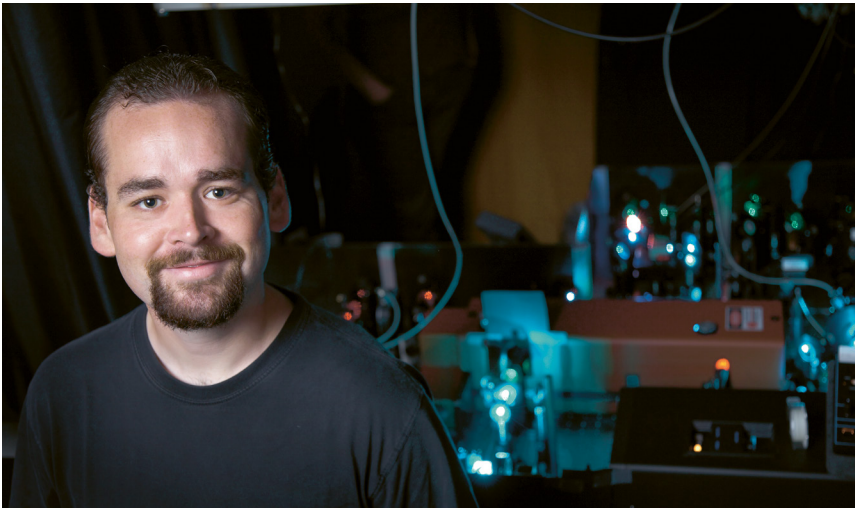


MSC IN ELECTRICAL ENGINEERING*

COMBINING KNOWLEDGE WITH TECHNICAL EXPERTISE



◀ After graduating I got a job working with developing new products. In my work I use a good deal of what I learned during my studies, because I have a really good foundation and basic knowledge in engineering. I can gradually extend this basic knowledge with the experience I gain in my job.

KENNETH HANSEN

MSc in Electrical Engineering
Development Engineer, Baumer

CHOICE OF SPECIALISED COURSES

As a student on the MSc in Electrical Engineering programme, you have the option of specialising in a number of areas within electrical engineering, including analog and digital electronics for regulation as well as data transmission and collection.

During the first year, students take courses which provide the academic foundation required for the chosen area of specialisation. Students can choose from a wide range of specialist areas ranging from optics to electro-optics, from semiconductor technology to pure electronics.

CREATING YOUR STUDY PLAN

There is considerable freedom in choosing the subjects for the study plan and students can select from a number of optional modules, including experimental technology, data collection, micro-controls, materials physics and much more. In consultation with the specialist lecturers, students can design precisely the study plan that suits their interests and background.

FUTURE PROSPECTS

The degree programme aims to train development engineers with the potential to innovate in advanced-technology companies both in Denmark and abroad. Graduates also have the option of continuing their studies at doctoral level, often in the form of an industrial PhD.

STUDENT LIFE

The Department of Engineering has a number of social spaces where you can meet other students outside class, and this is an excellent basis for social activities. There is also an engineering club for staff and students through which students can network with like-minded people. As in all departments, there is a popular Friday bar, and the Tågekammeret association organises celebrations and social events for all science and technology students across departments.

CAREERS

The MSc programme in electrical engineering aims to train development engineers to acquire the potential to innovate in advanced-technology companies both in Denmark and abroad. Graduates find work in a wide range of fields, from basic engineering or science research in joint projects involving research institutes and the industrial sector, to research and development projects in industry. Many graduates have decided to work as consultants in ATS (approved technological service) institutes or patent agencies, while others have sought jobs with knowledge communication within the media and publishing industries, and in the finance sector.



PLACE OF STUDY

Aarhus

WWW

masters.au.dk/electrical-engineering

ANNUAL TUITION FEE

EU/EEA/Swiss citizens: FREE
Others: EUR 13,500

MSC IN ELECTRICAL ENGINEERING*

Due to changes in the general semester structure at the Faculty of Science & Technology from summer 2017, changes will occur in the programme structure and content from summer 2017 – to be announced in the spring of 2017.

1 ST SEMESTER	2 ND SEMESTER	3 RD SEMESTER	4 TH SEMESTER
Compulsory Courses	Compulsory Courses	Elective Courses	THESIS
Compulsory Courses	Compulsory Courses	Elective Courses	
Compulsory Courses	Compulsory Courses	Elective Courses	
Specialised Study Package 1	Specialised Study Package 2	Elective Courses	
		Elective Courses	
		Elective Courses	
30 ECTS	30 ECTS	30 ECTS	30 ECTS

COMPULSORY COURSES

A basic package of six subjects taken during the first year of studies.

SPRING

Systems Engineering	5 ECTS
Photonic Engineering Principles	5 ECTS
Wireless Sensor Networks and Electronics	5 ECTS

FALL

Optimization in Physical and ICT Systems	5 ECTS
Electronic Hardware System Design	5 ECTS
Science and Technological Innovation and Entrepreneurship	5 ECTS

SPECIALISED STUDY PACKAGES

Choose two of the specialised study packages.

SPRING

Integrated Electronics

CMOS Analog Integrated Circuit Design	5 ECTS
Advanced Analog Integrated Circuit Design	5 ECTS
Low Power Integrated Circuit Design	5 ECTS

Signal Processing

Advanced Signal Processing and Analysis	5 ECTS
Computer Vision	5 ECTS
Nonlinear Signal Processing and Pattern Recognition	5 ECTS

FALL

Photonics

Optics and Quantum Electronics	5 ECTS
Photonic Integrated Circuits	5 ECTS
Fiber Optics and Communications	5 ECTS

Electronic Wearable Devices

Wearable Electronic Devices	5 ECTS
RF System Design and Integration	5 ECTS
Sensor Interfacing and Signal Processing	5 ECTS

ELECTIVE COURSES

Choose courses from the specialised study packages or other courses at the Department of Engineering, and the broader Faculty of Science approved by the study programme manager.

AU Course Catalogue: kursuskatalog.au.dk/en/