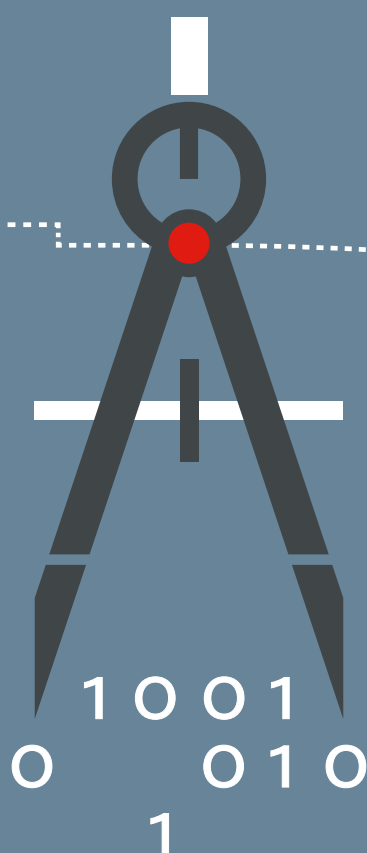


Façades Architecture Construction Engineering 2023

5th edition
Advanced course on innovative building façades



CREDITI FORMATIVI
for engineers
chartered in Italy
(Ordini professionali)

Façades Architecture Construction Engineering 2023 - 5th edition

Advanced course on innovative building façades

Description

Eurac Research offers a high specialization training course on Façade Architecture, Construction and Engineering (FACE).

FACE aims at delivering thorough education for technical designers and consultants operating in the façade industry to help them keep pace with a constantly evolving market. The initiative is open to researchers and freelance professionals working in the same industrial field.

Joining FACE allows for a boost in multidisciplinary competence for façade professionals. The course provides insights into the contemporary façade market industry and enables technical designers and consultants to manage complex projects both at organizational and technical level. The program covers architectural concepts, functional requirements and the related technical skills based on a cross-sectorial and international approach.

Expected results

- Train well-rounded façade professionals able to operate at practically any step of the façade design and construction value chain
- Provide technical insights into the sector of complex building façades
- Develop independent research on façade design innovation
- Take part into several design challenges together with fellow colleagues from the most relevant façade design and manufacturing firms, as well as well-know research institutions
- Build awareness of the challenges ahead of the façade industry

Job prospects

FACE alumni can actively contribute in innovating industrial processes within façade production and construction companies or further research on façade design within research institutions and as technical consultants.

FACE provides a façade design toolkit with a wide application potential in façade companies, from R&D to buy and sales, from technical consultancy to façade production management.

Trainers

FACE trainers are outstanding professionals in the field of façade design, construction and operation, as well as experts and scholars developing disruptive research in the areas of façade adaptivity, flexibility, digital design and service development, circular economy for the built environment, design for manufacturing and assembly and façade industrialisation.

Some of our outstanding trainers from the past editions:

- **ARUP Italy:** Matteo Orlandi
- **Pichler Projects:** Harald Spitaler, Alessio Passera
- **Reynaers:** Tommaso Pieraccini
- **glassAdvisor:** Luca Papaiz
- **Living Future Europe:** Carlo Battisti
- **Focchi:** Luca Nicolini
- **Skanska:** Saverio Pasetto
- **Politecnico di Milano:** Angelo Lucchini, Alberto Speroni
- **Politecnico di Torino:** Fabio Favoino
- **EOC:** Damian Rogan
- **TU Delft:** Thaleia Konstantinou, Juan Azcarate Aguerre
- **TU München:** Philipp Molter
- **UNICMI:** Paolo Rigone, Lara Bianchi, Valentina Ferrari
- **Universität Innsbruck:** Rainer Pfluger
- **University of Sydney:** Eugenia Gasparri
- **South Denmark University:** Nebojsa Jakica
- **Eurac Research:** Annalisa Andaloro, Stefano Avesani, Marco Larcher, Ingrid Demanega, Annamaria Belleri, Giuseppe De Michele, Simone Torresin

