



# Crafting Form

## Exploring the world of Ferrocemento

June 2021  
Politecnico di Torino

A joined design and build workshop  
Politecnico di Torino  
University of Antwerp  
ETH Zurich

There are many things about concrete today that still make it a product of craftsmanship: its components are specifically combined, its form is purposefully designed and its formwork constructed accordingly; even the reinforcement finds a clearly defined place inside. For a better construction process, to save material or to determine new form potentials, numerous designers developed new ways of fabrication. One of the most groundbreaking construction methods was proposed by the Pier Luigi Nervi with his „Ferro-Cemento“: Instead of formwork, the concrete was applied with trowels to a wire mesh of any shape, which was attached to supporting bars. In this way, the reinforced concrete not only broke away from the linear skeleton form, but also from the rigid geometry of its formwork. It was seamless, its shape completely independent. Nervi used the very slim, elements as finished elements, as formwork, or - most impressively - as lost formwork. Here, material, form, construction and architectural expression are inseparably linked. Some of the most important testimonies of this special search for forms were created in Torino.

During the 10-day workshop at the Politecnico Torino we want to understand the essence of modeled concrete. We will study the method of ferrocemento by designing and fabricating components on different scales ourselves. These will be investigated from an engineering and constructional point of view and further developed architecturally. In addition, we visit numerous buildings of the Italian Modernism and contextualize our ideas of construction. In the end, a small pavilion will be formed from our developed and manufactured Ferrocemento components, light and specific, just as Nervi intended.