COURSE DETAIL

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
UCEAP Semester Units 4.00

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
AUTOMATIC CONTROL PROJECT

Host Institution Campus
Engineering

Host Institution Faculty

Host Institution Degree

Host Institution Department
Engineering- Automatic Control

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