

## COURSE DESCRIPTION

**Course code:** MAP14KT04, PRE14KT01

**Course name:** Machine Elements 1

**Scope:** 3 ECTS

**Target group:** 2<sup>nd</sup> year student

**Objective:** After completing the course, the students should have knowledge of and be able to apply the design of some basic mechanical elements used in mechanical constructions. He/she must understand the technical and economic aspects in the choice of machine elements.

**Content:** Welded joints  
Screw joints  
Rivet joints  
Key joints  
Shrink and press fits  
Clamp joints  
Spline shafts  
Tapered joints  
Expanding and compressible joints

**Methods:** Lectures with exercises

**Prerequisites:** Strength of Materials 1, Technical Drawing

**Literature:** Lärobok i maskinelement. M. Mägi & K. Melkersson  
Koneenelimet ja mekanismit. S. Bloom et al. (Chapter 1)

**Examination:** Exam and exercises

**Time:** Year 2

**Language:** Swedish