

Course syllabus

# Transmissioner, dynamik Transmissions, Dynamics

## MMEN05, 7,5 credits, A (Second Cycle)

Valid for: 2023/24

Faculty: Faculty of Engineering, LTH

Decided by: PLED M

Date of Decision: 2023-04-11

#### **General Information**

Main field: Technology. Elective for: M4-pu

Language of instruction: The course will be given in Swedish

#### **Aim**

The course gives detailed knowledge in critical speeds and dynamic forces in gears and cam mechanisms.

## Learning outcomes

Knowledge and understanding
For a passing grade the student must

• have knowledge of how vibrations in machine elements are calculated.

Competences and skills

For a passing grade the student must

• be able to analyse different kinds of machine elements with the purpose to reduce vibrations.

#### **Contents**

Bending- and torsional critical speeds.

#### **Examination details**

**Grading scale:** TH - (U,3,4,5) - (Fail, Three, Four, Five) **Assessment:** Compulsory assignment and written examination.

The examiner, in consultation with Disability Support Services, may deviate from the regular form of examination in order to provide a permanently disabled student with a form of examination equivalent to that of a student without a disability.

### **Admission**

Assumed prior knowledge: MMEF05 Transmissions. The number of participants is limited to: No

## **Reading list**

• M Mägi, K Melkersson, M Evertsson: Maskinelement. Studentlitteratur AB, 2017, ISBN: 9789144109053.

#### **Contact and other information**

Course coordinator: Rikard Hjelm, rikard.hjelm@mel.lth.se Course homepage: http://www.mel.lth.se/utbildning/dynamik/

Further information: With less than 12 participants, the course may be given with

reduced teaching and more self studies.