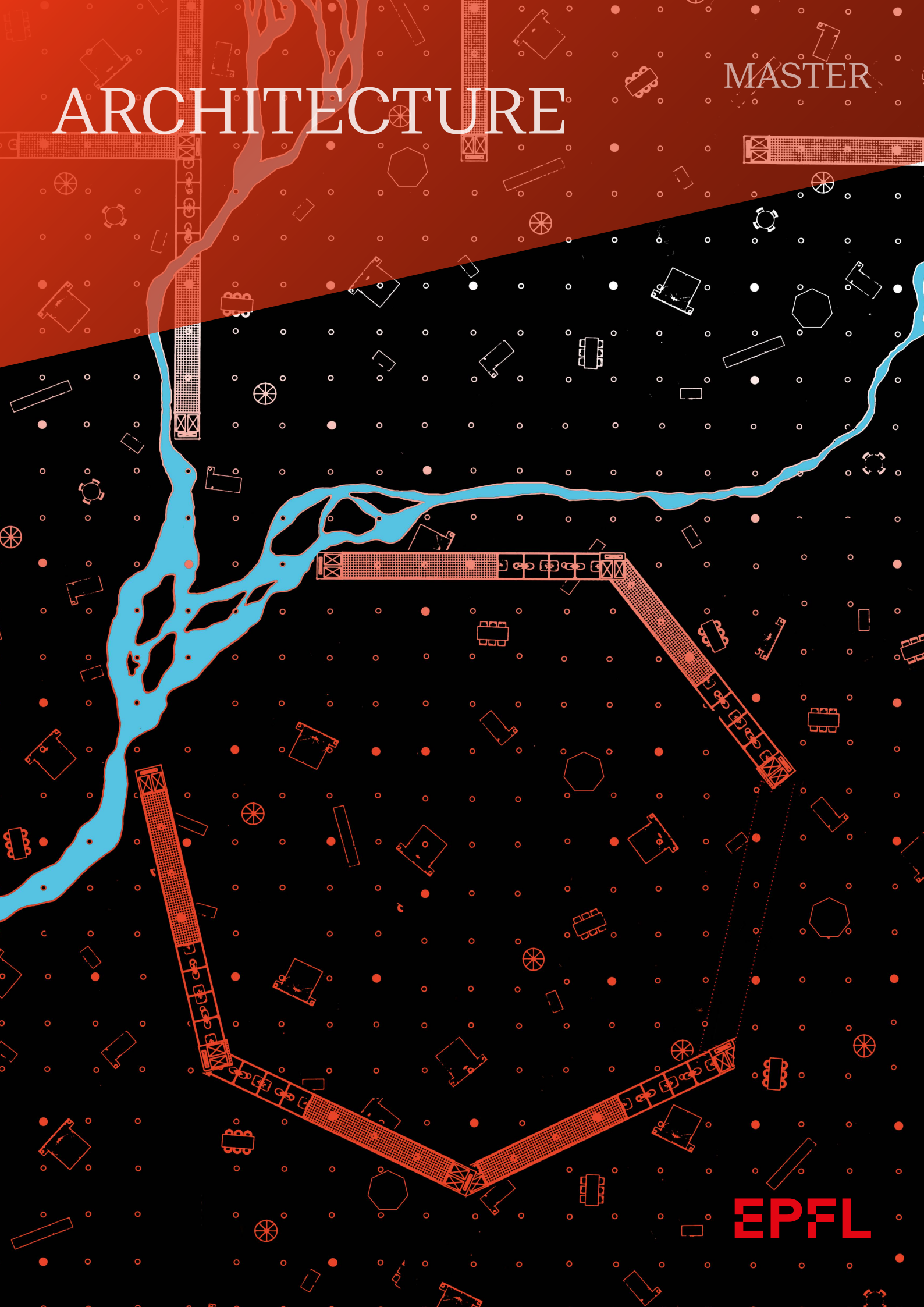


ARCHITECTURE

MASTER



EPFL

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.



