ON OFF | ARCHITECTURE OF THE EARTH
_FALL 2023 // MATTER TO DATA STUDIO + WORKSHOP

2023 Fall studio
Architecture of the Earth
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"Architecture is sometimes polarized between two disciplines - art and technology. We try to apply this expression towards the architecture of the earth. We are now in the era of the 'tabula pronta' - where the earth is ready and there is no need for a blank canvas; we just have to live with it."

STUDIO Description:

ARCHITECTURE OF THE EARTH is a space to bring in harmony. A testing ground that seeks to connect new emerging technologies with nature to create a distinct yet familiar architecture. It is through this intimate encounter that we can understand, learn and unlearn, maybe then innovate.

Architecture of the Earth explores the creative resources that are shaped by the environment we inhabit. We need to learn to manipulate the existing ground with common forces and energies that constitute the spatial event, without causing irreparable damage. This will give rise to art and experiments that can be transformed into a new standard language of building across the world. This process of design will allow students to explore the immense complexities that are at play. It would also develop skills of observation and analytical outlook that architects need to develop to read the spaces that the principle generates.

Research Methodology:

Through analyzing the existing ground, a framework is set up to generate spatial ideas and construction techniques that can be alternative to the current standards. Local material nature, production methods and typical applications of ready-made constructive units are studied to then be reimagined with a few constraints of specific programs and a site.

Through an iterative design process of making, students develop from experiments to prototypes of discovered solutions, understanding the limitations of the materials and products they work with while exploiting their untapped possibilities. Empirical work is carried out both as scientists and artists - carefully monitoring each step and using improvisation as creative tool-encouraging productive discovery from experiments as a way of inspiration and evolution of the work.

From physical construction, to digital scanning, to audiovisual documents and instruction manuals, media - the necessary ally for design production and dissemination - is also understood as a site for creative exploration.

El FONDUCO, MENORCA, SPAIN

Architecture of the Earth is a development of the On/Off hybrid studio, between Hands-On models sessions and online classes, in which students will integrate research, fabrication and design. This studio will focus on imagining and designing a hotel in El Fonduco at Mahón, Menorca, Spain. [Site Location Link](#)

The port of Mahón has a significant place in the history of the world and its strategic location as part of trade routes for numerous cultures. After the fall of the Roman empire, the territory was part of an Arabic Islamic State, before being captured by the Ottoman empire. By the early 18th century, the island became a battleground for British and French claims, before eventually becoming part of the Spanish territory by the early 19th century.

The design of the hotel will be situated in one of the areas of this significant port town with careful attention paid to the history of the earth and also the emerging forces that are at play in the island.

Student Learning Outcome Objectives:

This course welcomes any student who has the ability to observe, question, react, test, fail and persevere; who is able to venture into the unknown and enjoy the space of uncertainty; who is able to work autonomously while sharing ideas and actions that build a collective project; and who is willing to have active participation in this adventure in the class and through collaborative online platforms.

This is a hands-on-line studio. Students are expected to work continuously, both independently as a coordinated online group, with and without the instructor. Google suite platform will serve to build a class diary where each student is responsible to share the evolution of the work and any other related materials that contribute to enrich the class conversations.

We will also learn some advanced 3D scan techniques, hardware and software, online through a series of workshops. Students will learn to study the site closely, suggest appropriate ideas and to 3D scan their proposal spaces (models) with some post-processing.

Students will have the opportunity to participate in an enriching experience involving academic and theoretical design and research followed by practical application of their concepts.

During the design phase, students will participate in seminars to expand their technical skills, and will start developing their ideas through iterative model studies, exploring intuitive design approaches.

The studio involves and connects physical and digital design methods, and includes case studies, models, drawings, engineering and construction, with potential for 3D printing and 3D scans, 3D printed molds, structural reinforcements, concrete casting, etc. Models and mockups as part of prior research is also encouraged.

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Deliverables:

All materials will be progressively produced over the course of the studio as essential parts of the research, helping the design effort versus serving as mere means of representation. Different media will be part of the experimentation agenda and students are encouraged to be creative with design and with the tools that help develop it.

→ Google Spaces OnlineDiary (Every class)

→ Working Models (Weekly basis_Design development phase)

○ Physical Models: from concept to construction: unlimited (minimum 10)
○ Photographic Material documenting models
○ 3D scans of models testing scale and context, translated into animations

→ Documentation (Semester final delivery)

○ of Spatial Experience
○ of Construction Process

→ *15 minutes of fame* as final video delivery. (Semester final delivery)

Schedule:

(Week 01 - 04 : Research & Design development / Week 05 - 10 : Final production & Documentation)

- **Week 01: Studio Introduction and Online Warm Up]**
  Presentation
  Set-up of online tools (Google Suite & Google Spaces):
  online communication and sharing of first ideas/ intuitions/ doubts.

- **Week 02: Topic Research & Case Studies**
  Student presentations and group discussion

- **Week 03-04: Mockup study**
  Model Mockups and Concept design of hotel.
  September 28(Thu) - October 3, 2023(Mon) (Tentative)

- ***Week 04: Mid-Term Presentations & Reviews [20 Oct]***

- **Week 05: Audiovisual Documentation kick off**

- **Week 6-10: Production**
  Online Submission* of Final Review Materials.

FINAL REVIEW - 12 December 2023

Portfolio Preparation/Final Digital Submission Video**

*Online submissions will be shared to all the Google space groups and show the work evolution. It should consist of a narrated audiovisual that explains the progress of the project plus a link to materials. These materials will be gradually taking the form of the final studio publication.

**Final Digital Submission: All final work completed as a requirement of this course is to be submitted to the Instructor digitally for final grading and documentary purposes; inclusive of all physical materials. Models and/or physical materials will need to be adequately photographed. Failure to submit material can result in an incomplete and/or lower grade.

Studio Program

Architecture of the Earth

- **FALL 2023**:

    Hands On-line studio:
    - Architecture of the Earth - Introduction and Guidelines
    - Site Analysis
    - Program description and Concept establishment

    Design:
    - Hotel Design and Program allocation (preliminary studies)
    - Workshop on 3D modeling and scanning

    Matter to Data:
    - Digitalizing the proposals
    - 3D post-processing
    - Work with final 3D model
    - Final work and portfolio submission