

This MAS class is an interdisciplinary class of about 12 graduate students interested in research on the next level of Computer Aided Architectural Design. This class contains modules in theory, in basic skills about programming, and in the CNC production of architectural artifacts. The main interest of the research is the reflection on the potentiality of the upcoming technologies for future architecture. The class starts on an abstract theoretical and philosophical level and ends in exercises in designing concepts of future architecture on the so called symbolic level.



22th - 26th Sept 2010

MO : a curious double metal sheet blow up warm up

Experiencing Switzerland, the CAAD chair and the ETH facilities

Welcome to Switzerland at our locations in Zürich, Schlieren and Weesen. Motivation for the setup of the class. Why ABUNDANCE? Why technical orientated theory for architects? Recent research at CAAD. The Power Book. Form Philosophy to Software. From Design to Production. Visit to a Swiss production company. Experimenting Parametrism. Doing Real Work in Metal Sheet Melting. Programming the Robot. Double metal sheet blow ups.

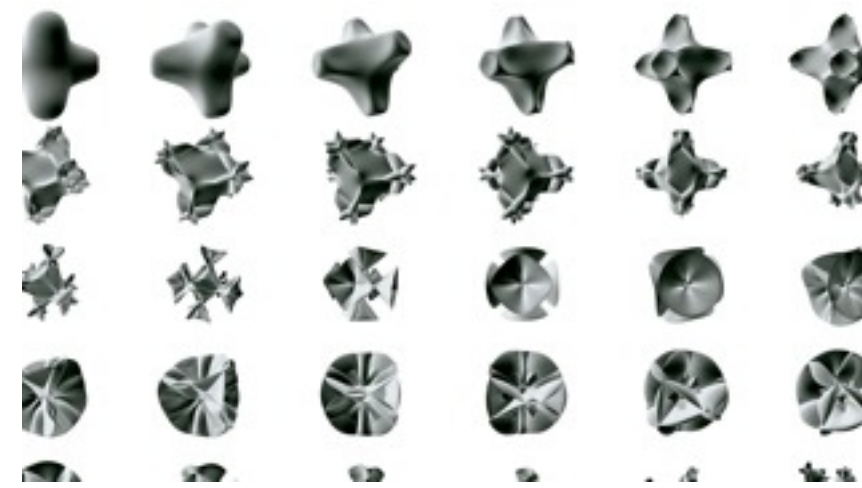


27th Sept - 15th Oct 2010

M1 : Living in a World of Abundant Potentials

the theoretical motivation / setup

what is the change like. an introduction to theory of the new plateau. die sättigung. the limit of growth. the apocaplyptics. the reductionists view. the pioneers in mathematics, philosophy. the sediment of symbols. domesticating the symbols. pioneering technologies. pioneering theories. example energy. from architecture to architectonics ...



08th - 26th Oct 2010

M2 : any form

the basic technical skills in design - from many forms to any form

Welcome to Switzerland at our location in Weesen. Motivation for the setup of the class. Why ABUNDANCE? Why technical orientated theory for architects? Recent research at CAAD. The Power Book. Form Philosophy to Software. From Design to Production. Visit to a Swiss production



23th - 31th Sept 2010

travel Isphahan : Abundant Ornament

lirum larum lorum

the first ornaments. the symbolisation of space and time. ornament and the movement in space. new ornaments. ornament as coded space.

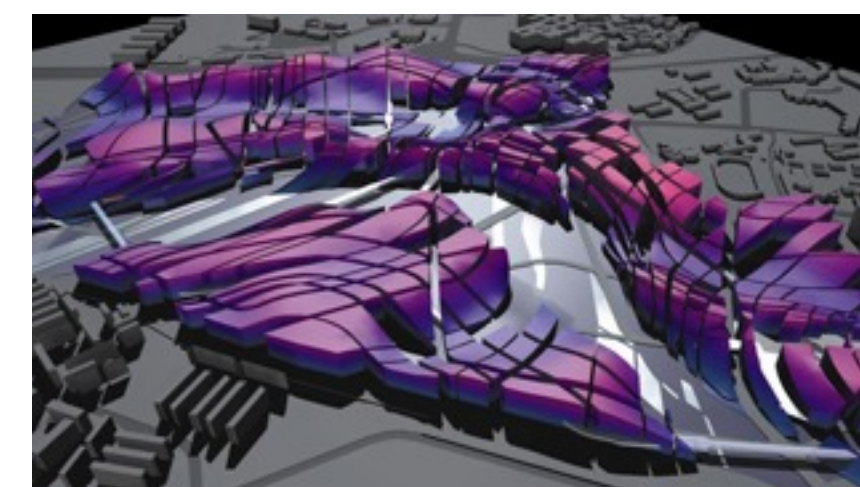


1st - 05th Oct 2010, 29th Oct - 20th Dec

M3 : Design to Production

the basic technical skills in production

from virtuality to reality. form follows function. generalization vs abstraction. the tools. the materials. the movements. the ornaments. the constructions. masterpieces. lecture: arnold walz : mercedes museum stuttgart unstudio lecture: christoph schindler : form follows function revisited lecture: tom pawlofsky: seminar: tools and materials exercise 1: milling, exercise 2: folded construction (2), deliverables: video from design, production and construction



