

COURSE DESCRIPTION

Course code: MAP14ME01, PRE14ME01

Course name: Basic Mechanics

Scope: 5 ECTS

Target group: 1st year students

Objective: The student will be able to

- use units and formulas,
- describe motion graphically and with equations,
- know different types of forces and apply Newton's laws of motion
- apply the energy principle
- calculate torques
- analyze trusses

Content: Units, formulas and uncertainty analysis
Kinematics of particles
Dynamics of particles
Work and energy
Statics of rigid bodies

Methods: Lectures and exercises
Lab exercises

Prerequisites: Functions and Equations 1 (compulsory)
Geometry and Vectors (compulsory)

Literature: Compendium

Examination: Exam(s)
Lab reports

Time: Spring term 1st year

Language: Swedish

Made by:

Checked by:

Approved by:

Valid in curriculum

NN

UA

AC

2017