

# MEDIALOGY

## BACHELOR'S PROGRAMME



Medialogy is about human-computer interaction, interaction design, media technology, programming, sound, computer graphics and sensor technology. If you are interested in the science and technology behind interactive digital media and if you would like to learn how to utilise and develop such technologies, Medialogy may be the right choice for you.

Medialogy combines technology and scientific experiments with focus on both hardware and software in designing new products and tools for use within media technology. The purpose of the programme is to educate students in technology and software development in the modern media and experience industry.

### THE PROGRAMME

In creating and designing interactive systems for specific users, the connection between the various academic fields is one of the biggest challenges. Medialogy's interdisciplinary structure demands a solid technical basis in both theory and practice, and as a student, you must be able to master and combine many different academic fields such as programming, interaction design, electronics, mathematics, human perception, design and analysis of scientific experiments, statistics and cinematography.

Medialogy is the science and technology behind interactive digital media, and you must have an interest in developing product ideas as well as programming and testing prototypes. Programming and testing is a large part of the Medialogy programme, so it is important that you are interested in and have a flair for mathematics.

### PROBLEM BASED LEARNING

The study method at Aalborg University is called problem based project work, or "The Aalborg Model for Problem Based Learning (PBL)", and is highly recognised both nationally and internationally. UNESCO has placed its only Professorial Chair in PBL at AAU. Among others, it means that each semester, you will work closely together with a group of fellow students on a large written assignment. See more at [www.en.aau.dk/education/problem-based-learning](http://www.en.aau.dk/education/problem-based-learning)

### THE PROGRAMME IN BRIEF

#### ADMISSION REQUIREMENTS

Upper secondary school exam, including:

- English B or an acceptable IELTS or TOEFL or Cambridge score
- Mathematics B

#### RESTRICTED ADMISSION

Places:

- Aalborg: 99
- Copenhagen 100

#### LEARN ABOUT

- Programming
- Interaction design
- Computer graphics
- Sound

#### PLACE OF STUDY

Aalborg and Copenhagen

#### IF YOU HAVE AN INTEREST IN

- IT, electronics & programming
- Media, communication & information

#### CONTINUE YOUR STUDIES ON

Medialogy, Sound and Music Computing, Lighting Design or Service Systems Design

#### JOB OPTIONS WITHIN

- Programming
- Software development
- Interaction design
- IT-consultancy
- Games development
- Web development
- Project management, typically in the entertainment- or IT-industry

### FOR MORE INFORMATION

Website:

[WWW.EN.AAU.DK/EDUCATION/BACHELOR/MEDIALOGY](http://WWW.EN.AAU.DK/EDUCATION/BACHELOR/MEDIALOGY)

The programme's student counsellor:

AAL: [mta-studievejl@create.aau.dk](mailto:mta-studievejl@create.aau.dk)

CPH: [mediatek-studvejlcp@create.aau.dk](mailto:mediatek-studvejlcp@create.aau.dk)

AAU's Central Student Guidance Service:

[STUDIEVEJLEDNING@AAU.DK](mailto:STUDIEVEJLEDNING@AAU.DK)  
+45 9940 9440

How to apply for admission:

[WWW.EN.AAU.DK/EDUCATION/APPLY/BACHELOR/HOW-TO-APPLY](http://WWW.EN.AAU.DK/EDUCATION/APPLY/BACHELOR/HOW-TO-APPLY)





## THE SEMESTERS

### In the 1st semester, you will learn about ...

... programming, digital 3D-design and problem based learning, target groups and research areas in medialogy.

### In the 2nd semester, you will ...

... develop an interactive hardware or software prototype and test it on a user group. You will also delve deeper into the mathematical foundation of media technology.

### The 3rd semester focuses on ...

... visual computing, i.e. automatic analysis of visual information recorded by one or more cameras. This could be, for example, a computer game controlled by human movement or an interactive museum installation which reacts to the human beings in its environment. You will also learn about digital images, image processing and the basic psychology behind human perception (vision, hearing, touch), how objects and experiences are perceived, and you will learn about object-oriented software analysis and programming design methods.

### The 4th semester is about ...

... sound and sensor technology. You will learn about the physical properties of sound, about sound processing in real time and offline, and you will work with basic elements of circuit theory, including resistance, voltage, power, Ohm's Law, etc.

### In the 5th semester, you will ...

... work with analysis, design and implementation of audio-visual experiments including pre-rendered and/or real-time interactive 3D computer graphics and animation.

### The 6th semester is ...

... the final semester of the bachelor's programme in Medialogy. Here, you are going to carry out your bachelor's project under the theme of "Interactive Systems Design". In addition, you can learn about AI Programming, Theory and Practice of Game Design and Development, Technologies for Web and Social Media, etc.



## PROGRAMMING AND CREATIVITY

"Medialogy is a scientific and technical education. To put it briefly, it is about media technology i.e. interaction between people and machines, computer graphics, technology and creativity. I started Medialogy because I had a great interest in film studies and computer graphics, but today, I know that Medialogy is much more than that.

At Medialogy we work with development of technological solutions within advanced design, audio and sensor technology, interactive media productions and more. Medialogy is for those who are interested in both design and technologies of animation, film, audio, graphics, 3D and programming.

Programming is a big part of the education, and you should preferably be fond of both numbers and math. We develop the creative ideas, but ultimately, we must also be able to implement them. Many people have asked me what I will be working with when I graduate. There is a need for professionals within technology and software development, and typical employment is within the film, entertainment or IT industry. During my time at Medialogy, I have personally worked with mobile applications, made movies and computer games and recently, I worked a lot with virtual reality about creating it in a pair of glasses. "

**ANNE JUHLER HANSEN**  
M.SC. IN MEDIALOGY

