

**BAI PROGRAM OF ACTIVITIES**SEPTEMBER-DECEMBER 2025





September-December 2025

SCHEDULE	_
ETSAUN / UPNA MASTERCLASS	3
BAI PRESENTATION IN MADRID	3
M-ZERO (BAI WORKSHOPS)	4
1st BAI SYMPOSIUM	6
MADRID-BARCELONA SEMINARS	9



# Schedule September-December 2025

# **SEPTEMBER**

FRIDAY 19

**ETSAUN MASTERCLASS** 

# **OCTOBER**

**EARLY OCTOBER (DATE TO BE CONFIRMED)** 

**UPNA MASTERCLASS** 

TUESDAY 21 - FRIDAY 24

M-ZERO BAI I WORKSHOP

# **NOVEMBER**

TUESDAY 4 - FRIDAY 7

M-ZERO BAI II WORKSHOP

WEDNESDAY 19 - FRIDAY 21

1st BAI SYMPOSIUM

LATE NOVEMBER (DATE TO BE CONFIRMED)

**BAI PRESENTATION IN MADRID** 

# **DECEMBER**

**THURSDAY 11** 

MADRID SEMINAR

**THURSDAY 18** 

**BARCELONA SEMINAR** 

# ETSAUN / UPNA MASTERCLASS

The aim of the masterclasses at ETSAUN and UPNA is to present BAI and its Postgraduate Program to the academic community of Navarra and to promote its training and research opportunities among potential interested students. The potential audience at ETSAUN is primarily recent graduates who intend to begin their studies in the Master's Degree in Architecture, while the audience at UPNA is recent industrial engineering graduates with an interest in robotics and construction

### **DATE & LOCATION**

### September 19th

School of Architecture, University of Navarra

### Early October (date to be confirmed)

Higher Technical School of Industrial Engineering at the Public University of Navarra

#### **PROFESSORS**

### Francisco Mangado

Extraordinary Professor at ETSAUN and Academic Director of BAI

### **Andrea Deplazes**

Professor at ETH Zurich and Academic Director of BAI

# **BAI PRESENTATION IN MADRID**

The event will take place as planned according to the June 19, 2025 announcement, which could not ultimately be held.

With the theme "The Question of Technique," the event will bring together a large group of BAI professors to present the fundamentals of the Institute to the public in Madrid, with a special focus on the Postgraduate Program.

### **PROVISIONAL DATE & LOCATION**

### Late November (date to be confirmed)

'La Casa de la Arquitectura' in Madrid



# M-ZERO BAI WORKSHOPS

M-Zero is BAI's first workshop aimed at architects, industrial engineers, and other professionals in related fields, who believe that technology is not an end in itself, but a means to promote architectural excellence. During M-Zero, a large team of internationally renowned professors, lecturers, and engineers will train participants to program a robot that collaborates with designers to create a living space defined by criteria of innovation and robotization but endowed with recognizable and largely replicable environmental qualities.

M-Zero will serve as an introductory course to Workshop 1 of the BAI Postgraduate Program, which aims to create a research and praxis environment that fosters creative interaction between architecture and industry through design. This module will provide students with intensive and specific training in the use of systems and instruments linked to the new paradigm of 'digital craftsmanship', from 3D printers to robotic arms, including computational design software and other methods of industrialization, prefabrication, and execution control. The relationship with technology will not be approached from the perspective of simple adaptation or even submission to technology, but rather from the pragmatic and ethical control of technology through architecture. The fundamental question would be, how can we harness the potential of new technologies from and for design, that is, to improve people's lives?

Professor Andrea Deplazes of ETH Zurich and the BAI Academic Director will mentor students' projects in the workshop. Through direct and fruitful dialogue with Professor Deplazes, participants will become familiar with the process of installing, programming, commissioning, and operating robotic arms. They will also understand the potential of new technologies for developing high-quality, contemporary projects. In the first edition of M-Zero, wood is the primary working material. Its performance, formal and geometric possibilities, constructive capabilities, and environmental behavior will be studied. Based on these characteristics and new technologies in computational design and digital manufacturing, spatial prototypes will be developed in two intensive, four-day sessions.

