AN INTRODUCTION TO NATURAL BUILDING



A 7 DAY DIGITAL COURSE ON NATURAL BUILDING WITH EARTHEN MATERIALS (MUD)

OVERVIEW

Is nature trying to send us a message? Is the latest COVID -19 pandemic an outcome of our actions? This could be debatable – but what isn't is the need to relook at the way architects or future architects see their profession. Being part of an industry that contributes to 40% of carbon emissions, it is a collective responsibility as architects to shoulder some responsibility, to sit up and take note of the impact on the planet.

India is at the wake of a new era as the country rushes towards an idea of modernity and development. There is little or no thought given to the material used in question – embodied energy, origin, industrial processing, and health impacts are never considered. Most often cost, aesthetics, speed of construction carries are given priority. This model of construction is unsustainable and will have dangerous implications on the environment.

It is therefore an urgent need to investigate sustainable, low-energy solutions for new constructions. In the present scenario, earthen architecture plays a vital role in providing a viable solution that responds to the Sustainable Development Goals.

Mud as a material has been used as a construction material in India for thousands of years. The richness of the traditional know-how in ancient India extends into the mud structures varying across different landscapes from palaces to quaint mud dwellings. These are great examples of sustainability through simplicity. Mud construction is now seeing a revival in the construction sector today through its earth warriors and natural builders and as a result, there are an increasing number of contemporary mud structures being built that act as the catalysts for change.

COURSE SCHEDULE



Teaching Tools:

The course will be an online virtual course that will cover all the basics of building with mud including the various techniques of earthen construction with case studies around the world while being informed by the traditional vernacular of the country. The course will include interactive sessions with earth builders around the world to understand the versatility of the material and to gain a worldwide perspective of the material. It will encourage hands on participation from the students through design charrettes on virtual platforms and easy DIY sessions. The exercises will be supported by live demos, presentations, videos and additional reading material.

Project Outcome:

A clear and comprehensive understanding of the following:

- Earthen construction with an international and contemporary perspective
- Different construction techniques using mud
- Benefits of natural building
- Embodied energy and life cycle analysis
- Sustainability along the 3 verticals of environment, socio-cultural and socio-economic.

| Day 1 1.5 hours | Introduction & summary of the course | Ice breaker sessions, introduction of participants |
|--------------------|--|--|
| Day 2 2 hours | Introduction to Earthen construction around the world - techniques and know how | Exercise: Case study Analysis (location, technique) |
| Day 3 2 hours | Contemporary innovations to traditional techniques (prefabricated and poured earth) | Exercise I: Case study Analysis II (examples from different contexts) Exercise II: Design charrettes - context |

COURSE SCHEDULE



| Day 4 2 hours | Life cycle analysis and sustainability wheel | Exercise: Case study Analysis - life cycle & WOS of select projects | |
|--------------------|--|---|--|
| Day 5 2 hours | In conversation with - mud experts (local and international) | Exercise - Design charette (materiality and area programme) | |
| Day 6 2 hours | Presentation of various projects by Masons Ink - Process, road blocks and innovations | Exercise - Design Presentation | |
| Day 7 1.5 hours | Summary of the course | Presentation of participant projects in pre-defined format | |
| 7 DAY COURSE | | | |

13 hours

INR 3,500

All sessions will be conducted on Zoom

MODULE CURATOR

MASONS INK STUDIO

Masons Ink Studio is an all-encompassing design and construction firm with a special focus on sustainable architecture and Heritage Conservation. Their designs have thrived on strong principles of ecological sensitivity and minimising the impact on the environment. Known for their commitment to excellence, Masons Ink has won many accolades including the Deccan Herald Changemakers of 2020.



They have worked on a wide range of projects across multiple sectors and typologies ranging from large urban master plans to private residences. They believe that knowledge transfer plays a huge role in their responsibility as architects and so they conduct hands-on training courses and workshops for masons, professionals and students of architecture on sustainability and heritage conservation. This course is curated by the principal architect trained and specialised in earthen construction and sustainable habitats from CRAterre – the UNESCO chair of earthen construction, building culture and sustainable development.

MODERATOR

ANKIT B

Ankit B is an educator. With a will to educate today's youth about the Sustainable Development Goals and the importance of sustainability, Ankit started The Happy Llamas. Ankit has worked in India and Brasil with brands like Amazon, Nike, FIFA, Olympics (IOC), among others. Ankit will be moderating the sessions on all days of the course.

