

Team TUM

Chair of Architectural Design
and Participation
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Projektbeteiligte und Sponsoren



Bundesverband der Deutschen
Ziegelindustrie e.V.
www.ziegel.de

Fachschule für Bautechnik/
Meisterschule für Bauhandwerk
Robert Klier & Meisterklasse

Learning by Doing: Nubian Vault



Learning by Doing: Nubian Vault

Construction Workshop

The workshop aimed to provide students with a hands-on experience handling materials, developing construction techniques and skills.

Furthermore, the workshop acts as an extension of the participatory mandate of the Chair, allowing students themselves to participate in an actual build, to develop team skills and to better appreciate the potential behind participation in construction.

Over the course of a week, 18 students from both the Bachelor and Masters programmes built a leaning Nubian vault.

The Nubian vault was chosen, on the one hand, for its simple and highly efficient construction type and, on the other, to allow students to learn a range of applicable techniques and the full potential of the materials involved.

Through its parabolic-like structure the Nubian vault is different from other vault types. The bricks are layered lengthwise on an inverted catenary line where the forces do not create any bending moments.

This technique does not require any formwork and it is practical for areas where there is a shortage of material.



„The workshop has helped me to understand the challenges of building on site.“

Hands on Experience

Learning took place through building together, checking how to use materials, finding ways of turning basic construction materials into high quality building elements.