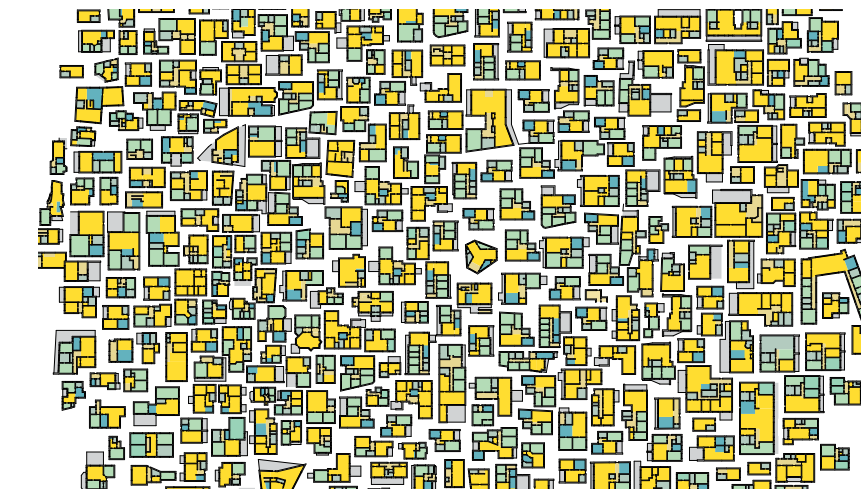
22th - 26th Sept 2010

M4 : Architects Revisited

towards an architectural theory of the symbolic

there are so many architectural manifestos / attitudes / theories. read them! what if geometry and structure are out of the primary equation of architecture. what if scarcities are out of the equation? rewrite them!

exercise: readings. writing an update of an



22th - 26th Sept 2010

M4 : system-ability

advanced in programming - from operation to operability

architectonics. parametrism. constantin. wachsmann/haller. armilla. parametric facade. 100 skyscrapers in 2 days. one new city per day. IFC. CRB. digitales bauen (volkmar). totale stadt. eclipse. swarms. emergence. software agents. RD. SOM. exercise: facade exercise: skyscraper exercise: city

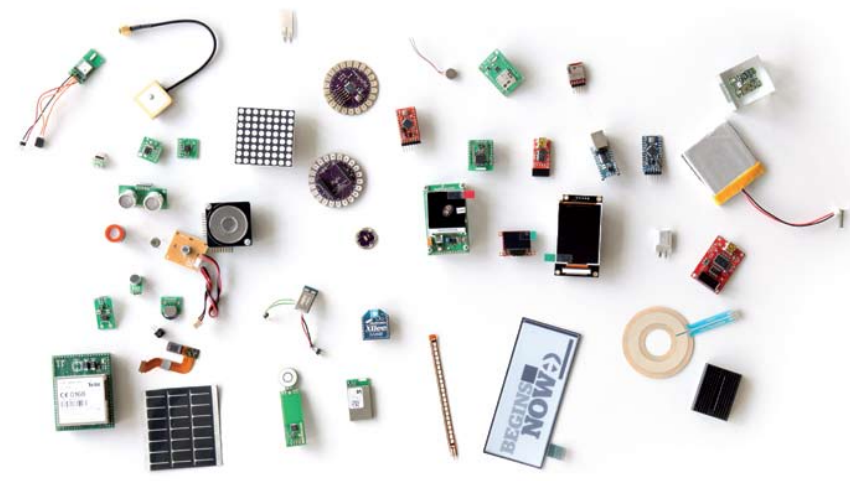


22th - 26th Sept 2010

travel North Sea : Abundant Energy

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engineerings. windmills fabric. construction. oil platform. rafinerie. the boat.



22th - 26th Sept 2010

M6 : adapt-ability

the basic technical skills in electronics

the formal and the informal. dezentrale gebäudetechnik, printed physics. membranen. self learning. wireless, sensors and actuators. exercise: your electronics



22th - 26th Sept 2010

M7 : choreographic architecture

the basic technical skills in electronics

masterpieces. composition. partitures. music.



22th - 26th Sept 2010

architecture for the metaliticum

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Thesis with an International Competition and an Exhibition

Featuring

Prof. Dr. Laurent Stalder: House as Appliance D-ARCH, GTA, ETH ZH, history and theory of architecture

Dr. Edward Willat: Gilles Deleuzes Organon for an Architectonics of Growth. Warwick University, London UK

Dr. Kerstin Kraft: How to capsule time and space in Ornaments and Patterns. University of Marburg, Ethnology

Prof. Dr. Kate Marshall: Narrative Infrastructures in story-telling. University of Notre Dame, IN USA, media and literature theory

Prof. Dr. Bernhardt Siegert: Cultural Techniques - on the relation between mathematics, technology and power. Bauhaus University in Weimar

Karten Schmidt aka Toxi is a computational designer, artist, and founder of *Postspectacular design studio*

Jessica Rosenkrantz and **Jesse Louis-Rosenberg** are founders of *Nervous System*, a laboratory for generative design and complex geometries.

Alvin Huang, *Amanda Levet Architects, London*

Prof. Achim Menges

Prof. Werner Oechsling

Armin Walz

Benjamin Dillenburger

Klaus Wassermann

Christoph Wartmann

Bruno Schindler

Markus Braach

Dr. Christoph Schindler

Oskar Zieta

Prof. Christian Kerez

Dr. Kay Strehlke

...

Team

Dr. Vera Bühlmann (Theory Modules, Seminar Week)

Pia Fricker (Assistance)

Mario Guala (Seminar Week)

Michael Hansmeyer (Software Modules)

Prof. Ludger Hovestadt (Head)

Manuel Kretzer (Hardware Modules)

Aoifa Rosenmeyer (Seminar Week)

Sibylla Spycher (Administration)

Date

Sept. 2010 – Sept. 2011, Zürich Switzerland

Contact

WWW.MAS2010.CAAD.ETHZ.CH