**ECO\_Trails**

The concept:

We were asked to Design a work of art which generate energy for the people who living in Mannheim city, in this proposal I am using passive design principles to cool down the temperature in summer and rise up the heat in winter inside sem public spaces in the proposed park in order to let people use these spaces in an effective way

Urban Landscape:

The air flow pattern to cool down the temperature were used as a planning tool to draw some pathway for people to explore the underground level of the park and to build more awareness about the hidden parts of the park

Architecture Design:

The free form grid shell were chosen a way to create a performative form that react to many condition and a form that were found by utilizing a set of algorithm which helps us to define this form which will be 3D printed later

Mechanical machines:

to save more energy during the construction process we will use analogue 3D printing which cost zero energy of electricity to run it

Construction:

The construction process consists of a network of steel cables which will be connected and then will hang sheets of knitted hemp multi layer fabric, which will be sprayed with a layer of concrete and clay.