

Faculty of Architecture

Department: Construction Engineering

Professional field: 5.7. Architecture, Civil Engineering and Geodesy

Specialty: Building Constructions

Educational-qualification degree: Master

COURSE DESCRIPTION

1. Course title: **Durability of Building Structures**
2. Course code: **CIE 3003**
3. Type of course: **optional**
4. Level of course: **Master**
5. Year of study: **second**
6. Semester when the course is delivered: **third**
7. Number of ECTS credits allocated: **3**
8. Name of lecturer: **Assoc. Prof., Eng. Dariya Mihaleva, PhD**
9. Learning outcomes of the course: as a result of the course students will know about the physical and mechanical properties of materials, will acquire skills to prepare expert evaluation of buildings and facilities in terms of the appropriateness of their further operation, will be able to apply the acquired knowledge in determining the methodology for conducting technical expertise, resource evaluation of various structures and the possibilities for repair.
10. Mode of delivery: **face-to-face**
11. Prerequisites and co-requisites: students have to possess the necessary knowledge in Building Materials and Building Insulations.
12. Course contents: to form knowledge regarding the design of building structures, determination of methods of analysis, evaluation, prognosticating and improving the durability of materials and their interoperability.
13. Recommended or required reading:
 - Колокольников, Е.И., Долговечность строительных материалов, М., Высшая школа, 1985
 - Москвин, В.М., и др. Коррозия бето- и железобетона и методы их защиты, Стройиздат, 1980
 - Drunau, E.B., Verhinderung von Bauschaden. Verl.R.Mullew, Koln-Braunsfeld, 1978
 - Durability of Concrete in service. Comitte 201. Am.concr. Journal, v. 59, 1987
14. Planned learning activities and teaching methods: **lectures, contact hours.**
15. Assessment methods and criteria: As elements of assessment during training shall be: attending classes – 10%, oral examination – 20% and written examination – 70%. The final examination constitutes two questions from the conspectus. Reasons for the evaluation, students receive on the day of the examination, based on the knowledge demonstrated. In the event of poor performance at the end of semester, the assessment of students can be reduced to a lesser extent, if shown good results from ongoing work during the semester, or they have regularly attended the lectures.
16. Language of instruction: **Bulgarian, English**
17. Work placement(s): **none**