besides these fascinating things, I experienced an exceptionally warm and kind atmosphere between the teachers and the students, extremely well-equipped laboratories and very helpful secretaries, who made the students' life easier.

ERKKI SEINRE, STUDENT



Erkki Seinre studies Indoor Environmental Engineering at Aalborg University (AAU) in Denmark. He comes from Estonia where he has studied at the Faculty of Civil Engineering at Tallinn University of Technology.

My first aim was actually to go to Holland, but they never

answered my request for information. Hence, I did not bother, but tried AAU instead – they answered quickly. They were supportive and very eager for me to come and study here which also made an incitement for me.

Denmark appeals to me, since there is a lot of 'green thinking' here; it seems that Danes care very much about their environment. It is my impression that many Danes use bicycles instead of cars which is really good for the environment. I chose to study Indoor Environmental Engineering at AAU because they have a much wider programme for it than we do in Estonia. In addition, they have the newest books and access to a great library. The programme is wider in the sense that it includes much more than in Estonia. Here, you design the entire building and not just parts of it. This makes you learn a lot more and makes the learning process itself interesting.

When I have finished my studies, I would like to work as a designer preferably in a bureau or in a company which specialises in heating and ventilation. I would like to work in a foreign country such as Finland. I know the language, since it is very similar to Estonian, and I like the country itself as well.

The university culture here in Aalborg is totally different from what I am used to. There is a lot of group work here, and it is easy to get used to this way of working. It is a good thing to have Danes in the group like we do; they can explain and guide you in the work because they have tried it many times before.

In my group, we have decided to work on creating office buildings which use as little energy as possible. A number of very good and usable courses inspired us to pursue this direction. When I get back home, I will suggest these to my professors. I think it is quite amazing that each group is given its own room with a set of keys. This room is the group's own for the entire semester. Here, you can work any time you like. Also, I like the fact that the AAU campus is quite large. It is a whole little town in itself.

When I arrived in Aalborg, the International Office of AAU took very good care of me. It was a good first day. Also, the International Accommodation Office was quite helpful, and my accommodation turned out to be much better than I had expected. All of the neighbours are Danish, but they are nice people. All of them speak English, and in fact, one does not have to learn any Danish phrases in order to live here.

I like my accommodation; it has furniture and good Internet availability. Furthermore, in my dormitory, there are facilities for leisure time activities and about twice a month we have a party. Aalborg would be a nice place to live, but it is huge compared to the population. I like the red brick houses very much – I would like to live in such a house one day. In addition, the landscape is beautiful. I thought that Denmark was totally flat, but I find it is not. There are many hills here, and this makes the landscape change from place to place.

The Danes have a kind of funny culture; they seem quite closed, but when there is a sport event in town, they go crazy! It is very funny. Once there is a sport event, they all rush there. It is a nice element of their culture, very united.





STRUCTURAL AND CIVIL ENGINEERING

Master of Science in Engineering in Structural and Civil Engineering

As an engineer specialising in Structural and Civil Engineering, you will be part of the realisation of large buildings and constructions. With this programme, you will be able to determine the load on buildings and constructions, design and analysis of structures by means of theoretical, experimental and computerbased methods.

Semester 1:

Analysis of structures subject to static loading

During your first semester, you will be introduced to the analysis of a structural element. For example, this may involve an investigation of localised stresses around point loads or cut-outs in a beam. The structure is considered as an elastic continuum, and various analytical and numerical methods are employed for the analysis of its deformation.

For the numerical analyses of the structure, the Finite Element Method is adopted. An important part of the project is the development of a simple computer programme for the evaluation of stresses and strains in a beam, plate or continuum Finite Element model.

Furthermore, each project group will analyse the deformation of the structural model experimentally by means of strain gauges in the laboratory. The measurements form the basis on which the analytical and numerical results may be compared.

Semester 2:

Foundation of marine structures The basis of your semester project will be a marine structure: for example a harbour, an offshore oil rig, coastal protection, a wave turbine, an offshore wind turbine or a pier.

