

Curriculum 2018-2019 & 2019-2020

Elective studies 25 cr

(Master's thesis 30 cr)

Advanced studies 95 cr

Learning Outcomes

The Master's Programme in Electronics and Nanotechnology offers a broad technical knowledge in an internationally recognized engineering field.

The student has an option to choose additional study entities which support their major. These studies can be selected from the wide selection of science, arts and business study portfolios offered at Aalto University.

The student forms an overview of professional practices within the major's study field. The student will be able to combine and link acquired knowledge to the relevant research fields. The students will attain a broad and deep understanding of his or her major. The student is able to perform scientific research and industrial R&D tasks, as well as fulfill international assignments in the field of the major.

Scientific practices and way of working

Having completed his or her Master's studies, the student will have the ability to develop further competencies through scientific doctoral studies and lifelong learning.

The student will have acquired scientific thinking practices and will be able to adapt these in his or her career. The student will also have a basic knowledge about innovation processes and entrepreneurship in the field of technical science.

The student will understand the theories and concepts related to his or her own field. Additionally, he/she will be able to apply those in the research and development tasks in the field of the major.

The student will know the lifespan of products and services related to his or her field. Furthermore, he/she will be able to participate on various engineering tasks related to the development and production processes.

The student will be able to choose and use appropriate methods and tools for design and performance evaluation. He/she will be able to critically observe the results, processes, and methods in the engineering work.

The student will know the main sources of information within his or her major and can acquire new knowledge to support his/her tasks.

After completing the Master level studies, the student will be able to design and develop complicated technical units belonging to large systems.

The student will be able to identify impact of technology on people, economy, society, and environment. He/she will be able to identify ethical questions and comprehend their significance in his or her work.

Professional competencies

During the Master level studies the student will have many opportunities to develop his/her skills in English. Furthermore, he/she will develop his/her oral and written communication skills.

The student, however, has the right to use Finnish or Swedish in his or her Master level studies according to the Finnish law.

The student will be able to work collaboratively in groups. In addition, the student will be able to contribute within an inter-disciplinary group also in an international environment.