The workshop will take place in the unique historical setting of the Arms Room at the Citadel of Pamplona. Built in the 19th century, this venue will serve as the backdrop for discussing the innovative, transformative, and social ideas underlying the BAI project. Workshop participants' work will subsequently be exhibited at the First BAI Symposium, which will be held from November 19 to 21 in Pamplona. Attending M-Zero and the First BAI Symposium will officially recognize participants as students of the BAI Postgraduate Program and grant them credit for Workshop 1, which focuses on design, innovation, and new technologies.

### DATE, LOCATION & PROGRAM

## M-Zero/Workshop 1

### October 21st-24th

Arms Room of the Citadel of Pamplona

Professor Andrea Deplazes will introduce participants to computational design and robotic manufacturing through an architectural exercise.

# M-Zero/Workshop 2

#### November 4th-7th

Arms Room of the Citadel of Pamplona

The best designs from the first phase will be developed and manufactured on a large scale with the help of a robotic arm. These projects will then be exhibited at the 1st BAI Symposium.

### **PROFESSORS**

## Andrea Deplazes

Extraordinary professor at ETH Zurich and Academic Director of BAI

### Jonathan Benhamu

**BAI** Research Assistant

#### Jesús Medina

Architect-specialist in robotic construction at ETH Zurich & professor of BAI

### MAXIMUM NUMBER OF PLACES

#### 20

#### **ENROLLMENT**

Full scholarships covering the cost of the course will be awarded. Interested individuals should apply for enrollment at **programabai@bai-institute.es** <u>before September 30.</u>

#### **RECOGNITION OF CREDITS**

Participation in the course will result in the recognition of credits for the first semester of Workshop 1 (Design-Innovation-New Technologies) of the BAI Postgraduate Program, and the official recognition of participants as official BAI students.



# 1st BAI SYMPOSIUM

The BAI Institute, funded by the Government of Navarra, the Ministry of Housing and Urban Agenda, the Ministry of Industry and Tourism, and other institutions, is a National Reference Center for Industrialization, Robotization, and Innovation in Construction and Architecture. The BAI Institute's main objective is to conduct research on innovative technological systems applied to architecture and engineering and to provide training to architects, engineers, and construction professionals through cutting-edge design and construction methods. This effort aims to prepare companies and technicians at all levels, from vocational training to postgraduate studies, to respond to contemporary societal demands.

The BAI Institute conducts research in two complementary ways: first, by developing innovative solutions in partnership with qualified companies in the sector, and second, by designing real, innovative buildings or interventions on an architectural and urban scale within an "Advanced Projects Laboratory." Both approaches aim to leverage new technologies in innovative, critical, and humanistic ways to construct the best possible buildings, infrastructures, and cities within contemporary societies, which are more changeable than ever before.

Based on these premises, the First BAI Symposium aims to raise awareness of the principles that structure the National Center for Robotization and Innovation in Architecture. The symposium also aims to promote debate on the relationship between technological innovation, architecture, and the city. It will raise open questions that require open, holistic, critical, and transversal approaches. The symposium will provide a platform for architects, engineers, technologists, sociologists, economists, politicians, and other civil society representatives to raise critical questions within five interrelated fields of debate. These fields will shape the structure of the symposium and reproduce the formative structure of the BAI Program, which is based on five teaching and research modules: Design-Innovation-New Technologies; Environment-Construction-History; Thought-Criticism-Project; City-Economy-Society; and Advanced Projects Laboratory.

The First BAI Symposium, held over three days in Pamplona, will also feature the presentation of innovation projects developed by the inaugural cohort of students from the National Robotics Center during the M-Zero workshops (October-November 2025).

