

# **COURSE SYLLABUS**

# Datorstöd inom Konstruktion 1

# Computer Aided Design and Drawing Standards, part 1

7,5 ECTS credit points (7,5 högskolepoäng)

Course code: MT1510 Educational level: First cycle Course level: G1N Field of education: Technology Subject group: Mechanical Engineering Subject area: Mechanical Engineering Version: 5 Applies from: 2017-09-01 Approved: 2017-06-15

#### 1 Course title and credit points

The course is titled Computer Aided Design and Drawing Standards, part 1/Datorstöd inom Konstruktion 1 and awards 7,5 ECTS credits. One credit point (högskolepoäng) corresponds to one credit point in the European Credit Transfer System (ECTS).

#### 2 Decision and approval

This course is established by Dean 2017-02-20. The course syllabus was revised by Head of Department of Mechanical Engineering and applies from 2017-09-01.

Reg.no:BTH-4.1.1-1755-2017 Replaces: MT1439

#### 3 Objectives

During the course the student obtain knowledge of how modern systems for construction work and product development are used, moreover so when creating solid models and compilation of these. In the course the student also obtain basic knowledge in technical drawing and standards regarding this area.

#### 4 Content

The course contains of among others following elements:

- introduction
- how CAD system works in principal
- history
- classification of program modules
- •help functions and different methods for how solid models are created
- •standards regarding outlining drawings and creation as well as praxis regarding this area
- how printouts work

#### 5 Aims and learning outcomes

On completion of the course the student will be able to:

- create solid models with a modern CAD system where the configuration is varying.
- create composite constructions of several inbound details and standard components from enclosed library.
- independently import and export models to and from a CAD system.
- have knowledge of how a detail and compilation drawing is created that complies with established standard.

#### 6 Learning and teaching

Distance course. Swedish

# 7 Assessment and grading Examination of the course

Code Module		Credit	Grade
1710 Assignment 1720 Assignment 1730 Assignment 1740 Assignment	2	1 ECTS 1 ECTS 2.5 ECTS 3 ECTS	G-U G-U G-U A-F

<sup>1</sup> Determines the final grade for the course, which will only be issued when all components have been approved.

The course will be graded A Excellent, B Very good, C Good, D Satisfactory, E Sufficient, FX Fail, supplementation required, F Fail.If grade FX or UX are given, the student may after consultation with the course coordinator / examiner get an opportunity to within six weeks complement to grade E or G for the specific course element.

## 8 Course evaluation

The course coordinator is responsible for systematically gathering feedback from the students in course evaluations and making sure that the results of these feed back into the development of the course.

## 9 Prerequisites

Basic qualifications.

# 10 Field of education and subject area

The course is part of the field of education and is included in the subject area Mechanical Engineering.

## 11 Restrictions regarding degree

The course cannot form part of a degree with another course, the content of which completely or partly corresponds with the contents of this course.

## 12 Course literature and other teaching material

- Ritteknik, Bo Lundkvist, Liber ISBN 91-47-01123-8.
- Training examples may be found on the course web site
- Training examples in the help system of the software used
- CAD software may be downloaded from the vendor to be used in the student's own computer.