MSC IN ELECTRICAL ENGINEERING*
COMBINING KNOWLEDGE WITH TECHNICAL EXPERTISE

SPECIALISE AS YOU CHOOSE
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 electrooptics, from semiconductor technology to pure electronics.

BUILD YOUR OWN 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.

STUDENT LIFE
At Aarhus University you will be part of an extensive engineering environment with more than 3,000 engineering students. So you will have ample opportunity to get involved in both academic and social student associations with your fellow students.

Aarhus University campus is unique, with its buildings closely grouped together and surrounded by nature. The campus is conveniently situated close to the city centre, and student accommodation is readily available as long as you apply on time. There are a range of activities, ranging from running to a regatta on the lake, as well as guest lectures, film screenings, and university events taking place throughout the year. To ensure student well-being, counselling services are available to offer students support and guidance during their time at Aarhus.

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 R&D 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. Graduates also have the option of continuing their studies at doctoral level, often in the form of an industrial PhD.

An interdisciplinary approach is key to finding the coolest technological solutions to all sorts of problems. At AU the engineering students have the great advantage that they work with students from other disciplines. Drawing on other people’s knowledge in my work is something I do almost every day. I mostly work with development of software and hardware, and I feel very well equipped for this by my degree from Aarhus University. It is a big strength that I was trained at AU to use theory to solve tasks. It has allowed me to start my working life as a consultant.

JONAS WEST AALRØE
MSc in Electrical Engineering

STUDY AT AU 2019
WWW
masters.au.dk/electrical-engineering

IT, ELECTRONICS AND PROGRAMMING

FEES ARE SUBJECT TO CHANGE. SEE STUDYGUIDE.AU.DK

PLACE OF STUDY
Aarhus

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

WWW
masters.au.dk/electrical-engineering
### MSC IN ELECTRICAL ENGINEERING*

**COMBINING KNOWLEDGE WITH TECHNICAL EXPERTISE**

<table>
<thead>
<tr>
<th>1ST SEMESTER</th>
<th>2ND SEMESTER</th>
<th>3RD SEMESTER</th>
<th>4TH SEMESTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compulsory Courses</td>
<td>Compulsory Courses</td>
<td>Elective Courses</td>
<td></td>
</tr>
<tr>
<td>Compulsory Courses</td>
<td>Innovation and Entrepreneurship</td>
<td>Elective Courses</td>
<td></td>
</tr>
<tr>
<td>Specialised Study Package 1</td>
<td>Specialised Study Package 2</td>
<td>Elective Courses</td>
<td></td>
</tr>
</tbody>
</table>

| 30 ECTS | 30 ECTS | 30 ECTS | 30 ECTS |

**COMPULSORY COURSES**

**AUTUMN**
- Optimisation and Data Analytics: 10 ECTS
- Electronic Hardware System Design: 5 ECTS

**SPRING**
- Systems Engineering: 5 ECTS
- Fundamentals of Photonics: 5 ECTS
- Innovation and Entrepreneurship: 5 ECTS

**SPECIALISED STUDY PACKAGES**

Choose two of the specialised study packages

**AUTUMN**
- Photonics
  - Fiber Optic: 5 ECTS
  - Photonic Devices: 10 ECTS
- Wearable Devices
  - RF System Design: 5 ECTS
  - Wearable Electronics: 10 ECTS
- Wireless Communication
  - Advanced Wireless Communication: 5 ECTS
  - Internet of Things Technology: 10 ECTS

**SPRING**
- Signal Processing
  - Advanced Signal Processing: 5 ECTS
  - Computer Vision and Machine Learning: 10 ECTS
- Wireless Transceivers
  - Analog and Digital Integrated Circuits: 10 ECTS
  - Radio-Frequency Transceivers: 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, subject to approval by the study programme manager.

AU Course Catalogue: [kursuskatalog.au.dk/en/](http://kursuskatalog.au.dk/en/)