

Summer School Building with Earth 26 - 30 August 2024

Brussels

Organized by

BC studies & BC materials
Faculty of architecture La Cambre Horta ULB

In collaboration with

Hasselt University, Living Lab earth brick
Atelier Kara
Acroma



PRESENTATION

To this day, raw earth appears in only a fraction of the projects built in Europe. As such, it is rarely included in the education of students in architecture. Yet, this material is integral to our vernacular architecture - even if this has been forgotten in (too) many regions. And more importantly, it presents a deeply ecological character: locally available, unfired, recyclable and reusable - not to mention its applicability in structures and its contribution to good physical properties for the building. As such, earth represents a crucial asset in construction and architecture, as we are looking to make them sustainable.

Hence this summer school's objective: to give the opportunity to learn to build with earth the only way it works - with your own hands. More precisely, this 1-week program aims to offer a good opportunity to dive deeper into the world of earth construction, and experience for yourself various earth techniques that are commonplace in the present-day practice.

What is earth, as a material? What are its properties? How is it rooted into our vernacular architecture? What does contemporary architecture in raw earth look like? How do you assess the potential of a local earth? How do you use earth to build in rammed earth, blocks, and to make plasters?

We will answer these questions through a combination of lectures, visits and hands-on workshops, led by experienced tutors and practitioners. You will be part of a mixed group of (approximately) half students, half professionals, from all over Europe (and even beyond!).

[Here](#) you can find an impression of last year's edition.

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-[BC studies](#) & [BC materials](#)
-the [Faculty of architecture La Cambre Horta ULB](#)

In collaboration with
-[Living lab Earth brick](#) (Hasselt University)
-[Atelier Kara](#) (Timur Ersen)
-[ACRUMA](#) (Arianna Fabrizi de'Biani)

Application deadline: June 30th 2024 on the [website of BC studies](#).

WHO CAN APPLY?

- Students: Bachelor (recommended: min. BA3 level), Master, PhD
- Professionals: no age limit, just be young at heart!

Keep in mind that the work during the 3 technical training days will be physical. Also, note that the visit day will be done by bike (provided).

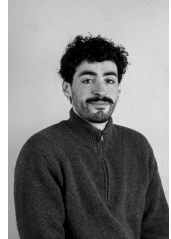
BC Architects & Studies & Materials

BC studies is a non-profit research and education laboratory investigating the material environment through processes of construction and production. BC studies manifests itself in teaching & education, consultancy, workshops and published research.

BC studies regularly collaborates with universities such as ULB, RWTH Aachen, UHasselt and KULeuven.

BC studies aims to spread knowledge around geo-based and bio-based building materials. For this summer school, BC studies organises the practical and pedagogical part.

<https://bc-as.org/studies>



BC Materials, an emanation of BC architects, is a Brussels-based pioneer cooperative producing raw earth building products, using mainly local excavation earth and recycled products.

The BC Materials team will join forces with the other tutors to share their knowledge on the different earth building techniques.

<https://bcmaterials.org>

rammed earth

Timur Ersen (Atelier Kara) is a French/Turkish artisan and architect. He studied at the School of Architecture of Lyon as well as at the EPFL (Federal Polytechnical School of Lausanne). After graduating in architecture, he worked eight months as an artisan for the visionary rammed-earth craftsman Martin Rauch, especially on the Ricola Herb Center.

In 2017 Timur started atelier Kara, a company that focuses on constructing newly built rammed earth projects. He has completed several exemplary contemporary rammed earth constructions, among which Atelier Luma in Arles.

www.timurersen.com



clay plaster

Arianna Fabrizi de' Biani is a Belgian/Italian artisan in clay plaster and a graduate from the ULB Faculty of Architecture. Her final project, the Xewa Sowé orphanage in Benin, provided her with an intense earth building experience and was selected for the Terra Award in 2016. Today, Arianna leads her Brussels-based company ACRUMA, whose main aim is to apply and promote clay- and lime-based plasters. As well as working on site, she helps architects, contractors and self-builders to choose and to apply natural plasters.

www.instagram.com/acruma_ariannafdb



earth bricks

Nijs de Vries will represent the Living Lab Circular Economy "From Earth to value", which aims to contribute to the further implementation of earth block masonry. Nijs is a Dutch architect and researcher based in Antwerp. He participated in the second edition of the postgraduate Building Beyond Borders themed "Architecture of Extr-a-ction." This program emphasised responsible construction practices within a context of scarce resources. Presently, he is pursuing a PhD research at the Faculty of Architecture and Arts of Hasselt University. His research focuses on how architects, clients, and end-users evaluate and experience earth block masonry and which considerations are made concerning its implementation.

www.livinglabearthblocks.be



PROGRAM

Monday August 26th

Introduction

General discovery of earth as a building material, through lectures, workshops (Carazas tests) and a presentation of BC Materials' premises.

