

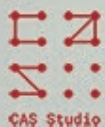


**7<sup>th</sup> to 11<sup>th</sup> September 2020**  
FCT/UNL Caparica Campus / ONLINE



**REEDCAMP®**  
3<sup>rd</sup> international summer school  
earth architecture

organization



partners



KAIROS LAB

info / registration:



[www.cas-at.com](http://www.cas-at.com)  
[info@cas-at.com](mailto:info@cas-at.com)

# REEDCOB

WORKSHOP PROGRAM

ONLINE

international summer workshop  
architecture with reed and earth

7<sup>th</sup>-11<sup>th</sup> September 2020

7<sup>th</sup> to 11<sup>th</sup> September 2020  
FCT/UNL Caparica Campus / ONLINE

3<sup>rd</sup> international summer school  
earth architecture

# REEDCOB®

organization



KAIROS LAB

info / registration:



[www.cas-at.com](http://www.cas-at.com)  
[info@cas-at.com](mailto:info@cas-at.com)

## INTRODUCTION

The 3<sup>rd</sup> **REEDCOB** international summer workshop 2020 will be held online with part of the program at the campus of the Civil Engineering of the FCT/NOVA University of Lisbon. The period will be from the 7<sup>th</sup> to the 11<sup>th</sup> September. It is organized by CAS Studio Architecture in partnership with the Civil Engineering Department of the FCT/NOVA University.

Portugal has a historical reputation on earth buildings namely rammed earth and adobe. At this moment there is an increasing interest about earth constructions and its environmental, economic and social positive impacts.

## OBJECTIVES

To promote a building technology called “ReedCob” made with earth and reed canes, as an excellent sustainable technology to small/medium size buildings. This technology started to be developed by CAS Studio and the Eng. Fernando Cartaxo in 2013 and then in 2014 with the fundamental contribution for M&A of the Civil Engineering Dept. of the FCT/NOVA of Lisbon.

After 4 years of monitoring and assessment and construction developments this technology its being developed in the architectural point of view by CAS Studio. Due to its characteristics, this technology can have important impacts in the social, cultural economical and ecological aspects both in developing and developed countries.

Furthermore, during the workshop other earth based techniques will be introduced such as adobe, rammed earth, cob, etc.

## PROGRAM

The workshop will be developed during 5 mornings, including lectures from professional experts and academics, simple practical exercises to be made remotely, lab sessions about the technology of reed canes and earth and its application in contemporary architecture.

### Practice and Theory classes

- Practical sessions with hands on dirt exercises;
- Lectures about earth construction principles, earth architecture, ecological architecture, vernacular and contemporary architecture;
- Laboratory tests about mechanic and thermal resistance;

## QUICK INFORMATION:

### COORDINATION

CAS Studio: Paulo Carneiro, Alina Jerónimo  
FCT/NOVA: Paulina Faria, Vitor Silva

### PARTICIPANTS

The workshop it's oriented mostly to architecture and engineering students and researchers interested on sustainable building technologies.

### DATES

7<sup>th</sup> September to 11<sup>th</sup> September 2020

### WORKSHOP FEES:

130 Euros\*  
(early registration until 15<sup>th</sup> August)

180 Euros\*  
(late registration 16<sup>th</sup> August - 6<sup>th</sup> September)

\*VAT included

\* 2020 Registrations will have a 20% discount for the 2021 Summer workshop

### WORKSHOP LOCATION

ONLINE

### MORE INFO

PREVIOUS WORKSHOPS  
[www.cas-at.com/summerschoolpro](http://www.cas-at.com/summerschoolpro)

REGISTRATION / FAQ  
[info@cas-at.com](mailto:info@cas-at.com)

# ONLINE reedcob® schedule

THE TIME ZONE WILL BE:  
GMT+1 (LONDON/LISBON)

## SEPTEMBER 2020

---

### 7 Monday (EARTH - AN INTRO)

WELCOME / PRESENTATION	9:30 AM
L1-EARTH ARCHITECTURE INTRO BY PAULO CARNEIRO	10:00 AM
LAB1-EARTH MATERIAL BASICS BY ALINA JERÓNIMO	11:00 AM
PS1-EARTH PRACTICE BY CAS STUDIO	12:00 PM

---

### 8 Tuesday (STRUCTURE)

L2-EARTH PLASTERS/RENDERS BY PAULINA FARIA	9:30 AM
L3-EARTH STRUCTURAL ANALYSIS BY CARLOS CHASTRE	10:30 AM
LAB2 - MATERIALS RESISTANCE BY VITOR SILVA	11:30 AM
PS2-EARTH PLASTER EXERCISES BY CAS STUDIO	12:30 PM
SP1-STUDENTS PRESENTATION BY STUDENTS	13:30 PM

