Automation engineering

This module will not be taught during the academic year 2019/2020.

Basic information

**Code:** FITech

**Extent:** 20 ECTS

**Language:** English, Finnish

**Organising university:** Tampere University

**Methods and location:** Online

**Teacher in charge:** Matti Vilkko (matti.vilkko@tut.fi)

**Administrative contact:** Seppo Tikkanen (seppo.tikkanen@tut.fi), Hannele Kulmala (hannele.kulmala@tut.fi)

**Target group:** All Aalto students, especially Schools of technology students

**Quotas and restrictions:** -

**Prerequisites:** All students who are interested on automation. Knowledge on mathematics and basic programming skills are required.

**Content and structure of the minor:**

FITech & Tampere University offers minor studies in automation engineering. The minor offers basic knowledge on

- Control systems
- Automation systems
- Robotics

Control system studies build the theoretical knowledge of control systems that are base for all automation systems. The automation system studies concentrate on the realization of automation systems in different application fields. The robotics studies give basic knowledge on robotics and their technology.

Automation is found everywhere and our current everyday life is depending on the various automation systems such production and distribution of electricity and heating. Ordering items from web-store is possible of because of automation and the order starts chain of automated tasks including picking from storage, packaging, transportation, invoicing and so on. In the future robot can deliver the package to your home door. Automation is key competence area for Finnish export technology products.

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