Courses to support mechatronic study path — Suggested courses outside ENG

Kari Tammi

Mechatronics courses at ENG

MEC-E5001 Mechatronic Machine Design, 5, III, Kari Tammi

MEC-E5002 Mechatronics Project, 10, III-IV, Petri Kuosmanen

MEC-E5003 Fluid Power Basics, 5, III-IV, Heikki Kauranne

MEC-E5004 Fluid Power Systems, 5, I-II, Matti Pietola

MEC-E5005 Fluid Power Dynamics, 5, I-II, Jyrki Kajaste

MEC-E5006 Vehicle Mechatronics, 5, II, Kari Tammi

Do you want to append courses from other schools to your studies?

First, **check how to include the courses in your studies** (e.g. in elective studies)

Few "study paths" including courses from ELEC and SCI are presented in forthcoming slides

- Background recommendations
- Electrical power transmission emphasis
- Dynamics, control, and systems technology emphasis
- Computer science emphasis

Aalto University

Background recommendations for mechatronics engineers

KON-C2004 Mechatronics Basics 5 cr

ELEC-C1230 Säätötekniikka 5 op

CSE-A1141 Tietorakenteet ja algoritmit Y, 5 op

ELEC-C1320 Robotics 5 cr

Hobbies

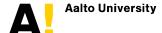**Electronics, programming, embedded systems, …**

Electrical power transmission emphasis

ELEC-E8112 **Hybrid powertrains in vehicles 5 cr**

ELEC-E8405 **Electric Drives 5 cr**

ELEC-E8407 **Electromechanics 5 cr**

Dynamics, control, and systems technology emphasis

- **ELEC-E8001 Embedded Real-Time Systems 5 cr**

Lighter Systems technology approach

- **ELEC-C1110 Automaatio- ja systeemitekniikan perusteet**
- **ELEC-E8103 Modelling, Estimation and Dynamic Systems 5 cr**

Heavier Systems technology approach

- **ELEC-C1230 Säätötekniikka**
- **ELEC-E8101 Digital and Optimal Control 5 cr**

Computer science emphasis

T-106.5300 Embedded Systems

T-106.5740 Project in Embedded Systems

T-106.5840 Seminar on Embedded Systems

CSE-C3200 Operating Systems

Aalto University