

**IDEM303**

# Computational Fabrication and MetaMaterials

**Q1**

**B**

How can we use 3D printing to create new material behaviours and experiences? And how do we need to design to harness this technology effectively?

In this course we will dive into the inner workings of the 3D printer and learn how to achieve novel printed results.

With computational fabrication, we step away from the traditional way of working. Instead of designing a shape and applying a material to it, we will design the material properties. We apply the principles of Meta-Materials: achieving properties emerging from the designed structures and not just the base material itself.

You will use Rhino Grasshopper for both designing and controlling the 3D printer. The printing technologies used in this course are Material Extrusion and Material Jetting.

**Assessment: Group assignment & individual exam**

**Zjenja Doubrovski**

*“It is exiting to hack the 3D printing process, making the printer work in an unconventional way”*