Urbanising the Alps – Fiona Pia

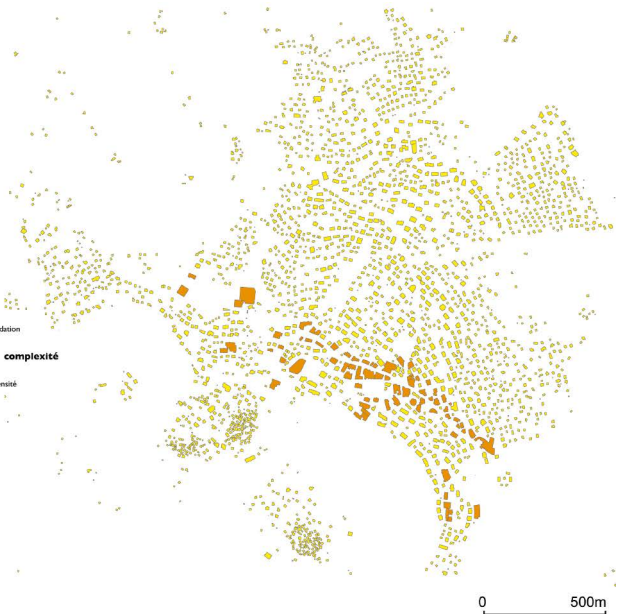
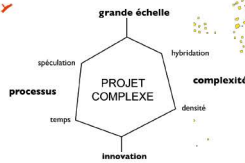
Switzerland's urban area is currently undergoing a process of transformation: the distinction between leisure resort in the mountains as merely a seasonal appendage for skiing purposes and the "real" city has become obsolete – as evidenced by the fact that many urban functions are relocating to the mountains

Voir la vidéo :



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. »



0 500m

(including convention centers, theatres, museums, educational complexes, urban retail businesses and permanent residences). The multiplication and intensity of communication and transport modes are driving these new trends; the mobility network is forging the urban environments of city and mountain into a single entity.

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.

This programme is unique in Switzerland, examining the ways in which realising complex projects questions and engages knowledge and practical expertise specific to three areas – law (UNIFR – University of Fribourg), socio-economics (UNINE – University of Neuchâtel) and architecture (EPFL).

<http://complexdesign.epfl.ch>



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).

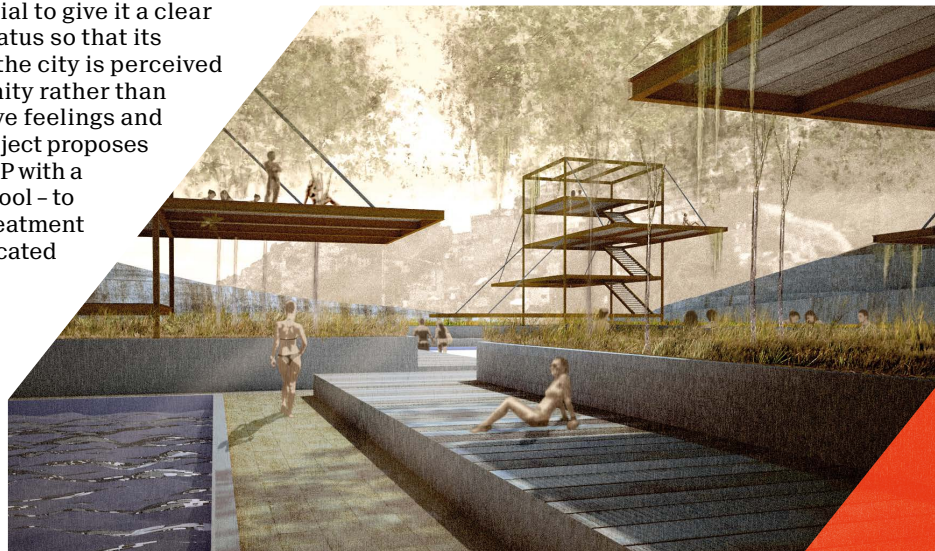
Yet when designing an infrastructure of this kind within a dense urban fabric it is essential to give it a clear positive status so that its presence in the city is perceived as an opportunity rather than arousing negative feelings and rejection. This project proposes to combine the WWTP with a municipal 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 ground below

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.



