**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: **Testing and Evaluation of Building Constructions**
2. Course code: **CIE 3005**
3. Type of course: **compulsory**
4. Level of course: **Master**
5. Year of study: **first**
6. Semester when the course is delivered: **second**
7. Number of ECTS credits allocated: **6** (**3 –** lectures and **3 –** seminars)
8. Name of lecturer: **Assoc. Prof., Eng. Rositsa Petkova, PhD**
9. Learning outcomes of the course: students will know about the technical means of measuring stress and strain condition, monitoring systems during testing, electronic filing and processing of information, will be able to make the basictenets of testing, analysis and evaluation of structures. They will know how to use theways and means for loading of structures, static test, analysis of results and assessment of the probability of destruction of static loads, dynamic testing - determination of the dynamic characteristics, and quasi-dynamic and quasi-static test methods, modelingand testing of scale models of structures.
10. Mode of delivery: **face-to-face**
11. Prerequisites and co-requisites: students have to possess the necessary theoretical and practical knowledge attained in the Bachelor's course.
12. Course contents: to form knowledge regarding the connection between stress and strain conditions in a building structure, their reliability, test, static and dynamic research.
13. Recommended or required reading:
    - Золочевски, А. Б., Экспериментальные методы в строительной механике, М., Стройиздат, 1983
    - Smith, B., Coull, A., Tall building structures: analysis and design, 1991
    - Сотиров, П., Динамично експериментално изследване на едропанелни жилищни сгради, Сп. "Строителство", кн.12, 1987
    - Сотиров, П., Експериментален анализ на динамичните характеристики на строителните конструкции, ВИАС, 1989
    - Марков, Т., Изпитване на строителни конструкции и съоръжения, С, Техника,1985
    - Димов, Д., Обследване и изпитване на строителниконструкции и мостове, С, Техника, 2006
14. Planned learning activities and teaching methods: **lectures, seminars, 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**