Course name: BUILDING MATERIALS AND CHEMISTRY

Course code: YCRÉPKÉBNF

2 lectures / 0 practice / 2 laboratory / Exam/ 7 credit

Department: Department of Fire Safety and Construction Materials

In charge: Dr <u>FEHÉRVÁRI</u> Sándor PhD, Assoc. Prof., Head of the Department

## **OBJECTIVE OF THE COURSE:**

Students become familiar with the basic mechanical and physical properties of construction materials. Basic physical, mechanical, and hydromechanical properties of binder materials, aggregates, concrete, and mortar.

## 12-14 WEEKS SCHEDULE:

1. week: Physical and mechanical parameters of the building materials

2. week: Mechanical and rheological properties

3. week: Binder materials. Types, properties, usages.

4. week: Binder materials. Types, properties, usages.

5. week: Aggregates. Types, properties, usages.

6. week: Aggregates. Types, properties, uses.

7. week: Chemistry of building materials

8. week: Concrete mix design

9. week: Properties of the fresh concrete

10. week: Properties of the hardened concrete

11. week: Mortars

## Assignment:

Two midsemester tests, homework, exam