Field tests of a natural earth mix to recognize its type and assess its possible uses in construction, through lecture and hands-on exercises.

Tuesday, Thursday, Friday August 27th, 29th, 30th

Parallel training workshops

In addition to the technical training itself, each workshop day starts with a 1-hour lecture, including a Q&A session, covering the use of raw earth construction and architecture.

The rest of the day is dedicated to learning one specific earth technique:

- rammed earth
- blocks: adobes + compressed earth blocks + vibro-compacted earth blocks + masonry
- earth plasters

Wednesday August 28th - Projects visits

Visits of relevant recent projects in Brussels that include geo-based / earthen (and bio-based) materials.

| PROGRAM | | Monday 26/8 | Tuesday 27/8 | | | Wednesday 28/8 | Thursday 29/8 | | | Friday 30/8 | | |
|--------------------------------|----------|--|----------------------------------|----------------------------------|---------------------------------|--------------------------|--|----------------------------------|---------------------------------|--------------------------------------|----------------------------------|---------------------------------|
| | | | Rammed earth (Timur + Bregt) | Clay Plaster (Arianna + Anis) | Earth Blocks (Nijs + Jasper) | | Rammed earth (Timur + Bregt) | Clay Plaster (Arianna + Anis) | Earth Blocks (Nijs + Jasper) | Rammed earth (Timur + Bregt) | Clay Plaster (Arianna + Anis) | Earth Blocks (Nijs + Jasper) |
| 09h - 10h | LECTURE | Icebreaker / Intro lecture: (week program + Unifred earth (BC architects & Studios & Materials)) + Presentation tutors | Lecture 1 (Atelier Kara / Timur) | | | Project visits @Brussels | Lecture 2 (BC: Bregt Hoppenbrouwers + Anis Saoudi) | | | Lecture 3 (Acroma / Arianna Fabrizi) | | |
| 10h-10h15 | GYM | | gym | | | | gym | | | gym | | |
| 10h15 - 13h15 | WORKSHOP | Tour of site + showroom + field tests | A | B | C | PICNIC / LUNCH | A | B | C | A | B | C |
| 13h15-14h15 | LUNCH | | LUNCH | | | | LUNCH | | | LUNCH | | |
| 14h15-17h15 | WORKSHOP | Carazas + Cluquet grid | A | B | C | Project visits @Brussels | A | B | C | A | B | C |
| 17h15-17h30 | GYM | | gym | | | | gym | | | gym | | |
| Drink at Brasserie de la Sonne | | | | | | | | | | | | |

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RESOURCES

The earth used during the summer school is provided by BC Materials and comes from excavation works in the Brussels Region; it is thus local and recycled. All other materials (gravel, sand, clay and straw) come from Belgium, most of them from the Brussels Region itself.

After the summer school, if there are some discarded materials from the built prototypes, they will be recovered and reinserted into the working cycle, for other future applications at BC Materials.

Overview of the past editions

Have a look at the picture albums on our [Facebook page!](#)

LEARNING OUTCOMES

At the end of this summer course, participants will be able to:

- contextualise the use of earth in architecture and construction, over time and in contemporary architectural practice;
- test a natural earth mix to assess its possible uses in construction;
- implement 3 techniques at a basic level.

PRACTICALITIES

Location

The summer school takes place at BC Materials' production hall, in the Tour & Taxis area in Brussels: Avenue du Port 104

1000 Brussels, Belgium

(for the access details, check the video on <https://bcmaterials.org/contact-us>)

Lectures and lunches will take place in the building of Bruxelles Environment on the Tour et Taxis site.

Inscription deadline: June 30th 2024

Price for the one week summer school will be 665 € incl. VAT (student price); 850 € + VAT (professional price).

Brussels people receive a reduction of 30%: student 465 € incl. VAT; professional 595 € + VAT.

