



# Textile reinforced concrete – sustainability in concrete construction

## Content of the Project

Standard steel-reinforced concrete has conquered the construction world in the last 150 years. The secret to success is simple. Both materials are used according to their favorable properties. Steel for transferring tensile forces and concrete to transfer compression forces.

Unfortunately, the steel reinforcement corrodes. To protect this material, a high concrete cover is needed. Consequently, the dimensions of the concrete elements increase the environmental footprint. We need reinforced concrete, but we have to solve the durability. The solution is easy – just replace the reinforcement with a non-metallic material. One example is carbon, as you can see in the picture.

## Erasmus+ BIP

The international Team ENISE (France), VUB (Belgium), BOKU (Austria) and HAS (Germany) welcomes you to its exciting Erasmus+ Blended Intensive Programme in Augsburg, a historical city in Bavaria. The programme is a combination of online cooperation and a field visit in Germany.

Our aim in this project are further investigations of the innovative construction material. Therefore, we need your help. During the next semester (April – June 2023) we will start a project regarding standardization.

## What will you do and learn?

- You will develop sustainable concrete structures.
- You will work in an international group and compare best practices.
- You will learn about the latest trends in sustainable concrete constructions.

## Where will you be staying?

There will be reservations for a Youth Hostel in Augsburg. It will take just a few minutes to the university. You will receive more information later.

## What does your field visit to Augsburg include?

- Visit Augsburg
- Visit realized concrete constructions with non-metallic reinforcement
- Visit a non-metallic reinforcement producer

## When is it going to happen?

25% - field visit  
10<sup>th</sup> April – 16<sup>th</sup> April 2023

75% - online session  
17<sup>th</sup> April – 30<sup>th</sup> June 2023

## Practicalities

Participation in field trip and online sessions combined with a report will enable to use it as “Konstruktives Projekt” (6 ECTS-credits). It is organized under Erasmus+. This means that students travelling to Germany will receive **financial support for traveling and the stay.**

## For attendance please contact

**Prof. Dr. Benjamin Kromoser ([benjamin.kromoser@boku.ac.at](mailto:benjamin.kromoser@boku.ac.at))**

**until latest 12.02.2023**

