Combining theory, practice and personal research

At Master’s level, students follow an integrated teaching program encompassing current issues, architectural theory, discussions ranging across the full spectrum of design and construction – from design details through to urban planning, and guidance as they embark on their personal research. The course is structured around the production of a dissertation (where the focus is theoretical) and a Master’s project, developed with a supervision panel selected by the student.
Adrien Alberti: “I have used algorithms inspired by nature and integrated them into a program that generates architecture.”

Nicolas Pierret: « Pour moi, l'architecture représente un très bon compromis entre des études scientifiques, comme présentes sur le reste du campus, et quelque chose de peut-être plus artistique, plus esthétique. »

Urbanising the Alps – Fiona Pia

Switzerland’s urban area is currently undergoing a process of transformation: the distinction between leisure resort in the mountains as merely a seasonal appendage for skiing purposes and the “real” city has become obsolete – as evidenced by the fact that many urban functions are relocating to the mountains.

This research aims to construct new development strategies based on sustainable architectural and urbanist design paradigms, offering an innovative response to the complex project of combining functionalities and modal interfaces while renewing our understanding of the nature of altitude. This research is undertaken within the ComplexDesign doctoral programme.

Urban Recharge Area

Steffan Heath and Edouard Philippe

Mexico City and its millions of inhabitants are facing a massive overexploitation of the local water resources. The underground aquifer that is the city’s main source of supply is in a critical state of depletion with little hope of recharge. To offset this shortfall the city needs to make better use of the available local resources such as wastewater and rainwater by creating new wastewater treatment plants (WWTPs).

Yet when designing an infrastructure of this kind within a dense urban fabric it is essential to give it a clear positive status so that its presence in the city is perceived as an opportunity rather than arousing negative feelings and rejection. This project proposes to combine the WWTP with a municipal swimming pool – to demonstrate what the treatment process can achieve. Located to the west of the city, the project is set in an area where the urban fabric is conducive to recharging the aquifer. Located downstream from a retention dam, the planned WWTP generates a green corridor in which the treated water is used to revitalise the river as it flows towards a park located 1.5 km further downstream. The swimming pool is the first element in this green corridor sequence.

Watch the video:

http://complexdesign.epfl.ch
Master of Science in ARCHITECTURE

2-year program - 120 ECTS

Students must choose among one of the following orientations:
A Form - Data
B Habitats - Housing
C Cities - Territories
D Sauvegarde - Resources
E Types - Typologies

An orientation is composed of mandatory courses and projects depending on its subject.

Possibility to choose a 30 ECTS minor in:
- Engineering for sustainability (EngS)
- Integrated design, architecture and sustainability (IDEAS)
- Urban planning and territorial development (DTU)

Prerequisites for admission:
- Bachelor in Architecture
- Practical experience of 12 months
- An excellent command of French or English, and a good command of the other language are recommended
- Present a portfolio (A4 size) including several projects made by the candidate in the course of his/her studies and possibly practice

Career prospects

Studying architecture is the natural pathway towards a career as an architect, and it can also open up opportunities in many related professions – and in other, more unexpected areas, too:
- Architect – freelance or in a practice; Government official in a department dealing with the built environment (heritage conservation, regional/landscape planning, urban planning, etc.); Set designer (for shows and exhibitions); Project manager; Logistics specialist; Involvement in a humanitarian project; Real-estate manager; Real-estate expert; Researcher; Teacher; University lecturer; and Publisher.

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