

*Course syllabus*

# **Trafikteknisk teori: Tillgänglighet, Framkomlighet, Säkerhet och Miljö Traffic Engineering Theory: Accessibility, Level of service, Safety and Environment**

**VTTF05, 7,5 credits, G2 (First Cycle)**

**Valid for:** 2023/24

**Faculty:** Faculty of Engineering, LTH

**Decided by:** PLED V

**Date of Decision:** 2023-03-21

## **General Information**

**Compulsory for:** IBYV3

**Language of instruction:** The course will be given in Swedish

## **Aim**

The aim of the course is that the students will acquire an understanding for how various variables affect the effects of traffic within primarily the areas of Level of service, Safety and Environment but also to some extent within Accessibility and Security. The course should induce understanding for the complexity in that what is good for one area don't necessarily need to be good for the other, and that there is often need for a compromise between them. After fulfilling the course the students should have a good theoretical basis for further studies traffic engineering and planning

## **Learning outcomes**

*Knowledge and understanding*

For a passing grade the student must

- Have knowledge about the most important variables affecting traffic within the areas of Level of service, Safety and Environment

- Have understanding for relationships between variables and effects and have understanding that not all relationships are not known or measurable

#### *Competences and skills*

For a passing grade the student must

- Be able to analyse a given problem from the viewpoint of level of service, safety and environment and identify potentially important variables affecting the effects of traffic in the given case
- Be able to scrutinise and analyse literature within the area of traffic engineering
- Be able to present results orally and in writing

## Contents

As this is a course to build the theoretical base within traffic engineering and planning focus is on lectures and exercises, but the course also contains seminars discussions.

The course consists of lectures, seminars and assignments.

## Examination details

**Grading scale:** TH - (U,3,4,5) - (Fail, Three, Four, Five)

**Assessment:** For a passing grade: passing grade on exam and approved assignments. The grade is awarded on the basis of the grade on the exam and the written assignments.

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:** VTVA50 Transports and Society AND FMSF50 Mathematical Statistics.

**The number of participants is limited to:** No

**The course overlaps following course/s:** VTT131, VTVN15, VTVN20

## Reading list

- Hydén, Christer (red.): Trafiken i den hållbara staden. Studentlitteratur AB, 2008, ISBN: 9789144053011.
- Van Wee, Bert. Annema, Jan Anne. Banister, David: The Transport System and Transport Policy. Edward Elgar Publishing Ltd, 2012, ISBN: 9781781952047.

## Contact and other information

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