

Electrical Engineering

Electrical Engineering is a broad multi-disciplinary doctoral programme providing graduates with the ability to work in a variety of fields ranging from traditional electrical engineering and energy sector to biomedical engineering and robotics and nanotechnology and further to communications engineering. Based on a strong mathematical and natural science basis, the curriculum is flexible, allowing each doctoral candidate to compile her/his own combination of courses and research according to her/his own interests. The programme covers all disciplines of the School of Electrical Engineering and allows multi-disciplinary co-operation across Aalto University.

The Aalto Doctoral Programme in Electrical Engineering was established on 1 January 2011. It comprises 24 fields of research. The Programme is a joint effort of the Departments of Electronics and Nanoengineering (ELE), Signal Processing and Acoustics (SPA), Electrical Engineering and Automation (EEA), and Communications and Networking (TLV), as well as the Metsähovi Radio Observatory and Micronova - the Research Centre for Micro- and Nanotechnology.

The degree

The Doctor of Science (Tech) degree is 40 ECTS credits of theoretical studies and dissertation thesis which means four years of full-time studies. The Licentiate of Science (Tech) degree is 40 ECTS credits of theoretical studies and licentiate thesis which means two years of full-time studies. The extent of the licentiate and doctoral degrees consist of theoretical studies and research work. The emphasis is on research work. [See more detailed description of the degree.](#)

Research fields in Doctoral Programme in Electrical Engineering

The research field is chosen when applying to the programme. Descriptions of the research field can be found at [Degree structure and coursework page.](#)

- Acoustics and Audio Signal Processing
- Advanced materials and photonics
- Applied Electronics
- Automation, Systems and Control Engineering
- Bioelectronics and Instrumentation
- Communications Engineering
- Electromagnetics and Circuit Theory
- Electromechanics
- Electronics integration and reliability
- Illumination Engineering and Electrical Building Services
- Information Theory
- Measurement Science and Technology
- Micro- and Nanoelectronic Circuit Design
- Micro- and nanosciences
- Network Economics
- Networking Technology
- Power Electronics and Electric Drives
- Power Systems and High Voltage Engineering
- Radio Engineering
- Signal Processing for Communications
- Signal Processing Technology
- Space science and technology
- Speech and Language Technology
- User Interfaces

News

[Adobe provides CC applications licenses for Aalto students | Adobe tarjoaa CC-sovellusten lisenssejä Aallon opiskelijoille | Arbetsstationslicenser för Adobe CC-applikationer tillgängliga för studenter](#)

02.07.2020

[Opetus ja opiskelu kampuksella syksyllä | Undervisning och studier på campus hösten | Teaching and studying on campus in autumn 2020](#)

24.06.2020

[Intossa käyttökatko | Serviceavbrott i Into | Maintenance break on Into 9.6.2020](#)

05.06.2020

Learning Hub Atriumin kirjat ja lehdet muuttavat Oppimiskeskukseen | Bok- och tidskriftssamlingen i Learning Hub Atrium flyttar till Lärcentret | Learning Hub Atrium library collection moves to Learning Centre

04.06.2020

Oppimiskeskuksen verkkosivusto vaihtuu | Lärcentrets webbadress ändras | New web page address for Learning Centre

03.06.2020

Tulostuspalveluissa katko keskiviikkona 10.6.2020 | Break in printing services on Wednesday, 10 June

02.06.2020

MyCourses maintenance break | käyttökatko | serviceavbrott 15.6.2020

26.05.2020

Mindfulness-tuokio tiistaisin Zoomissa, alkaen 14.4.2020

07.04.2020

Opiskelijoiden ohje kampuksen käyttöön | Vistelse på campus: anvisningar för studerande | Instructions on campus use for students

20.05.2020

Opiskelija, hae opintotuki kesäksi nyt! | Studerande, sök sommarstudiestöd nu! | Apply now for financial aid for the summer months!

18.05.2020

RSS 

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