FUTURE CITIES



Information Architecture and Future Cities: Smart Cities

What will happen when cities change from static configurations into responsive and dynamic structures? What does it mean for buildings that undergo the same changes? What is the impact on architectural and urban design education? How can citizens influence this development?

The Smart Cities course will answer these questions and supply you with the necessary skills and knowledge to understand and design such dynamic structures. The intelligent use of data and information are at the core of this course. Data and information are new building materials of future cities. Citizens produce increasing amounts of data in their daily life, with stationary sensors and mobile smartphones. Using those data, citizens begin to influence the design of future cities and the re-design of existing ones. The course will be a first step towards the emerging citizen design science and cognitive design computing. Those will be the next generation of participatory design and design computing.

Where

HIT H 31.4 (Video wall)

Supervision

Prof. Dr. Gerhard Schmitt gerhard.schmitt@sl.ethz.ch

Danielle Griego griego@arch.ethz.ch

EdX MOOC on Livable Future Cities:

www.edx.org Search for ETH - Livable Future Cities 21.09.2015 Introduction:

Prinzipien der Informationsarchitektur und urbaner Simulation Principles of Information Architecture and Urban Simulation

28.09.2015 **Urban Systems I:**

Smart Cities

Exercise 1: Examples of S

Exercise 1: Examples of Smart Cities

05.10..2015 **Urban Systems II:**

Methoden und Werkzeuge des städtebaulichen Entwurfs Methods and Tools for Urban Design

12.10.2015 Urban Systems III:

Bestand und Dynamik in urbanen Systeme Stocks and Flows in Urban Systems

19.10.2015 **Seminar Week** (No lecture)

26.10.2015 Urban Research

Die Vermessung städtischer Eigenschaften A Conversation: Measurements in the City Exercise 2: Data Collection and Specification

02.11.2015 Urban Science

Citizen Design Science A Conversation: Citizen Design Science

09.11.2015 Complexity Science

Städte als komplexe Systeme Cities as Complex Systems

16.11.2015 Urban Governance

Partizipativer Entwurf und Stadtmanagement Participatory Design and Management Exercise 3: Energy and Mobility Data

23.11.2015 Responsive Cities

Cognitive Design Computing

30.11.2015 Final Critique

Präsentation der Resultate aller drei Kurse Presentation of Results from 3 Courses Certificates