---

### 9 Wednesday (VERNACULAR)

L4-VERNACULAR ARCHITECTURE 1 BY MARWA DABAIEH	9:30 AM
L5-VERNACULAR ARCHITECTURE 2 BY HANAAA MSALLAK	10:30 AM
L6-VERNACULAR ARCHITECTURE 3 BY AHMED SAMI MOHAMED EL FAYOUMI	11:30 AM
L7-VERNACULAR ARCHITECTURE 4 BY ADEL FAHMY	12:30 PM

---

### 10 Thursday (COMMUNITY)

L8-PARTICIPATORY DESIGN1 BY MANAL EL-SAHAT	9:30 AM
L9-PARTICIPATORY DESIGN2 BY YUTAKA SHO	10:30 AM
SP2-STUDENTS PRESENTATION BY STUDENTS	11:30 AM
F-FILM ABOUT EARTH BUILDINGS THE FUTURE OF MUD	12:30 PM

---

### 11 Friday (CASE STUDIES)

L10-CONTEMPORARY CASE STUDY1 BY SEBASTIAN NIEMANN	10:00 AM
L11-CONTEMPORARY CASE STUDY2 BY ANNISA SHAHARIN	11:00 AM
L12-CONTEMPORARY CASE STUDY3 BY JOAQUIN KARCHER	12:00 AM
SP3-STUDENTS PRESENTATION BY STUDENTS	13:00 PM
FS-FINAL SESSION	13:30 PM

DISCOVER MORE AT:  
[www.cas-at.com/summerschoolpro](http://www.cas-at.com/summerschoolpro)

FAQ/REGISTRATION:  
[info@cas-at.com](mailto:info@cas-at.com)

## 7 Monday (EARTH - AN INTRO)



09:30 AM



09:30 AM

## 8 Tuesday (STRUCTURE)



09:30 AM



10:30 AM



11:30 AM

## 9 Wednesday (VERNACULAR)



09:30 AM



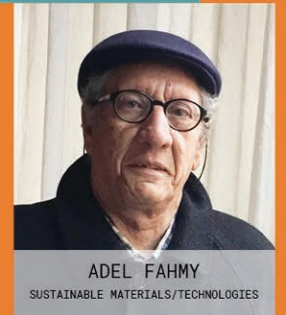
10:30 AM



11:30 AM



11:30 AM



12:30 AM

## 10 Thursday (COMMUNITY)



09:30 AM



10:30 AM

## 11 Friday (CASE STUDIES)



10:00 AM



11:00 AM



12:00 AM

## WORKSHOP

The workshop fee is:

130 Euros\* (early registration until the 15<sup>th</sup> August)

180 Euros\* (late registration 16<sup>th</sup> August - 4<sup>th</sup> September)

\*VAT (Value Added Tax) included

**To a better understanding of the theory and practical exercises the student should have (not mandatory) the following materials and tools:**

- 2 to 3 liters of earth (rich in clay, no organic matter) excavated 50cm from the surface
- 2 Liters of cleaned sand (0-2mm)
- 2 Liters of straw (wheat, oat, etc.) dried and cut (5 to 10cm)
- 1 Liter aerial lime
- 2 used floor tiles of aprox. 33x33cm

**- Each student must use safety equipment to their own responsibility:  
gloves, eyeglasses, tools and clothes ready to be get dirty!**



small mason trowel



tray



plastic/wooden trowel



33x33cm used tile



3 recycled bottles (750ml)



30cm ruler

## CONDITIONS

-Please note that is not possible to refund the workshop fee in case of withdrawal of the participation in the workshop due to reasons not directly attributable to the workshop organization.

-The registration and requests for information are made to: [info@cas-at.com](mailto:info@cas-at.com)

## 2019 WORKSHOP

The 2019 REEDCOB workshop had 38 participants from 12 nationalities:

- 2 Assistant Professors and 6 Students from Landscape architecture program, Faculty of Engineering, Ain Shams University Cairo, Egypt.
- 1 Assistant Professor/Researcher and 8 Students from the Faculty of Architecture, Architectural Engineering and Urban Planning of the University Catholic of Louvain, Belgium.
- 1 Lecturer/Researcher and 7 Students from the Institute of Urban Planning and Design, University of Stuttgart, Germany.
- 1 Professor from the Department of Architecture of the University of the Free State Bloemfontein, South Africa.
- 2 Lecturers and 6 Students from the Civil and Environmental Engineering Department, FCT/NOVA University of Lisbon, Portugal.
- 4 Architecture Professionals working in Qatar, Germany, France and Portugal.



