Should you choose a harbour for the subject of your project, your project focus could be on the design and analysis of rubble-mound breakwaters and quay structures. You will carry out experimental and numerical analyses in order to determine the forces on selected structures. Additionally, diffraction and refraction of waves as well as wave overtopping may be analysed.

If you choose an offshore structure, the main emphasis will typically be on the evaluation of the load due to waves and currents. Normally, you will carry out experiments in a laboratory in order to evaluate hydraulic forces on a structure, e.g. a monopile or a bridge pylon.

Regardless of your choice of subject, you will have the opportunity to research and measure the material properties of the subsoil in a laboratory and in the field. Furthermore, you have the possibility to test the load-bearing capacity as well as the settlements of a foundation experimentally. You will learn about different foundation concepts, and you will apply advanced analytical and numerical methods to your geotechnical analysis. This includes the use of a nonlinear finite element model for the analysis of soil-structure interaction.

Semester 3:

Advanced methods for the analysis of structures, materials and loads

In your third semester project, you will work with advanced analytical methods for example when analysing the structure-soil interaction phenomena, dynamics of complicated structures, material behaviour of concrete, wood or composite structural materials.

In your project, you can choose to focus on the analysis of a large civil engineering structure such as a tunnel, a cable-stayed bridge, a wind turbine or a high-rise building. An approach to these structures could be an emphasis on their dynamic response to wind, waves or earthquakes. You can also concentrate on a material modelling of a particular structural member or the subsoil. In general the problems that you address in your project should cover aspects of structural dynamics, material behaviour and statistical methods. This may involve the use of advanced computational methods as well as field and laboratory tests.

Semester 4:

Master's Thesis on Structural and Civil Engineering

This semester is devoted entirely to the Master's Thesis and, therefore, there will be no official courses for this semester. The Master's Thesis is often carried out by students individually or in small groups of two or three students.

The focus of the Master's Thesis is typically on a real structure, either in Denmark or abroad. Alternatively, the project may be carried out as research concerning a particular topic in the field of civil and structural engineering.

If you choose this field of study, you have the opportunity to collaborate with a consultant or an engineering company in Denmark or in your home country.

Should you want to carry out numerical analyses, there are highly advanced computer programmes available to assist you. On the other hand, it is also possible for you to prioritise experimental work in the field or in the laboratory.

Specific information on courses and further details can be found on our webpage civilengineering.aau.dk.

JAKOB HAUSGAARD LYNG Student doing his Master's Thesis



When I began studying at the School of Civil Engineering, it was

because of my fascination for large buildings and infrastructure projects. The complexity excited me and I was curious to get the key understanding to how they were created. In grammar school, I was also very fond of mathematics and physics, particularly

when the subjects were combined, so that the mathematics was used to modelling a real physical problem. Fortunately, it appears that this very connection between mathematics and physics is exactly the basis for the civil engineer.

I think that the group work at Aalborg University has been very rewarding. When you have to work on the same project in a group with six others for half a year, you cannot avoid learning the different aspects of group work and co-operation. You get much practise in delegating responsibility and distinguish between important and irrelevant discussions. Furthermore, you and your group learn to share the obtained knowledge individually acquired by all group members, giving you access to a much more extensive bank of knowledge than if you worked merely on your own. Moreover, from the first day at the university, you get a social network which is worth having when you have just moved to a new town.

During the last two summer holidays, I have been working at two large engineering firms. In these firms I have found out that what I learn during my studies is, fortunately, what I am going to need in real life. It was incredibly satisfying to find that I was able to manage a job as an engineer - and it was also incredibly exciting to work with projects which I knew would become a reality.

In my final project, I work on a sinking tunnel in Greece which is exposed to powerful earthquakes. The project consists of an analysis of the methods which are normally used for earthquake analyses. The earthquake exposure is an unbelievably complex phenomenon. In reality, you need approximated models that examine the exposure of the construction adequately. This involves making a whole lot of approximations, for example how the earth behaves and affects the tunnel. It is these approximations that I look at more closely to find out whether they are safe.