Contents of the course

-  **UNIT 01 – FAÇADE PHYSICS**
From 03 to 07 October 2023
On site: Bolzano/Bozen
- Energy performance**
- Façade performance modeling and simulation
 - Condensation risk of critical nodes
 - Window wall construction
 - Advanced glazing systems and modeling tools
 - Laboratory visits and site visits
-  **UNIT 02 – FAÇADE TECHNOLOGY**
14, 16, 17, 18, 21, 22 November 2023
Online
- Design general**
- Conventional and advanced façades
 - Energy renovation of existing façades
 - Curtain walls case studies
 - Timber based façade systems
 - Steel based façade systems
-  **UNIT 03 – FAÇADE MANAGEMENT AND LIFE-CYCLE**
12, 14, 15, 16, 19, 21, 22 December 2023
Online
- Operations, Circular economy and life-cycle management**
- Maintenance, cleaning, diagnosis and access systems
 - Façade leasing
 - Servitization of façade – Envelope for service
 - Circular economy in the façade industry
 - Life-cycle assessment principles, methods
 - Façade life-cycle assessment
 - Principles of life-cycle approach in façade design
-  **UNIT 04 – CIRCULAR FAÇADES**
16, 18, 19, 20, 23, 25, 26 January 2024
Online
- Design and workshops**
- Circular façade design principles
 - Envelope commissioning
 - Performance control systems
 - Sustainability, resilience and biomimicry
 - Fixings and anchoring in timber buildings
 - Workshop on circular façade design
-  **UNIT 05 – FAÇADE PHYSICS + INDUSTRIALIZATION**
From 28 February to 02 March 2024
On site: Bolzano/Bozen
- Design and laboratory unit**
- Daylighting and acoustics
 - Façade ventilation
 - Adaptive façade systems
 - Industrialized façade design
 - Curtain wall case studies
 - Workshop on industrialized and adaptive façade design
 - Site visits
-  **UNIT 06 – SITE VISITS**
From 20 to 22 March 2024
On site: Milan
- From design to construction process**
- Glass statics
 - Façade statics
 - Site visits in and around Milan
-  **UNIT 07 – PROJECT WORK CLOSURE**
From 08 to 10 May 2024
On site: Bolzano/Bozen
- Design unit**
- Hackathon
 - Site visits
 - Hackaton closure
 - Final event with public presentations

COURSE CERTIFICATION

- *Crediti formativi* for engineers enrolled in the Italian *Ordini professionali*
- Certificate of attendance and course completion

LANGUAGE

English

DURATION

150 hours

DATES

- **Course duration:** October 2023 to May 2024
- **Final event:** May 2024

LOCATIONS AND COURSE ATTENDANCE

- **On site units:** Bolzano and Milan (Italy)
- **Online units:** Zoom or other platform with recordings made available
- **Course attendance** is mandatory to achieve course certification
- **Absences** (online and onsite) should be kept to a minimum and shall be duly justified

ADMISSION AND REGISTRATION

Participation is subject to admission procedure and payment of a tuition fee covering organizational costs. Places are limited.

Qualification requirements: Bachelor / Diploma of Architecture, Architectural Engineering, Civil Engineering or similar studies or related professional experience. Application with CV and motivation letter.

- **Sign-up fee to be paid upon enrollment confirmation:** 1.950 €

MAX NUMBER OF TRAINEES

20

TARGET GROUP

Technical staff and R&D in façade manufacturing and system supply companies, general contractors in the field of façade construction, technical consultants and independent façade professionals, early stage researchers in façade design, engineering and performance driven optimization

KEY TOPICS

- Façade Design + Architecture + Construction + Maintenance
- Façade value chain and supply chain management
- Project planning, development and commissioning
- Life-cycle and circularity
- Performance design and measurement

SCIENTIFIC COORDINATION

Annalisa Andalaro, Eurac Research

TEAM

Eurac Research

INFORMATION

Marco Cecchellero, Eurac Research
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INFO AND SUBSCRIPTION

FACE - Façades Architecture Construction Engineering

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