TECHNO-ANTHROPOLOGY

2-YEAR MASTER’S PROGRAMME

AALBORG UNIVERSITY
AALBORG COPENHAGEN
WHAT IS TECHNO-ANTHROPOLOGY?

The Master’s Programme in Techno-Anthropology combines competence in carrying out anthropological studies of techno-science cultures with technological insight.

The programme deals with collaboration between technical experts in different settings and other stakeholder groups, e.g., consulting firms, R&D departments at multinational companies, advisory bodies, international organisations, public institutions, think tanks, NGOs or universities.

As a Techno-Anthropology student, you work both theoretically and empirically on how such collaborations can be turned into sustainable technological innovation and responsible decision-making regarding new technologies. In addition, you use anthropological theories and methods to study how technology is used, and how it influences users.

The programme presents you with theoretical accounts of knowledge production, user-driven innovation, expert cultures and social responsibility. It combines sustainable and responsible technological innovation with competence in carrying out anthropological studies of new technology as well as of the experts who develop cutting edge technology.

Graduating from the Master’s programme in Techno-Anthropology, you are able to analyse and understand expert technology cultures and to facilitate and promote this understanding outside expert cultures.
Techno-Anthropology is a two-year Master’s programme of 120 ECTS. Each semester consists of both courses and project work. You will follow courses approximately half of the time; in the remaining time you will do larger project work in a group.

During the first two semesters, you get an overview of different theoretical approaches to the Science/Technology - Culture/Policy/Society interface. You will get acquainted with STS (Science and Technology Studies), PNS (Post-Normal Science), organisation theory, and you will get insight into how ethical reflections can entangle concrete cultural settings. You will also gain insight into new technological fields such as health-, food-, bio-, energy- and/or information technologies. Hence, the first year of the Master’s programme combines applied anthropology and applied ethics with technological innovation and science-based policy advice.

During the second year of the programme, you will conduct a major fieldwork in an organisation that works with science and/or technology (i.e. a company, a political organisation, a consultancy firm, a governmental office, a university abroad).

The fieldwork can focus on cultural analysis, or it can be rooted in action research and aim at technological innovation or expert learning.

The last semester is devoted to writing your Master’s thesis. During this semester, you will analyse the empirical material gathered during your ethnographic fieldwork carried out during the third semester. The task is to work with an interdisciplinary problem through independent work. The groups are small – 1-3 persons.

1ST SEMESTER

Project
Expert Cultures and Responsible Technology (15 ECTS)

Courses
- Organisational Culture: Expertise, Innovation and Responsibility (5 ECTS)
- Responsible and Innovative Knowledge Production (5 ECTS)
- One elective course (5 ECTS)

2ND SEMESTER

Project
Anthropology-based Product Development (15 ECTS)

Courses
- Product Development: Value-sensitive Design, User-driven Innovation, Technology-based Service or Scientific Advice (5 ECTS)
- Mapping Controversies (5 ECTS)
- One elective course (5 ECTS)

3RD SEMESTER

Third semester is devoted to fieldwork (30 ECTS) in an organisation that works with science and/or technology (i.e. a company, a political organisation, a consultancy firm, a governmental office, a university abroad).

4TH SEMESTER

Master’s thesis (30 ECTS).
THE CORPORATE WORLD SAYS...

“AT NIRAS, WE FIND THE EDUCATION IN TECHNOANTROPOLOGY VERY EXITING AND RELEVANT”

The NIRAS group was founded in 1956 and is today, with more than 1,250 employees, one of the largest consultancy companies in Denmark. We have grown through organic growth and fusions, which means that NIRAS now comprises 16 offices in Denmark, subsidiaries in 10 countries and a strong representation in the Baltic, with departments in Poland, Estonia, Finland, Sweden and Ukraine.

