

# 3D Concrete Printing

## Erasmus+ Blended Intensive Program

**Paris & Orléans, France**  
**26 May - 5 June 2026**

Take part in a short theoretical and practical training around 3D printing from architecture to printing

Learn about the benefits and impact of the 3D printing on the environment, by reducing the quantity of materials printed and using low-carbon inks



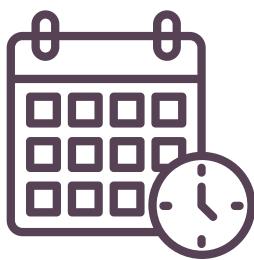
Experience exciting social events and cultural in vibrant cities of Paris and Orléans

Earn 3 ECTS

Attend virtual lectures and work in teams on projects



Co-funded by the European Union



## Tentative program

*may be subject to changes*

### Virtual part of the program:

*Date and time of the virtual component will be announced soon.*

### Face-to-face part of the program includes the following activities:

#### [ WEEK 1 ] 26 - 31 May, 2026

Date	Location	Morning activity	Afternoon activity
Monday 25/05	Cachan	Arrival	
Tuesday 26/05	Cachan	Welcome meeting & Project Design : design and conception and 3D modeling	Field trip / visit
Wednesday 27/05	Cachan	Lecture and practical work: Cementitious materials, Rheology, Application to 3D concrete printing	Optional cultural activity or Free time
Thursday 28/05	Cachan	Project Design in Lab: Mortars formulations	Field trip / visit
Friday 29/05	Cachan	Project Design in Lab : Mortars formulations	Free time
Saturday 30/05	Cachan	Free time	Free time
Sunday 31/05	Orléans	Transfer from Cachan to Orléans / Visit	

#### [ WEEK 2 ] 1 - 5 June, 2026

Date	Location	Morning activity	Afternoon activity
Monday 01/06	Orléans	Lecture and Practical work: rheology	Cultural visit / activity
Tuesday 02/06	Orléans	Lecture and Practical work: robotic, printer installation, experimental protocol	Project Design 4 : Finalisation of the design and modelisation of the object / 3D modeling
Wednesday 03/06	Orléans	Labwork 2 : Printing / preparation of final presentation	Labwork 3 : Printing / preparation of final presentation
Thursday 04/06	Orléans	Labwork 4 : Printing / preparation of final presentation	Labwork 5 : Printing / preparation of final presentation
Friday 05/06	Orléans	Project Final presentation	Closing ceremony Travel back to Paris

**\*\*\* End of the program \*\*\***

# Content

## Learning outcomes

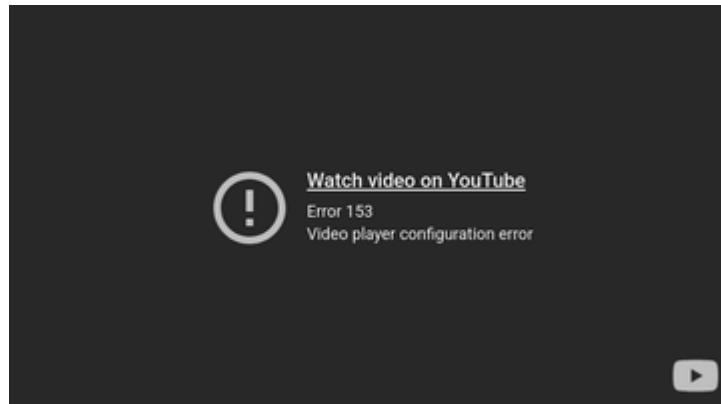
At the end of the program, students will be able to:

- Design and print a complex shape.
- Formulate and characterize a cementitious ink.
- Formulate and characterize an alternative ink by replacing a percentage of cement with an industrial by-product or an addition and the natural sand by recycled one.

## Total Workload

62 hours (virtual and face-to-face)

## Watch student testimonials





## Who can participate

- Academic: open to Bachelor and Master's students in Civil Engineering and Architecture
- Language : English level B2.
- Prior knowledge: strength of materials, physico-chemical analysis methods, characterization of mechanical properties of materials, materials science, modeling, computer science.
- Students must come through the Erasmus scheme.



## ECTS and Evaluation

Upon completion of the program, students will earn 3 ECTS. The assessment will be based on a final presentation.



## Recognition



A certificate of attendance will be provided to all participants.

A certificate of completion will be provided to successful participants. Recognition and credit transfer to home university will be possible.

# Practical information



## Accommodation

[ Week 1 in Cachan ]

Accommodation options may include student residences on campus, subject to availability.

Additional options are available in Paris and nearby cities.

[ Week 2 in Orléans ]

Several affordable accommodation options are available in the city center.



## Transportation

Participants are responsible for all travel arrangements between their home country and France.

Trips between Paris and Orléans are covered by ESTP.



## Fee

The program is free of charge as it is conducted under the Erasmus+ program.

Students are responsible for their own accommodation, meals and personal expenses. Student expenses may be covered by an Erasmus grant (individual and travel assistance) provided by the home institution.

# 2026 APPLICATIONS NOW OPEN

Application deadline:  
February 16, 2026



## How to apply

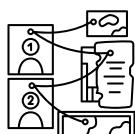
### Step 1

Applicants must provide the following application documents to their Home Institution's Erasmus Office:

- o A CV in English
- o English level certificate (provided by home institution)
- o A copy of the latest transcript of records translated in English
- o A motivation letter stating why you would like to participate in this Erasmus+ BIP (1 A4 page maximum, written in English)
- o A copy of a valid EU ID/Passport

### Step 2

The Erasmus office sends us the applications along with a nomination sheet completed with the name and personal details of all applicants.



## Selection and Enrolment

Students will be selected by the BIP's academic coordinators based on the following criteria:

- academic results (transcripts of records)
- suitability of academic background
- motivation
- level of English language proficiency

Students will be notified of the selection results by February 27th. Selected students will be contacted to start the enrollment process.

# Meet the team

## Academic coordinators

- Dr. Eliane Khoury, Assistant Professor in Civil Engineering (ESTP)
- Dr. Céline Florence, Head of Concrete Materials Engineering Chair (ESTP)
- Pr Sébastien Rémond, Full Professor (University of Orléans)
- Dr. Szymon Skibicki, Assistant Professor (West Pomeranian University of Technology)
- Dr. Libor Topolář, Associate Professor (Brno University of Technology)
- Dr.-Ing. Bartłomiej Sawicki, Research Associate (Technische Universität Braunschweig)

## Administrative support

For any questions, please contact Ms. Naoil Bendrimia, Erasmus Coordinator:

Email: [nbendrimia@estp.fr](mailto:nbendrimia@estp.fr)

Tel: +33 (0)1 49 08 24 66

## BIP Partners

- West Pomeranian University of Technology
- Polytech Orléans, University of Orléans
- Brno University of Technology
- Technische Universität Braunschweig
- ESTP, Grande école d'ingénieurs de la construction (coordinating institution)
- Concrete materials Engineering Chair (IdB)



West Pomeranian  
University of Technology  
in Szczecin



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Université  
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POLYTECH  
ORLÉANS

