

Title : Hack-A-Dome Workshop

Type : Digital Design and Fabrication to 1:1 Prototype Construction

Date : 5 - 9 June 2019

Location : Kalentzi, Epirus, Greece

Tutors : Iason Pantazis, Evangelos Pantazis - Topotheque Design Studio

Curation : P2P Lab in the context of Distributed Design Market Platform

Description

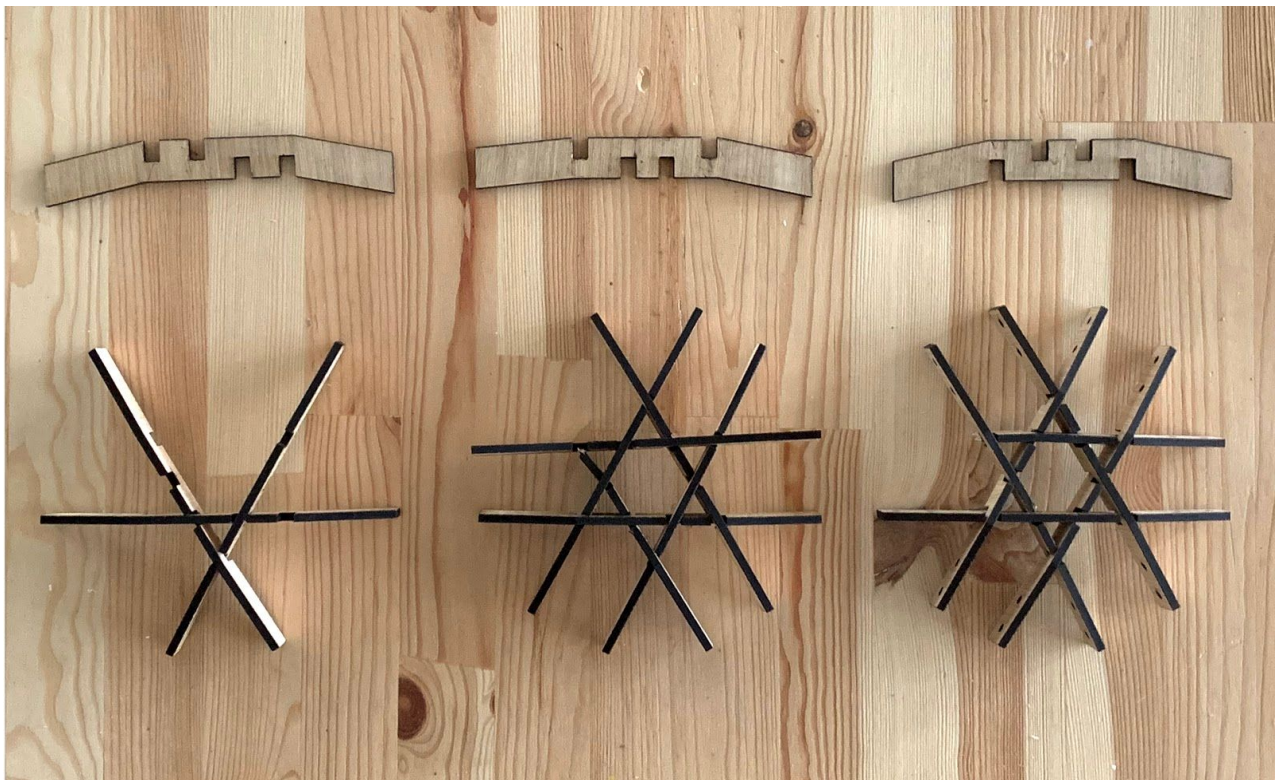
Topotheque Design Studio in collaboration with Fab Lab Ioannina invites every creative person to the Hack-A-Dome Workshop which will take place at Tzoumakers Lab in Kalentzi in Epirus region in Greece.

Hack-A-Dome Workshop is part of the Open Source Agricultural Workshop which is organised by P2P Lab for the Distributed Design Market Platform (<https://distributeddesign.eu/>). Program partners are the Institute of Advanced Architecture of Catalonia (IAAC), the Politecnico di Milano, the Fab Lab Budapest among others

From the vernacular construction technique of Pindos' Shacks and Buckminster Fuller's geodesic domes to open data and modern digital media, the participants of the workshop will have the opportunity to follow and co-design the construction of a self-supporting structure on a 1 : 1 scale through the familiarization with traditional techniques and modern technological means.

The workshop will foster an investigation of the design and construction of prototype nodes that make up the self-supporting structure through parametric digital design and fabrication (3D Printing, CNC Milling, Laser cutting) and through the use of traditional tools .

A special focus will be given to the solution of the nodes and to the reciprocal structure techniques, so that the participants can creatively hack and then construct the self-supporting structure.



The main objective of the workshop will be to provide the necessary know-how to the participants so that they will be able to create a construction based on their own hack, designed to their own standards and needs.

Last but not least, based on "Design Global, Manufacture Local" state of mind, the workshop designs and plans will become available on DDMP's open source platform at the end of the workshop towards the diffusion of design information and its updating and configuration by other makers, architects and engineers from all over the world.

Platforms:

Rhinoceros 3d, Digital Fabrication Techniques(CNC Milling, Laser Cutting, 3d Printing)

Participation:

Participation to the Workshop is free of charge within the Distributed Design Market Platform program and the Fab Lab Ioannina Sponsorship.No software knowledge is required.

Application form:

<https://docs.google.com/forms/d/e/1FAIpQLSfs4aaS1NoXU5PsIBBdYkIYMvRJ7qtShzxba8GHtifqdgzh5Q/viewform?fbclid=IwAR3-Jml-S7IETSziigmK6XVMoyy7qYibjdJuc--gmh9s1Ay3IQL7bFtvDHU>

Program:

Wednesday 05/06/2019

10:00-12:00

Presentation of the workshop

12:00-14:00

Getting to know the participants

14:00-15:00

Break / Lunch

15:00-18:00

Introduction at parametric design and digital fabrication

Thursday 06/06/2019

10: 00-14: 00

Design of parametric nodes for vaulted construction

14: 00-15: 00

Break / Lunch

15: 00-18: 00

Digital Fabrication (Laser Cutting / 3d Printing)

19: 00-21: 00

Presentation of prototypes by the participants

Friday 06/06/2019

10: 00-14: 00

Construction of the Dome on a 1: 1 scale
Assembling the nodes

14: 00-15: 00

Break / Lunch

15: 00-18: 00

Construction of the Dome on a 1: 1 scale
Beam construction and assembly quality control

Saturday 07/06/2019

10: 00-14: 00

Construction of the Tholos on a 1: 1 scale
Assembling joints and beams

14: 00-15: 00

Break / Lunch

15: 00-18: 00

Construction of the Tholos on a 1: 1 scale

Assembling joints and beams

Sunday 08/06/2019

10: 00-14: 00

Completion of construction

14: 00-15: 00

Break / Lunch

15: 00-18: 00

Presentation of the results of the workshop