

# FMF3017 Post Graduate School in Tribology 9.0 credits

#### Forskarskola i Tribologi

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 valid from Spring 2019

# **Grading scale**

P, F

# **Education cycle**

Third cycle

# Specific prerequisites

Admitted to the postgraduate course Machine Design at KTH

# Language of instruction

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

## Intended learning outcomes

After passing the course, the doctoral student must know three of the following five elements (the main supervisor together with the doctoral student chooses the elements), where each element corresponds to 3 credits:

- · Lubricant theory at an advanced level
- Surface topography and surface layers in theory and practice at advanced level
- Contact mechanics analytically and numerically at advanced level
- Abrasion modelling, simulation and experimental at advanced level
- Friction modelling, simulation and experimental at advanced level

## **Course contents**

The course has five parts of three credits each. The main supervisor together with the doctoral student chooses up to three of the sub-moments:

- Advanced lubricant theory
- Surface topography and surface layers
- Contact mechanics
- Wear, modelling, simulation and experimental
- Friction modelling, simulation and experimental

### **Examination**

• INL1 - Assignment, 9.0 credits, grading scale: P, 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.

## 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.