This growth has enriched the company with a great number of competencies and a solid foundation to execute both small and large tasks nationally as well as internationally within a broad range of disciplines. Based on consulting engineering, NIRAS offers consultancy within construction, public utilities, environment, climate change and energy, infrastructure, planning, finance and development consulting.

We foresee a future, where technology increasingly impact our everyday lives. Technology does not create results without close coorporation with its users. Unfortunately, we often see engineers who focus too much on their knowledge, instead of implementing the needs and behaviour of the users. This applies to many disciplines such as biotechnology, machines, buildings, transportation, hospitals etc. In other words, we need something else and more.

Technoanthropology might be a new word, but it is not necessarily a new way to work. At NIRAS, we have experienced that the best results come from combining engineering with anthropology and related fields. This applies to all phases in a given solution: 1) Innovation and development of new solutions based on users’ need 2) Testing and adjusting solutions 3) Implementation of solutions in organisations or everyday lives, and 4) organisational development.

At NIRAS, we find the study programme in Technoanthropology very exiting and relevant. It is also a very ambitious project. To us, the crucial thing is to keep up the level of quality in both the technical and anthropological area when combining two academic fields and emphasising the importance of engaging with companies. It must not affect ambitions within one of the fields. The technical, theoretical and methodological knowledge and security must be on a very high level, in order for us to really make use of the graduates.

Gertrud Øllegaard and Erik Wormslev, NIRAS

CAREER OPPORTUNITIES

As a Techno-Anthropologist you can combine technological knowledge with cultural understanding. Graduates who possess such skills have numerous possible career paths - both in companies, NGOs and different authorities.

EXAMPLES OF CAREER OPPORTUNITIES

Consultancy
You can help bridge the gap between different cultures in connection with for instance international collaboration regarding technological projects or in connection with analysis of international segments e.g. project development or marketing.

Design of Technology
You can work as a project manager facilitating the relation between technicians and different users for instance in connection with the development of design concepts and new technological prototypes.

Analysis
You can conduct analyses concerning the need for and the distribution of knowledge within the fields of culture and technology within an organisation or in collaboration with a company’s external partners.

Corporate Social Responsibility
As a techno-anthropologist, you can work with technology and humans in situations demanding profound insight into the development and distribution of technological solutions in an ethically acceptable way.

Marketing
Within the field of marketing, you can facilitate the collaboration between the knowledge-producing and the communicating units within a company, for instance in connection with innovative and creative processes or development and marketing of new technological products or solutions.

AS A GRADUATE YOU WILL

• have well-developed skills in teamwork with people from different cultural, educational as well as professional backgrounds
• be able to navigate in specialist technological cultures by bridging culture gaps between scientists, the public, and political and other stakeholders
• be able to take direct part in responsible technological innovation and decision-making
• be able to act and interact professionally in cross-disciplinary and intercultural positions - combining and advancing insight into cutting edge technology with applied anthropology.
As a student at Aalborg University, you will work closely together with your fellow students by way of problem based project work. Aalborg University is host to a successful UNESCO Chair in Problem Based Learning in Engineering Education and a Centre for PBL and Sustainability approved by UNESCO. The Aalborg Centre for Problem Based Learning in Engineering Science and Sustainability under the auspices of UNESCO will build upon and develop the work of the UNESCO Chair and Centre for PBL and Sustainability, and is keenly supported by Aalborg University and the Danish Ministry of Science, Innovation and Higher Education.

When writing your problem based project, you will typically be part of a group consisting of 4-5 students. Once you have formed a project group, you need to define a problem together that you want to examine. The problem forms the basis of your project, and you are to a great extent responsible for defining it yourselves within an often very broad theme frame. The group work ensures a great variety of approaches and perspectives, which results in a sound and thoroughly prepared project. Together, you are able to discuss the details thoroughly. At the same time, you are able to solve larger and more complex problems than if you were studying on an individual basis.

