Course syllabus

Projekt i Automation
Project in Automation

EIEF26, 7,5 credits, G2 (First Cycle)

Valid for: 2023/24
Faculty: Faculty of Engineering, LTH
Decided by: PLED E
Date of Decision: 2023-04-11

General Information

Main field: Technology.
Compulsory for: IEA3
Language of instruction: The course will be given in Swedish

Aim

The course aims to provide an experience to work in small project teams (4-6 students) in automation. Primarily this part shall be performed at a company with operations in automation / power. As alternatives, in-house project in construction are offered that has a focus on automation and control technology.

Learning outcomes

Knowledge and understanding
For a passing grade the student must

be able to interpret and analyze the diagrams with a focus on automation,

be able to explain the most common methods of project methodology in industry,

Competences and skills
For a passing grade the student must

be able to work on projects with a focus on automation and control technology, and be able to practically apply the knowledge gained from this and previous courses,

be able to choose materials to an automation system based on a given specification,

be able to use electrical equipment in accordance with regulations on safety,

be able to apply basic concepts in business administration linked to projects and innovation.

Judgement and approach
For a passing grade the student must

be able to to reflect on the future professional role.

Contents

Project management in industrial automation projects with project economics and innovation,

Selection of components in an automation system based on given specification,

Documentation of automation systems,

Ethics linked to the professional role.

Examination details

Grading scale: UG - (U,G) - (Fail, Pass)
Assessment: Approved project and passed laboratory experiments and passed assignments.

The examiner, in consultation with Disability Support Services, may deviate from the regular form of examination in order to provide a permanently disabled student with a form of examination equivalent to that of a student without a disability.

Admission

Admission requirements:

- Mandatory elements in EIEF06 or EIEF05 Automation

Assumed prior knowledge: ETEF15 Circuits and Measurements, Advanced Course, EIEF06 or EIEF05 Automation
The number of participants is limited to: No
The course overlaps following course/s: EIEF25

Reading list

- K.L.S. Sharma: Overview of Industrial Process Automation. Elsevier, 2011, ISBN: 978-0-12-415779-8.

Contact and other information

Course coordinator: Mats Lilja, Mats.Lilja@hbg.lth.se
Course homepage: https://www.lth.se/iea/utbildning/kurser-paa-campus-helsingborg/projekt-i-automation/
Further information: Some of the compulsory elements are included in the Ing-days.