



# *Secrets de Maîtres*



## **Introduction to the Mechanical Art** **Immerse yourself in the Masters' Secrets**

This Mechanical Art training builds a bridge between Art and Mechanical Technology. Unique in its approach, it is a benchmark for its transmission of know-how skills.

This training is at the core of a network of expertise, ideas and mechanical fantasy. Its fundamental purpose is to preserve and promote ancestral traditions, enabling technological and artistic advances. As a result, future talents and new entrepreneurs will emerge, thus ensuring the sustainable cycle of Mechanical Art.

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**Created in collaboration with the CIMA (Centre International de la Mécanique d'Art), the CPNV (Centre Professionnel du Nord Vaudois), PERFORM and the artisans in Mechanical Art, this training program has been conceived with the best practices in Mechanical Art in mind.**

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Our mission is to address the pursuit of authentic values. In reaction to our era of globalization, connectivity, dematerialization and virtual reality, an increasing number of people are eager to discover local traditions.

During this whole month of training, the Masters, world renowned artisans, will accompany and guide you through the discovery of their secrets. They are committed to maintaining and transferring traditions in their Mechanical Art craft practice, to respect their local artisanal culture and more specifically, that of Sainte-Croix. They strongly believe that their expertise and craftsmanship belong to the world intangible cultural heritage and deserve to be supported.

[mec-art.ch](http://mec-art.ch)






A close-up of Denis Flageollet, a watchmaker, working on a large, dark metal gear. He is holding the gear with his hands, and a small red tool is visible. In the background, a fire burns in a furnace, creating a warm, orange glow.


**Denis Flageollet**  
Watchmaker

“A hand extended by a tool opens  
an almost unlimited playing field  
to achieve a wild mechanical dream”

Nicolas Court, an automater and watchmaker, is shown working on a complex mechanical device. He is using a tool to adjust a part of the machine, which is illuminated by a bright light. The background shows shelves filled with various mechanical components.


**Nicolas Court**  
Automatier,  
Watchmaker

“Rack your brain to solve the enigma  
of the mechanical fantasy that gives  
movement to a unique piece”

François Junod, an automater and sculptor, is sitting in his workshop. He is surrounded by shelves filled with numerous small, detailed mechanical sculptures and automata. He is wearing a pink shirt and has a friendly expression.

“An insatiable curiosity  
to understand the mechanical  
engineering that generates  
the magic of movement”

**François Junod**  
Automatier, Sculptor

Boris Masur, a mechanical art engineer, is holding a large, dried leaf. He is wearing a dark cap and a jacket. The background is a bright, outdoor setting with a clear sky.


**Boris Masur**  
Mechanical art engineer

“Once the mechanical  
fundamentals are acquired,  
there is no limit to what  
your mind and heart  
can create”

Renaud Lelièvre, a cutler, is working on a wooden structure in a forest. He is wearing glasses and a blue shirt, and is using a tool to shape the wood. The background shows a dense forest with trees and foliage.

**Renaud Lelièvre**  
Cutler

“The mechanical art  
magic relies also  
on human interaction  
and sharing”

Victoire Halter, a jeweller, watchmaker, and decorator, is working on a jewelry piece. She is shown in a close-up, looking intently at her work. She is wearing a green top and has dark hair with bangs.

**Victoire Halter**  
Jeweller, watchmaking, decorator

“In mechanical art,  
aesthetic precision  
is essential, even  
hidden mechanisms  
must be beautiful”



At the end of this training, you will have acquired basic knowledge in Mechanical Art, in the following domains:

- different techniques in the manufacture of constituents
- use of measuring tools
- work at the bench
- the history of mechanical objects
- mechanical motor organs
- levers and cams movement
- bells, gongs, pin-barrel, Serinette sounds
- the fundamental principles of automaton, music box, singing bird box, and watchmaking
- the most frequently used materials in Mechanical Art
- conservation techniques
- art history
- artistic and technical drawing
- modelling and sculpture
- soldering techniques
- foundry and moulding techniques
- forging techniques
- additive manufacturing techniques
- new technologies applicable to mechanical art
- 3D scanning techniques
- design of an object



**Jean-Michel Bolens**  
Teacher, music arranger

“Having a passion is not enough, you must share it and pass it on, so that it will keep on growing”

Furthermore, you will be able to characterize the type of object you might encounter, to analyze its best efficient conservation measures and plan its safest transportation and utilization.

You will have acquired sufficient knowledge to enable you to follow professional artisans in mechanical art objects designing or manufacturing, by drafting the specification and acting as the project manager of such a realization.

Last but not least, at the end of this training, each participant will leave with a Pièce-École on which they will have worked throughout the 4 weeks training.



## Training duration

The total training duration is 160 hours on a full-time schedule for four weeks, Monday through Friday.

Training hours from:

8 am to 12 pm and 1:30 pm to 5:30 pm.

## Training location

Mec-Art Workshops

1450 Sainte-Croix – Switzerland

## Method

This training combines practical sessions in the workshop, theory, visits to museums and manufacturers, in relation to the material being taught.

Indeed, the Artisans support the idea that theory and practice should not be separated so they will be able to adapt the courses to the manual skills of each of the participants, without affecting the final training quality. The practical part is specifically important to allow comprehension of the sensitivity of the trade and to illustrate in a more explicit way the theoretical input.

## Upcoming training session dates

4th to 29th July 2022.

## Training cost

Training fees and documentation amount to CHF 6'950.-.

### Included in the cost:

The Pièce-École on which each participant will have been working, a tool kit, training days' lunches and all visits and entertainment activities.

## Mechanical Art

### Did you know?

Mechanical Art is when mechanics adds a motion to art, thus becoming a mechanical work of art. This definition includes any object appealing to senses, emotions, intuition and intelligence, realized to achieve Beauty even through transgression or fracture principles. That would include automatons, music boxes, singing bird boxes, artisanal watchmaking, animated paintings or sculptures, mechanical music and any mechanical object referring to art without restriction of motorization.

