AG2141 Urban Infrastructure 7,5 hp

Urban Infrastructure

Fastställande

Skolchef vid ABE-skolan har 2021-10-05 beslutat att fastställa denna kursplan att gälla från och med VT 2022 (diarienummer A-2021-1842).

Betygsskala

A, B, C, D, E, FX, F

Utbildningsnivå

Avancerad nivå

Huvudområden

Samhällsbyggnad

Särskild behörighet

3 years of university studies within the field of Planning, Architecture, Engineering or Social Science.

For independent applicants: 150 credits including 30 credits in Architecture, Planning or Civil Engineering and English B.

Undervisningsspråk

Undervisningsspråk anges i kurstillfällesinformationen i kurs- och programkatalogen.

Lärandemål

The aim of the course is to provide basic knowledge on the functions, dynamics and interactions of urban infrastructure systems. After fulfilling the course requirements students should:

- Be conversant in a range of theories addressing technology, society, and urban development;
- Recognise and appreciate the relational and spatial aspects of urban infrastructure development; and
- Have the ability to apply analytical skills to critically assess infrastructure networks in terms of sustainability, liveability, and resilience.

Kursinnehåll

Contemporary cities are supported by a diverse range of infrastructure networks including energy, water, wastewater, transportation, and communications. These networks are traditionally defined by their technical and economic characteristics but they also have significant (and often unappreciated) spatial, political, and cultural implications. Today, the upgrading and reimagining of infrastructure services is central to notions of sustainability, resilience, economic prosperity, and improved quality of life.

This course provides an opportunity for students to study the co-evolution of technology and cities using theories and case studies from urban history, science & technology studies, urban geography, planning, and architecture. The course explores historical and theoretical ideas about cities and infrastructure as well as contemporary issues that address infrastructure trends and debates. The course also provides students with the opportunity to develop research skills to study infrastructure networks. The knowledge and skills taught in this course will allow students to develop a critical perspective on technology and society as it relates to cities of the past, present, and future.

The course consists of lectures, literature seminars and group work in which students will prepare a paper and presentation on a relevant topic

Examination

- ÖVN1 - Övningar och fältövningar, 3,0 hp, betygsskala: A, B, C, D, E, FX, F
- TEN1 - Skriftlig tentamen, 3,0 hp, betygsskala: A, B, C, D, E, FX, F
- DELN - Deltagande, 1,5 hp, betygsskala: P, F

Examinator beslutar, baserat på rekommendation från KTH:s handläggare av stöd till studenter med funktionsnedsättning, om eventuell anpassad examination för studenter med dokumenterad, varaktig funktionsnedsättning.

Examinator får medge annan examinationsform vid omexamination av enstaka studenter.

När kurs inte längre ges har student möjlighet att examineras under ytterligare två läsår.

- NA¨R1 - Lectures, 1,5 credits, grade scale: P, F
- TEN1 - Examination, 3,0 credits, grade scale: A, B, C, D, E, FX, F
- O¨VN1 - Exercises/Excursions, 3,0 credits, grade scale: A, B, C, D, E, FX, F

Övriga krav för slutbetyg

To receive a passing grade, students need to:

- Attend 75 percent of the lectures and participate in the literature seminar and the study visit (1,5 credits)
- Participate in and contribute to the group work that involves the writing and presentation of a paper (3 credits)
- Pass the written exam (3 credits)

Etiskt förhållningssätt

- Vid grupparbete har alla i gruppen ansvar för gruppens arbete.
- Vid examination ska varje student ärligt redovisa hjälp som erhållits och källor som använts.
- Vid muntlig examination ska varje student kunna redogöra för hela uppgiften och hela lösningen.