

Continuous Curves, Rotating Forms: A New Approach to Ceramic Printing

What if clay 3D printing could move beyond stacked layers? Mark Meier's experimental rotary-axis process combines Rhino, Grasshopper, Python, and robotic fabrication to draw continuous ceramic patterns directly onto rotating 3D forms, creating remarkably light and intricate structures.

Rethinking Egyptian Crafts Through Parametric Design

At the German International University in Egypt, two Industrial Design theses used Rhino and Grasshopper to reinterpret traditional Egyptian crafts through computational design. Inspired by Mashrabiya woodworking and Talli embroidery, the projects explore how parametric workflows can expand design possibilities while keeping artisans at the center of the process.

Parametric Adaptive Shell for

an Autonomous Stock Handling Robot

Designed for a real-world logistics automation platform, this project explores how Rhino and Grasshopper can be used to develop adaptive industrial components that balance structural performance, mechanical constraints, ventilation, and manufacturability within a fully parametric workflow.

Waffle-Structured Chair: Exploring Robotic Manufacturing in Design Education

A team of DIA Master's students at Hochschule Anhalt explored computational design and robotic manufacturing by creating a full-scale, waffle-structured ergonomic chair, combining efficiency, ergonomics, and sustainability. Exhibited at Campus Fest 2025, the project showcased the potential of digital workflows and robotic fabrication in architectural education.

Digital Shingles: Interactive Robotic Shingle Facade Assembly

The project “Interactive Robotic Shingle Facade Assembly” explores how traditional Swiss woodcraft can be reimaged through digital technologies. This interactive installation invites visitors to customize shingle facade patterns via an intuitive interface and watch a robotic arm assemble their designs in real-time. The installation showcases the potential of robotics and parametric design to revive craftsmanship while promoting sustainable, adaptable architecture.

Digital Clay: A New Layer at the Natural History Museum

At the Natural History Museum’s new Fixing Our Broken Planet gallery, digital design meets sustainable craftsmanship through 3D printed ceramics. Using Rhino and Grasshopper, the team developed modular components that bring innovation to a heritage space without leaving a trace.

New Dawn: A Lamp That Lives,

Breathes, and Decomposes

New Dawn by Aga Blonska is a 3D-printed lighting piece that transforms microbial biopolymers into an evocative sculptural form, entirely modeled and fabricated within the Rhino and Grasshopper environment. Showcased at Milan Design Week 2025, the project reimagines material decay as design potential, marking a milestone in sustainable large-scale additive manufacturing.

From Code to Clay: 3D Ceramic Printing at 3D Clay Summer School

At the 3D Clay Summer School, designers and researchers push the boundaries of ceramic fabrication through robotic extrusion and computational design. Datura Sculpture showcases how parametric modeling and advanced toolpath scripting transform raw clay into intricate, organic forms.

The Talavera Project, Bridging Heritage and

Technology for a Sustainable Future

The Talavera Project aims to blend traditional handmade craftsmanship with digital fabrication, specifically robotic 3D printing. Inspired by Uriarte Talavera's historic techniques, the team used Rhino for 3D modeling and Grasshopper for slicing and optimizing printing.

Unlimited Space

This project explores the intricate movements of the human hand and how they translate into a captivating robotic performance.