Design of a Regular Reinforced Concrete Structure - Spring 2024

• Project category: GC

• Project type: Bachelor Project

• Project supervisors: Prof. David Ruggiero (validate the project), Elias Merhi and Ahmad Majdouba



• Description:

Despite its significant environmental impact, reinforced concrete buildings still make up the vast majority of structures constructed in Switzerland as well as worldwide. Civil Engineers are expected to conduct an efficient design of the different load-carrying elements in order to deliver a sustainable design by optimizing the type and the amount of used materials.

In this project, you will be provided with a plan and an elevation of a typical reinforced concrete building. In groups of two or three, you are expected to design a reinforced concrete structure, which provides a direct load transfer from the superstructure to the foundation system.

• Keywords:

Load Transfer Mechanisms, Concrete Structures, Modeling, Conception and Design.

To register for the project please send an email with your names to: elias.merhi@epfl.ch