### KEY FACTS ABOUT THE 1st BAI SYMPOSIUM

### **DATE & LOCATION**

### November 19th-21st

Arms Room of the Citadel of Pamplona

### **DIRECTORS**

### Francisco Mangado

Extraordinary Professor at ETSAUN and Academic Director of BAI

#### **Eduardo Prieto**

Professor at ETSAM-UPM and Director of Programs at BAI

#### **REGISTRATION**

Admission is free, but prior registration is required. Register <u>before November 10</u> at **simposiobai@bai-institute.es** 

### **RECOGNITION OF CREDITS**

Those enrolled in the BAI Program who participate in the symposium will receive proportional credit for Modules 2, 3, and 4.

### PROGRAM FOR THE 1st BAI SYMPOSIUM

#### TABLE 1

'Design-Innovation-New technologies'

#### TABLE 2

'Environment-Construction-History'

#### TABLE 3

'Thought-Criticism-Project'

### **TABLE 4**

'City-Economy-Society'

#### TABLE 5

'An Atlas of Contemporary Architecture'

more information on the following page >>



## TABLE 1: 'Design-Innovation-New Technologies'

One of the BAI Institute's fundamental objectives is to create an environment that fosters creative interaction between architecture and industry. The first panel of the First BAI Symposium will critically evaluate new tools associated with the "digital craftsmanship" paradigm, including 3D printers, robotic arms, computational design software, and other methods of industrialization, prefabrication, and execution control. Rather than approaching the relationship with technology from the perspective of simple adaptation or submission, the symposium will explore the pragmatic and ethical control of technology through architecture. The fundamental question is: How can we harness the potential of new technologies for design to improve people's lives?

### TABLE 2: 'Environment-Construction-History'

This roundtable discussion will focus on how construction methods, systems, and materials have evolved over time to enable the creation of exceptional architecture. Special attention will be given to environmental and energy considerations, not merely as concepts linked to economic sustainability, but as ideas that have led to valuable design solutions. We will critically analyze aspects of the environmental and construction history of architecture, as well as the avant-garde trends currently shaping architecture from environmental and construction perspectives. Our goal is to establish a fruitful dialogue between different solutions and historical moments, and to pursue a deep understanding of construction innovations.

## TABLE 3: 'Thought-Criticism-Project'

At the BAI Institute, technology will be critically evaluated from cross-disciplinary and humanistic perspectives. This broad temporal approach allows for a better understanding of the architect's role today, past and present architectural thought, the fundamentals of architectural criticism, the relationship between thought and action, and the relationship between architecture and technology.

# TABLE 4: 'City-Economy-Society'

What are the demands of contemporary society? What about today's cities? What are their economic principles? How can architectural projects be approached from the perspective of social challenges? From the perspective of management? These are questions that require knowledge that is currently lacking in architectural training. That is why the BAI Institute has given them special importance in its program, and why they will also be addressed at the fourth roundtable of the First BAI Symposium. The symposium will present the complex and changing reality surrounding architects today. This reality must be understood in detail to accurately shape responses and give meaning to formal and technical work. Otherwise, it risks falling into a vacuum or becoming diluted into uncritical positions.

# TABLE 5: 'An Atlas of Contemporary Architecture'

The architecture project at BAI will synthesize all imparted knowledge and function as an open, cross-disciplinary workshop. Students will participate in ongoing projects, working alongside architects, engineers, technicians, and industrialists. Through 1:1 scale models, students will work as if in a testing laboratory for innovative solutions inspired by the Institute. These solutions will seek constructive, environmental, economic, and social endorsement in reality. Based on this premise, the final panel of the first BAI symposium will discuss valuable experiences in architectural innovation and industrialization from the perspective of those involved.

# MADRID-BARCELONA SEMINARS 'THE QUESTION CONCERNING TECHNOLOGY'

Following the same theme that guided the presentation of the BAI Institute at La Casa de la Arquitectura in Madrid, "The Question of Technique," two technical seminars will be held in Madrid and Barcelona to raise awareness among architects of BAI's meaning, teaching, and research activities. The seminars will present some of the content developed at the First BAI Symposium in an organized, thematic, open, and critical approach. Both BAI professors and managers, as well as local architects or engineers, will be featured.

### **DATE & LOCATION**

#### December 11st

Arquia Fundation in Madrid

### December 18th

Official Association of Architects of Barcelona





























