COURSE DETAIL

APPLIED MECHATRONICS
Country Sweden
Host Institution Lund University
Program(s) Lund University
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Mechanical Engineering Electrical Engineering
UCEAP Course Number 157
UCEAP Course Suffix
UCEAP Official Title APPLIED MECHATRONICS
UCEAP Transcript Title APPLIED MECHATRNICS
UCEAP Quarter Units 8.00
UCEAP Semester Units 5.30

Course Description
The development of the products of today and tomorrow is more and more often demanding an optimized combination of electromechanical solutions and embedded systems (integrated electronics and software). The aim of the course is that the student should use the knowledge and skills achieved from earlier courses and independently seek and find solutions for complex mechatronic assignments. The course has two parts. The first one is the development of a concept with technical specifications that solves a real problem in industry (the concept is implemented into a working industrial prototype in another optional course). The “concept” project group is composed by at least one E-student and at least one M-student to form a mechatronic team with various competences. The other part of the course is an individual assignment to construct a complete mechatronic system for the PC control of a DC motor, including computer communication, electronic design also on the circuit board, microprocessor programming, sensor technology, and automatic control strategies. The system is built in a lab open 24/7, where cooperation is encouraged but still the final examination is individual.

Language(s) of Instruction
English

Host Institution Course Number
EIEN45

Host Institution Course Title
APPLIED MECHATRONICS

Host Institution Course Details

Host Institution Campus
Engineering

Host Institution Faculty

Host Institution Degree

Host Institution Department

Engineering- Industrial Electrical Engineering and Automation
Course Last Reviewed

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