ii. Visualizing and Simulating Future Cities 2010 Global Summer Program Report

ETH Zurich	
Brief description	After learning new Urban Design Simulation instruments at the ETH Zürich Chair for Information Architecture, you will design a future city. The Chair for Information Architecture investigates visualization and simulation methods to develop seamlessly interconnected computer-assisted design and simulation processes. Research goals of the Chair are the fundamentals of knowledge visualization and the integration of simulations. The Chair's educational and practice goal is the design and simulation of sustainable future cities and to manage complexity. This course provides step-by-step introductions to basic knowledge for visualizing city schemes through computer-based methods and field trips inside Switzerland. The goal of the course is to familiarize the students with a novel, computer-assisted design process and test its application within the field of architecture. This course will incorporate lectures and a range of other learning approaches such as peer learning, small group seminars, panel discussions, field trips and workshops.
Course duration:	14 – 26 June
Tuition fees:	Waived
Accommodation:	USD$ 833 [CHF 867 (three-bed room)]
Field trip:	USD$ 205 (CHF 214)
Course facilitator(s):	Prof Gerhard SCHMITT, Post docs, PhD students of the ETH Chair for Information Architecture

2. Participant and teaching staff data

	University	Number of Students	Teaching Staff
IARU Partner Universities	Australian National University	2	
	ETH Zurich	5	6
	National University of Singapore	3	
	Peking University		
	University of California, Berkeley		
	University of Cambridge		
	University of Copenhagen		
	University of Oxford		
	The University of Tokyo		
	Yale University	1	
	Total IARU partner involvement	11	
Non-IARU Partner Universities			
	TOTAL Non-IARU partner involvement		
	TOTAL	**11**	

3. Successful aspects of the course

Please outline the successful aspects of the GSP course, where possible, referring to feedback gained from students and/or staff involved in the course. Feel free to incorporate photos into this section of the report. (Est. 500 words)

Module 1: From human perception of urban qualities to interactive Multi-Touch-Table Applications

The module took place on the first day of the course and was set up around a guided city walk through Zurich. Participants enjoyed this hands-on introduction into relevant fields of the course.

Module 2: From Script to Design

In only five days of intensive guided and individual work the students where able to create and present an urban design project using leading edge parametric design methods. With one exception the students didn't have any prior knowledge concerning the tools used. Contemporary parametric design tools usually require the students to completely change their ways of thinking. It usually requires some time for the students to take this step. The course structure and the high motivation of the students enabled us to complete this step within only a few days. It was a real pleasure to work with an intercultural group of highly motivated, interested and intelligent students.

Module 3: From reconstructing the future to simulating sustainable future cities

The module took place within the last two days of the course, and a certain amount of exhaustion was noticeable. Nevertheless, the students were highly motivated and able to learn the basic aspects of a procedural urban modeling tool (CityEngine) on the first day. During the second day, they successfully realized a small project on their own, which was presented at the end of the day at ETH Zurich's ValueLab.

Excursions:

The excursions were well appreciated offering a good mix of history, art and architecture. All of the Information Architecture team members took part, which gave a good exchange with students from abroad, ETH students, tutors and Information Architecture staff.

4. Challenges and concerns for the future

Please outline aspects of the course and/or the wider GSP that presented difficulties for your University. (Est. 500 words)

Even though we managed to deliver quite a bit of information and skills in a short time, for a future GSP we should consider reducing the number of modules and creating the excursions in such a way, that the different parts of the course correlate better.

Given the short time frame we will need to improve our learning materials in order to allow for a faster learning curve. Also, an option would be to provide the students with some material in advance, so they can obtain basic knowledge before the module starts.

Module 1 could be taken as an interesting excursion day with a focus on architectural aspect, which would give extra day for lecture with max 2 modules in total.