



Course syllabus

Faculty of Technology

Department of Mechanical Engineering

2MT012 Fordonsteknik, 7,5 högskolepoäng

Vehicle Technology, 7.5 credits

Main field of study

Mechanical Engineering

Subject Group

Mechanical Engineering

Level of classification

First Level

Progression

G2F

Date of Ratification

Approved by Faculty of Technology 2014-06-17

The course syllabus is valid from spring semester 2015

Prerequisites

60 credits in Mechanical Engineering and 7.5 credits in Thermodynamics, Fluid Mechanics and Heat Transfer, or equivalent.

Objectives

After completing the course, students should have knowledge of:

- modern vehicle components
- the function of various vehicle components
- calculation and dimensioning of vehicle components
- assessment of the various components suitable properties in a vehicle
- air brakes for vehicle

Content

The course includes the following topics:

- comb movements, calculation, production of comb in CNC milling
- self-oscillations of the crank shafts / driveshafts
- shocks and interaction of springs for road
- vehicle servo system
- calculation of tubular frame with respect to stress and deformation.

Type of Instruction

The teaching consists of lectures, seminars and exercises. Some parts are mandatory. The scope of the compulsory elements provided by the examiner at the start of the course.

Examination

The course is assessed with the grades U,3,4 or 5.

The assessment of student performance usually takes place during special examination periods and achieved through project work, laboratory work, assignments and written examinations. Assessment is both written and oral.

In order to pass, the objectives of the course should be achieved.

Course Evaluation

A course evaluation will be carried out and compiled after the course is completed. The compilation will be presented to the current board as well as to the students and filed.

Credit Overlap

Overlaps with 80% with Light and heavy vehicle.

Required Reading and Additional Study Material

Required reading

A. Gramham Bell, *Four-Stroke performance tuning*, senaste upplagan, JH Haynes & Co Ltd, ca 200 sidor.

Utdelade kopior