If you register as a student, please send us a proof of your status (e.g. copy of present student card).

If you register as a Brussels-based participant (i.e. domicile in Brussels region), please send us a proof (e.g. residence certificate from Irisbox).

These documents should be sent to info@bcstudies.org.

This price does include all lunches.

It does not include dinner and accommodation: these will need to be arranged by the participants.

Cancellation until July 1st included: 100 % refund

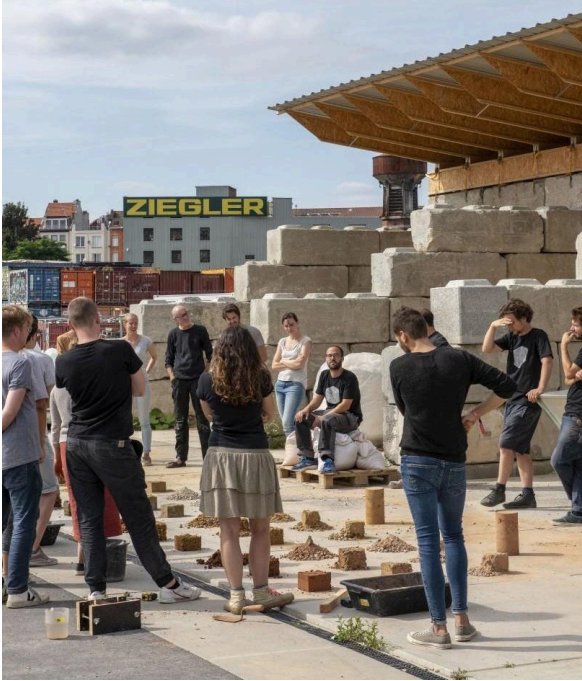
Cancellation from July 1st: no refund

Soon after registration, you will receive a document with detailed information and a FAQ.

At the end of the summer school you will receive:

- a certificate of attendance;
- an invoice.

For questions: mail to info@bcstudies.org with topic: Summer School question.



Accessibility

Some spaces are only accessible through stairs, including BC's offices (used for a few activities), the room for morning lectures and the places visited on the 3rd day. But we have already welcomed a participant in a wheelchair in the past, using help from the group. Contact us to evaluate the practicalities adapted to your specific situation.

Language

The summer school will be held entirely in English.

Participants

Registration is limited to max. 48 participants

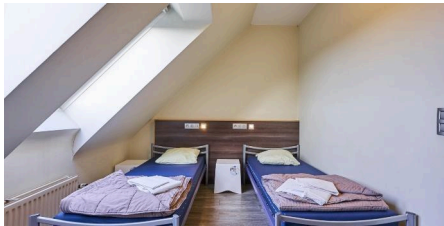
Accommodation: recommendations

You may want to check the following websites:

<https://lesaubergesdejeunesse.be/en/brussels-generation-europe-youth-hostel>

<https://lesaubergesdejeunesse.be/en/jacques-brel-youth-hostel>
www.hostelworld.com

www.meininger-hotels.com/fr/hotels/bruxelles/hotel-bruxelles-centre



A Whatsapp group will also be created, where you will be able to contact the other participants. In particular, you will be able to post a call to share accommodation with (an)other participant(s).

TRAVEL

In order to stay on the ecological side, in line with this Summer School topic, may we suggest that you explore other means of transportation than the plane, whenever possible? Indeed, airplane travel comes with an enormous ecological tag. To get an overview of the existing alternatives, you could use for instance the website www.rome2rio.com.

In case you take a plane, may we similarly suggest that you consider a carbon compensation of your trip. This can be done for instance via <https://greentripper.org> or www.myclimate.org.

Thank you very much in advance!

Free time

If you have some energy left in the evening, the Tour & Taxis site itself is a vibrant place to hang out! Check out the following links:

<https://tour-taxis.com/fr/eat-drink/>

<https://be-here.be>

www.brasserieidelasenne.be



Moreover, Brussels, as the capital city of Belgium, obviously offers a great range of places to go out for dinner and drinks. Why not stay here for a weekend in addition to the summer school, for a citytrip?

Find some inspiration on www.visit.brussels/en/visitors!



We are looking forward to welcoming you in Brussels,
giving you the opportunity to train yourself in earth construction,
and getting you dirty at it!