My project is a good example of how you as an engineer many times move on the edge of the limitations of your models. On one hand, you have to be quite sure of yourself, trusting that what you are doing is safe. On the other hand, there is nobody who will pay you for using several months on dimensioning the rafters for an allotment garden house! As an engineer, the ability to distinguish between essential and unessential parameters is a requirement. Furthermore, you need a good understanding of physics. I enjoy and thrive under these challenges.



JANNIE JESSEN NIELSEN

Student doing her Master's Thesis

The reason why I chose to become an engineer in the first place was my fascination for large structures and the fact that I liked and was good at both math and physics. Additionally, I used to be a scout where we often built timber structures, which I enjoyed. One of the reasons why I chose Aalborg University was the study

form; project oriented work in groups. Not that I liked group work in High School – on the contrary, I mostly found it lacking in seriousness, but I expected it to be different at a university, and I was right. You gain a lot from discussions, correcting other people's work, being corrected, reading for an exam together etc. Some people gain much from being helped and getting things explained, and others get trained in explaining things in a way that makes understanding easier. It is a fantastic training in giving and accepting feedback. You learn to keep an open mind, and you have responsibility not only to yourself, but also to your group. Group work is also very helpful when you move to a new place for your studies. Instantaneously, you have a social network and you can enjoy Friday afternoons at the bar with fellow students.

I have found the project-oriented study form rewarding, as you work with entire projects similar to being in the industry instead of solving exercises that are just fragments of a project. The master's programme allows you to do experimental work, investigate different theories and the limitations of these theories by yourself and in that way gain a better understanding of the theory. Furthermore, you are trained in how to write a scientific report and how to make an oral presentation.

I spent my third semester of my master's programme as a trainee at Rambøll (a Danish engineering company). I worked on different projects and was relieved to find that what I had learned at the university could in fact be used in the industry. It is a nice feeling that something you designed will in fact be built. Since it is a requirement to use advanced methods on your third semester, I studied the behaviour of a boiler support structure subjected to earthquake load, and investigated the use of a more advanced calculation method than the one normally used at the department.

In connection with my research I held a mini course for the employees at the department and, later, I held a presentation for approximately 80 engineers from Denmark – at that moment I was glad that I had made several oral presentations during my study.



WATER AND ENVIRONMENT

Master of Science in Engineering in Water and Environment



Do you want to work with water, the most important resource in the world?

At Aalborg University, you have the chance to specialise in Water and Environment, provided you have a background within civil engineering or similar. As an engineer in the field of Water and Environment you will have the opportunity to work in the area of resource and environmental management with specific reference to the use of water.

With your background in and understanding of the way in which industrial plants, roads, buildings and other constructions impact on the natural environment you will be a key person in evaluating the environmental effects of major installations.

This often means looking at the ways in which physical, chemical and biological processes interact. You learn to model and calculate the complex interconnecting factors involved in environmental problems.

You will get the opportunity to carry out experiments in the laboratory or to do measurements in the natural environment using hydrological, hydrographic, geological and hydrogeological techniques as well as advanced computer modelling.

Semester 1:

Ground water resources and pollution

Starting with examining a polluted industrial site or a cultivated agricultural area, you will look at how various substances are transported and transformed in the soil's saturated and unsaturated zones, and consider among other things whether pollution in the given area constitutes a threat to the groundwater. Computer modelling and measurement are important tools in determining the physical composition of the soil and the transport and transformation of different substances.

As part of the project, you will also consider various possible methods for purifying polluted soil and groundwater.

Semester 2:

Advanced wastewater treatment and pollution impacts on receiving waters

On your second semester, you will work with the treatment of wastewater from urban areas and the impact of wastewater on marine receiving waters.

You will learn about physical, chemical and microbiological methods of treating wastewater regarding pollutions such as nitrogen, phosphorous and organic material. Furthermore, the course content of the semester includes design of waste water treatment plants and treatment of sludge. In order to gain knowledge of the impacts on receiving marine waters, you will work with a specific location, for example an estuary where you will determine the quantities of nutrient salts and survey the hydraulic and physical conditions during a field week.

