

# SG1140 Mechanics II 6.0 credits

#### Mekanik II

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 SG1140 valid from Spring 2019

# **Grading scale**

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

## **Education cycle**

First cycle

# Main field of study

**Technology** 

# Specific prerequisites

Completed course SG1120 Mechanics I, SG1130 Mechanics I or SG1132 Mechanics I with project.

# Language of instruction

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

## Intended learning outcomes

After completing the course the student should be able to:

- identify a concrete mechanical problem, and choose suitable mechanical models based on a problem description,
- translate the mechanical model into a mathematical model,
- mathematically treat the problem and critically analyze the significance of the result,

in order to use a physical mindset and communicate this within the framework of engineering science contexts.

#### Course contents

Particle dynamics in accelerating systems. Particle system and rigid body mechanics.

### Course literature

Nicholas Apazidis: Mekanik II, Studentlitteratur, Lund.

#### **Examination**

- INL1 Assignments, 1.5 credits, grading scale: P, F
- TEN1 Examination, 1.5 credits, grading scale: A, B, C, D, E, FX, F
- TEN2 Examination, 3.0 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.

The examiner, in consultation with the KTH coordinator for disability (Funka), decides on any adapted examination for students with documented, permanent disability. The examiner may allow another examination form when re-examining individual students.

# Other requirements for final grade

INL1 - Assignment, 1.5, grade scale: P, F

TENA - Theory/KS, 1.5, grade scale: A, B, C, D, E, FX, F

TENB - Problem exam, 3.0, grade scale: A, B, C, D, E, FX, F

## 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.