

Thesis proposal:

## **Study and construction of structural elements in low cost and sustainable concrete with fiber-reinforced networks**

The thesis aims to study the feasibility of constructing reinforced concrete structural elements in which the reinforcement is replaced by a fiberglass mesh (slightly prestressed or loose). Furthermore, the study will also explore the use of concrete with a reduced cement content which will be partially replaced by a binder with a lower environmental impact than cement. The thesis is mainly experimental and requires the commitment for both laboratory and theoretical study activities. The preparation of concrete is foreseen for the realization of specimens which will then be used in the different types of experimental tests.

A maximum of 1 master's degree thesis is proposed with a maximum number of 2 students.

The proponents of this thesis are Profs. Giovanni Di Luzio (who will serve as supervisor) and Gian Luca Brunetti (who will be the thesis co-supervisor).

Candidates will be selected based on an interview concerning the objectives of the thesis.