Semester 3 (option 1):

Experimental and numerical environmental fluid mechanics

The first option in your choice of third semester involves an in-depth study of physical and mathematical modelling, including computer modelling which has become an important tool in modern engineering work. In this part of the course, you will gain first-hand knowledge of the most widely used models.

During this semester, you will also have the opportunity to go behind the polished user interface and develop a model yourself. Your starting point will be a large-scale natural system, such as soil or water.

You will analyse numerical techniques for problem solving and consider how measurement methods and modelling can best be combined: for example, whether a model can be made to adapt automatically to measurements taken in the field or the laboratory. During this semester, it is usually possible to conduct a project in association with one of the research departments at or outside of Aalborg University.

Semester 3 (option 2): Urban Drainage

The second option on your third semester involves different aspects of urban waste and storm water runoff.

You will learn how to design drainage systems for storm and waste water. Furthermore, you will use different numerical modelling tools to analyse complex drainage systems with regard to transport of water and solids in both dry and wet weather including simulation of flooding and combined sewer overflow.

Semester 4:

Master's Thesis on Water and Environment

This semester is devoted entirely to the Master's Thesis and, therefore, there will be no official courses for this semester. The Master's Thesis is often carried out by students individually or in small groups of two or three students. In your last semester, you will do a study on a scientific or an engineering problem of particular interest to you.

You will be given the chance to decide for yourself in agreement with a supervisor on which subject you wish to focus.

Specific information on courses and further details can be found on our webpage civilengineering.aau.dk.



I finished the Water and Environment degree from Aalborg University in 2007 and since then I have had the job of my dreams at the Danish consultancy firm COWI working on nature restoration and water resources. At COWI I work on a lot of different assignments: flooding analysis along rivers and impact of climate

change; nature restoration of wetlands and rivers; Water Frame directive related assignments; and analysis of aquifer systems by means of pump tests.

I spent my third semester, as an intern on a big airport project in Oman with COWI, working with drainage of the airport. This was a great working experience where I got a taste of working abroad on a big multidisciplinary project and made my contact with COWI. The Water and Environment education has given me a good basis for working with all kinds of environmental issues and Aalborg University is a place I am inclined to go back to.



ANDERS HESTBECH

NORCONSULT in Harmar, Norway

I started my civil engineering studies in Water and Environment at Aalborg University after two years of studying a similar field at an engineering school in Norway. The transition from the highly individual type of programme in Norway to the project-oriented programme at AAU was undeniably hard but also very enriching.

On my first semester at AAU, we worked on groundwater extraction and distribution of water supply. At that stage I was used to solving theoretical problems on my own. Now I not only have to work alongside others but also solve a specific problem from the real world. It was incredibly valuable in relation to what I had done before.

In the semesters that followed, we began modelling natural systems as part of the individual projects. For example, we have worked on soil pollution and the project involved modelling how pollution spreads in the groundwater and how it will spread and impact the environment in the future. Being able to make a series of measurements in the field and then use them in a computer model is precisely what has been so exciting, especially because it gives you the chance to see how a given case of pollution will develop and have an impact on us.

Anders graduated in 2005 and is now working at NORCONSULT in Harmar, Norway







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WAY OF **STUDY**



Group work

One of Aalborg University's trademarks is its unique pedagogic teaching model: namely the problem-based, project-organised model also known as Problem-Based Learning (PBL). With this method, a great part of the semester teaching and student work revolve around complex real-life problems or issues that the students wonder about and try to find answers to in scientific manners while working together in groups.

One of the cornerstones in this system is the formation of a project group and the working process of this group throughout the semester up to the production of a group project report and its oral defence.

At Aalborg University, it is customary practice to let the students prepare their projects in collaboration with external parties. In other words, the students are given the chance to work with relevant industries and, consequently, with real-life problems.

X















Project guidance

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.

Project work

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 allocated supervisor.

The usual procedure regarding meetings with the group's allocated supervisor consists of regular meetings with the supervisor for which the group should prepare an agenda. The decisions and agreements made should be summarised at the end of each meeting and a new meeting should be arranged.



















The group begins the semester by making a set of basic agreements on the internal behaviour of the group throughout the semester.

