

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 withinn 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, dafety 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

Course coordinator: Till Koglin, till.koglin@tft.lth.se

Examinator: Till Koglin, till.koglin@tft.lth.se Course homepage: http://www.tft.lth.se