COURSE DETAIL

UCEAP Semester Units

4.00

AUTOMATIC CONTROL PROJECT Country Sweden **Host Institution Lund University** Program(s) **Lund University UCEAP Course Level Upper Division UCEAP Subject Area(s)** Mechanical Engineering **UCEAP Course Number** 152 **UCEAP Course Suffix UCEAP Official Title AUTOMATIC CONTROL PROJECT UCEAP Transcript Title AUTMATC CNTRL PRJCT UCEAP Quarter Units** 6.00

Course Description

Modelling is often an important and time consuming part of an industrial control project. It is also important to describe the fundamental limitations given by the dynamics in sensors and actuators, and by measurement noise and actuator limitations. The course projects are typically performed on real model processes available at the department. In some cases the experiments are done at another department or in industry. The control design is first developed for a mathematical model. Software tools are used during the modelling, design, and simulation, and during the implementation. Some examples of model processes that may be used in the projects are inverted pendulums, model helicopters, quadruple tank processes, and industrial robots. Lego Mindstorm NXT is often used as an implementation platform. Project meetings are held regularly during the course. In the project the students must search for knowledge and information independently. In some cases regular seminars or guest lecturers are included in the course. The projects results and experiences are reported both in written and oral form.

Language(s) of Instruction

English

Host Institution Course Number

FRTN40

Host Institution Course Title

PROJECT IN AUTOMATIC CONTROL

Host Institution Course Details

Host Institution Campus

Engineering

Host Institution Faculty

Host Institution Degree

Host Institution Department

Engineering- Automatic Control

Course Last Reviewed

<u>Print</u>