

Course Syllabus

Product Design Processes 7.5 Credits*, First Cycle

Learning Outcomes

Upon completion of the course, the student shall be able to:

- Describe and value different design processes, and what sets them apart.
- Describe what the different parts of a design process consists of.
- Describe and articulate an arbitrary design process.
- Apply knowledge of design processes in in a development project.
- Describe the regulations that a construction company must follow in their construction work.

Course Content

The course covers the theory and practice in the design and development process, and the characteristics of an effective design process. The course teaches different types of construction processes, and what sets them apart. The different parts of a design process are reviewed. For example, the start up of design work, specifications, calculation and dimensioning, regulatory requirements and standards, drawing and CAD, design review, other departmental requirements for the design, testing, documentation, design approval, and release of a product. In the workshops the students deal with, among other things, the directive of machinery and drawing reviews. In a development project, students apply their knowledge of design processes.

Assessment

Written exam 3 credits, project work, 3 credits, workshops 1.5 credits

Forms of Study

Lectures, workshops, and project work.

Grades

The Swedish grades U, 3, 4, 5.

Project work and workshops U-G.

Written exam U, 3, 4, 5

Students are examined individually in each parts.

Prerequisites

At least 90 credits from a bachelor program in Mechanical Engineering

Other Information

In order to obtain progression and gradually meet the programme objectives, this course assumes that students have knowledge corresponding to the previous courses in the mechanical engineering programme.

Subject:

Mechanical Engineering

Group of Subjects:

Mechanical Engineering

Disciplinary Domain:

Technology, 100%

Progression Indicator:

G2F

Approved:

Approved 5 April 2018

Valid from 30 June 2018