MG2135 PLM - Product Lifecycle Management 9.0 credits

PLM, Product Lifecycle Management - Informationshantering i produkt-framtagning

This is a translation of the Swedish, legally binding, course syllabus.

If the course is discontinued, students may request to be examined during the following two academic years

Establishment

Course syllabus for MG2135 valid from Spring 2016

Grading scale

A, B, C, D, E, FX, F

Education cycle

Second cycle

Main field of study

Mechanical Engineering

Specific prerequisites

MG2028/MG2128 CAD and other IT Tools in Industrial Processes

or the equivalent

Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

Intended learning outcomes

After passing the course, the student should be able to:

- explain what product data is and describe its role in a producing company through the whole life cycle of a product
- explain the basic principles of documentation of a product including the rules of operations that apply to this
- describe the main functions and the general architecture of a PLM system
- develop a specification for adaptations of a PLM system for a producing company, based on given preconditions
- create an information model based on a number of operations requirements on product data
- use this information model in an implementation of a PLM system to support a company's processes
- account for the fundamentals of relational databases and formulate simple expressions/queries in a modern database management system
- account for similarities and differences between different PLM systems on the market

Course contents

PLM systems â€“ functions, architecture, configuration and usage

Information flows in producing companies

Principles and methods for product data management

Data modelling

Relational databases and SQL

Disposition

Introductory lectures and guest lectures

Study visits at end user companies and software suppliers

Teacher-supervised exercises and laboratory sessions

Individual written assignment

Project assignment in a large group

Course literature

Will be published in Bilda

Equipment

None

Examination

- INL2 - Homework Assignment, 1.5 credits, grading scale: A, B, C, D, E, FX, F
- LAB2 - Laboratory Exercises, 3.0 credits, grading scale: P, F
- PROJ - Project, genomförande, 4.5 credits, grading scale: A, B, C, D, E, FX, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

Other requirements for final grade

Passed laboratory assignments (LAB2; 3 cr),

Passed written assignment (INL2; 1.5 cr)

Completed project work (PROJ; 4.5 cr)

Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.