



Course syllabus

Design av stadens infrastruktur Urban Infrastructure Design

VTVN05, 7,5 credits, A (Second Cycle)

Valid for: 2023/24

Faculty: Faculty of Engineering, LTH

Decided by: PLED V

Date of Decision: 2023-03-21

General Information

Language of instruction: The course will be given in English

Aim

The purpose of the course is to provide knowledge about the design of the city's infrastructure at both the network and the local level. It focuses on understanding the needs of different road user groups, and how the design of the transport and street infrastructure as well as the public space can affect the conditions and rights for all the road user groups.

Learning outcomes

Knowledge and understanding

For a passing grade the student must

- Understand and be able to use the fundamental concepts that are used in Swedish design manuals like VGU and TRAST
- Understand the importance of basing the design solutions on systematic field work
- Understand how design influence the accessibility for different means of transport and different road user groups
- Understand how design influence the traffic system

Competences and skills

For a passing grade the student must

- Be able to observe, identify and analyze the problems at traffic sites in order to improve them and reach better traffic conditions for the users and improve the quality of the surrounding environment.
- Be able to apply theoretical knowledge to support the design proposals
- Be able to apply national transport policies as well as local regulations and goals in the design process
- Be able to illustrate the analyses made on the traffic system
- Be able to visualize the design solutions with drawings and illustrations

Judgement and approach

For a passing grade the student must

- Understand the value of systematic investigation work and understand the system effects of traffic.

Contents

The students will carry out a design project in a complex urban area. The course includes lectures, fieldwork, exercises and workshops. Examination is done by oral and written presentation.

Examination details

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

Assessment: Approved assignments and project work. The final grade is awarded on the basis of the grade on the individual assignments and the final project report and an oral presentation.

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

Admission requirements:

- VTTF01 Traffic Engineering

Assumed prior knowledge: VTVN15 Traffic Engineering and Analysis

The number of participants is limited to: No

Reading list

- VGU, TRAST and Trafikverkets Effektkatalog.
- A course library is available during the course.
- Groot, Rik de: Design Manual for bicycle traffic. CROW, 2007, ISBN: 978-90-6628-494-4.
- Arterial streets for people. Artist Project: Arterial Streets Towards Sustainability.
- Trafik för en attraktiv stad, TRAST Utgåva 3. Trafikverket, SKL & Boverket, ISBN: 978-91-7585-271-4.
- Vägars och gators utformning. VGU. Trafikverket & SKL.
- Jan Gehl: Cities for people. Island Press, 2010, ISBN: 9781597265737.
- Jan Gehl: Life between buildings, Using public space. Island Press, 2011, ISBN: 9781597268271.

Contact and other information

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Course homepage: <http://www.tft.lth.se>

Further information: The course will have the form of a project work.