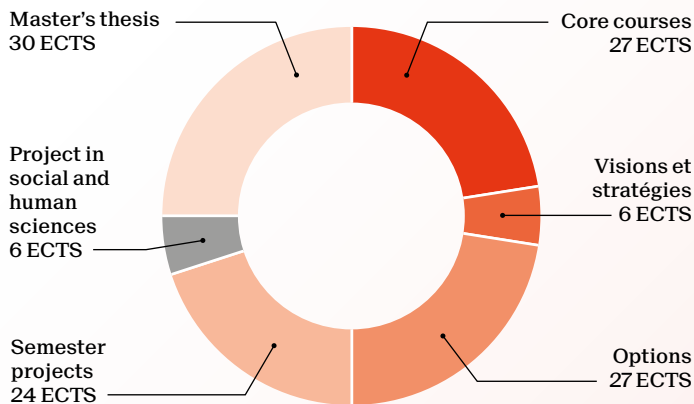
Adrien Alberti:
"I have used algorithms inspired by nature and integrated them into a program that generates architecture."

Watch the video:



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 (DUR)
- Integrated design, architecture and sustainability (IDEAS)
- Transforming territories under climate change (TTC)

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.

School of Architecture, Civil and Environmental Engineering
go.epfl.ch/master-architecture
 Contact: secretariat.sar@epfl.ch

	Orientation					Credits
	A	B	C	D	E	
Core courses						27
The origins of modern domestic space	A	B	C	D	E	3
Énoncé théorique de master						12
Superstudio A						12

Visions et stratégies						6
Architecture in the age of acceleration					E	3
Architecture, mass, media					E	3
La nouvelle architecture internationale en Suisse						3
Magma et principes		B				3
Political economy of design						3
The adventures of rationalism						3

Options						27
Teaching and research units						
UE C: Habitat et société		B			E	4
UE D: Territoire et société		B				4
UE E: Architectures en crise						4
UE F: Architecture et réhabilitation				D		4
UE H: Graphie						4
UE I: Territoire et paysage			C			4
UE K: Architecture et durabilité: études de performances			C	D		4
UE L: Digital Design and Making: New Approaches						4
UE M: Constructing materials				D		4
UE N: Constructing the view	A		C		E	4
UE R: Introduction au BIM (Building Information Modeling)						4
UE U: Cartography		B	C			4
UE V: Visions et utopies					E	4
UE X: Experience design	A					4

Other optional courses						
Architecture et énergie solaire				D		3
Architecture merveilleuse					E	3
Art et histoire des jardins						3
Behind/Beyond future cities						3
Building design in the circular economy				D		3
Climate and water sensitive urban design						4
Comfort and architecture: sustainable strategies				D		3
Constructing the view: In motion	A					3
Constructing the view: Still life	A				E	3
Digital design and making: a critical introduction	A					3
Droit de l'architecte, approfondissements: la réalisation d'une construction						3
Économie spatiale et régionale			C			3
Écrire / Construire. Allers retours						3
Foncier, immobilier, logement		B				3
Habitat et développement urbain		B	C			3
Habitat et typologie		B			E	3
Interactive conceptual design of structural forms				D		3
Introduction à l'archéologie de la construction						3
Introduction au BIM (Building Information Modeling)				D		3
Introduction to landscape and green space planning						3
Le projet du confort dans l'architecture du XX ^e s.		B		D		3
Modernity, Architecture and the Environment						3
Projet ENAC				D		4
Sociologie urbaine		B	C			3
Summer workshop						4
Sustainable Japanese architecture and landscape						3
Théories et techniques du projet de sauvegarde				D		3
UE génie civil: docta manus						4
Urban demography			C			3
Urbanisme et territoires			C			3
Ville et mobilité			C			3
Villes d'Asie						3