Each of you has the opportunity to shape the project because group work requires a contribution from everyone. If you have any academic questions, you may also discuss these with your friends in the group. The project work is completed with an exam. While working on your project, you will also need to do individual exams in your subjects. Together with lectures, literature and cooperation with the corporate sector, the project work will help you gain a deeper insight into the subject you are examining than if you had been working on your own.

With group work, you will quickly realise that you might have different opinions about how to solve a problem. Group work means that you have to compromise, and you will learn a lot about how to cooperate. Group work is very popular in the modern labour market so both you and your future workplace will benefit from the skills in cooperation you have acquired at Aalborg University.
AALBORG

Aalborg is Denmark’s fourth largest city and has approximately 125,000 inhabitants. 10% of these are students.

As a student at Aalborg University, you can enjoy Aalborg’s many opportunities with regard to cultural experiences, sports and spare time activities. In recent years, Aalborg has undergone a transformation from an industrial city to a city of knowledge and culture. The city’s development is particularly apparent at the harbour promenade where a lively urban and cultural life with cafes, cultural event venues and sports facilities has replaced factories and smoking chimneys. As an international student at AAU, your chances of finding accommodation in Aalborg are also great.

ACCOMMODATION IN AALBORG

When you arrive in Aalborg and in order to begin your studies at AAU, Aalborg University’s International Accommodation Office (IAO) will assist you in finding a place to live. The types of accommodation offered to you by AAU’s International Accommodation Office include a single room in a private house, a room in a hall of residence rooms or a large flat shared with other students. The rent and location vary according to the type of housing.

COPENHAGEN

Aalborg University Copenhagen (AAU-Cph) is located near the centre of Copenhagen, just 15 minutes from the Central Station. At AAU-Cph, you will be part of a dynamic, international and inspiring research and study environment of more than 3,000 students, 400 researchers and several innovative companies.

NEW AND MODERN FACILITIES

The new campus is designed to facilitate and optimize project-based learning, networking and interaction. All students at AAU-Cph have access to well-designed study spaces, newly furnished lecture halls and, for the experimental programmes, well-equipped laboratories.

INNOVATION AND ENTREPRENEURSHIP

Innovation and entrepreneurship are integrated into all programmes at AAU-Cph with the purpose of stimulating and developing your innovative ideas. The new campus is home to several start-ups, and AAU Innovation is represented at AAU-Cph to support students with entrepreneurial aspirations.

ACCOMMODATION IN COPENHAGEN

The housing market in Copenhagen is challenging, so start your search early. AAU-Cph has a limited number of rooms in residence halls for international students.
APPLICATION AND REQUIREMENTS

In order to apply, you are required to have a Bachelor’s degree in Techno-Anthropology or another university Bachelor’s degree which includes:

- at least 10 ECTS points in philosophy of science or similar, and
- which provides the candidate with an understanding of technology or knowledge of qualitative methods.

A Bachelor’s degree in areas such as natural science, engineering, computer science or within health studies such as biomedical laboratory science, nursing, midwifery and radiography will normally grant access to the programme, as will a Bachelor’s degree in anthropology, sociology, pedagogy or psychology.

Furthermore, you have to meet the official language requirements for international students applying to Aalborg University. You must complete and pass one of the following:

- IELTS (academic test). Minimum score: 6.5
- TOEFL (paper-based): Minimum score: 560
- TOEFL (internet-based): Minimum score: 88
- Cambridge Certificate of Proficiency (CPE)
- Certificate in Advanced English (CAE)
- Cambridge First Certificate with the grade B

RESTRICTIONS ON ENTRY

The Master’s programme in Techno-Anthropology has restricted entry. The selection process is based on the grade point average of the prior qualifying exam (alternatively, if the qualifying exam is not completed, the grades which have been achieved at the given time will be taken into account).

TUITION-FREE STUDIES

Students from EU/EEA countries are not required 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. 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.
If you have questions about how to apply or general questions about studying in Denmark and life at Aalborg University, please contact:

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