These agreements should cover the time of group meetings (and the group's "office hours"), the manner and conditions of collaboration within the group and all other practical aspects of a group project. These agreements will serve as a sound basis for a successful completion of the project. As soon as a project description has been agreed upon, the group should prepare a time schedule which should be monitored from the beginning to the completion of the project and project exam.

As the semester progresses, the group is expected to produce written text about the project which will be commented upon by the supervisor at the following meeting. These text "parts" will progressively form a draft of the final report.

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.

Lectures and courses

At Aalborg University we distinguish between two different kinds of courses. One kind is the project unit course (PE-courses). Project unit courses are organised in accordance with the general theme for each given semester.

For example, the courses can introduce the methods or theories that you can use in your project work.

In combination with the project work, the courses give you a thorough insight into the subject matter. The other kind of course is the study unit course (SEcourses), which provides you with basic and general knowledge of your field.























STUDENT LIFE



A stay abroad is an opportunity to develop professionally and personally as well as form new friendships. It is the philosophy of Aalborg University that a high-quality study environment offers the best conditions for professional development. This is why the university strives to make it easy for our international students to get to know the other students as fast as possible.

For example, 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.

Students at Aalborg University are always involved in several activities, and, of course, you are more than welcome to participate in them. Among the many activities, there are the weekly Friday Café and the athletic association of the university – both activities are great ways to get to know your fellow students. Every Wednesday, there is an international evening at the Student House where you will be given the opportunity to meet our other international students - probably some from your home country as well. If you don't speak Danish, it is no problem. Most Danish students are well-trained in English and some of them speak German and French as well. 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.

In Denmark, Aalborg University is renowned for having the best study environment in the country, which is mainly due to the study method.

The close collaboration between the group members will allow you to get to know your fellow students very quickly. This provides for a good professional collaboration, but it is equally important that you have someone to talk to about issues that are not professionally related. Likewise, it is nice to have companionship when going to a café or to the movies if you need to take some time off from your studies. Through our International Office, we do our utmost to ensure that international students are comfortable and happy during their stay in Denmark. There is always someone to help you in case 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 civilengineering.aau.dk.



AALBORG UNIVERSITY

Close to 14,000 students are enrolled at Aalborg University, ranging from students in preparatory courses to doctoral-level candidates. Of these, 12,5 % are international students from around the world. Approximately 3,500 students are enrolled at the Faculty of Humanities, 4,600 students at the Faculty of Social Sciences and 5,500 at the Faculty of Engineering, Science and Medicine.

Aalborg University has all the facilities that define a modern university. The laboratories are state-of-the-art.

In the university libraries, students have access to English-language journals and technical books. A unique feature of the university is that the students have their own group room.

The group room is your base where you can work on your project undisturbed and without interruptions. For many students, the group room also serves as a social venue.

Welcome to Aalborg

Situated in North Jutland, the third largest region in our nation, Aalborg University is found in the northern part of Denmark. Our main campus is located in the regional capital Aalborg, but you will also find campuses in Copenhagen and Esbjerg. The university plays a considerable part in Aalborg's daily urban life as 10 percent of the city's inhabitants are students.

Additionally, Aalborg has the privilege of housing the best "Student House": a facility run by students and a venue for many happenings and get-togethers.

With a history dating all the way back to the Viking Age, Aalborg has gone from being mainly an industrial town to today where a knowledge-based industry is the city's most important source of income and in this regard the university is an important contributor.

In Aalborg you will find that a rich variety of entertainment is within short reach of the University's main campus.

Aalborg has a wide range of museums and exhibitions (found in, among others, 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 recuperative 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. Furthermore, with Aalborg Airport you are no more than a 35-minute flight from Copenhagen.

Regardless of weather and season, the Danish people are to be found outside bicycling, running, walking, swimming and enjoying their surrounding nature.





PRACTICAL INFORMATION

Tuition free studies

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

When to apply:

■ 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:

- Ist of May when applying for the September intake
- Ist of October when applying for the February intake

For further information

You will be able to learn more about us at civilengineering.aau.dk

or

Contact us directly on mail: study@civil.aau.dk



* 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.