Faculty of Architecture

Department: Architecture and Urbanism

Professional area: Architecture, Civil Engineering and Geodesy

Major: Architecture

Educational-and-qualification Degree: Master

COURSE DESCRIPTION

1. Course unit title: Physics in Construction

Course unit code: CIE 2017
Type of course unit: compulsory
Level of course unit: Master

5. **Year of study**: first

- 6. Semester when the course unit is delivered: second
- 7. Number of ECTS credits allocated: 4,5
- 8. Name of lecturer: Assoc. Prof. Galina Todorova, PhD
- 9. **Learning outcomes of the course unit**: acquired applied knowledge of physics and skills in measuring physical quantities.
- 10. Mode of delivery: face-to-face
- 11. Prerequisites and co-requisites: physics from high school, Mathematical Analysis 1
- 12. **Course contents**: Applied aspects of classical physics with application in the architectural practice: fluid mechanics, heating technology, periodic movements, engineering light techniques, acoustics.
- 13. Recommended or required reading:
 - Г. Тодорова. Лекции по строителна физика. ВСУ виртуално обучение, 2010 г.
 - Г. Тодорова. *Лабораторен дневник по физика*. ВСУ–виртуално обучение. 2010 г.
 - Препоръчителна:
 - Х.Фулър, Р. Фулър и Р. Фулър. Физиката в живота на човека. Наука и изкуство, 1988
 - Лекции по строителна физика за УАСГ
- 14. **Planned learning activities and teaching methods**: lectures and laboratory work. The lectures are presentations. The laboratory work is carried out in a fully equipped laboratory and includes practical measurement and evaluation of the accuracy of the results.
- 15. Assessment methods and criteria: an exam test with maximum of 100 points. When doing the test students are free to use any books they need. Priority assessment is given to the understanding of the subject, not memorizing the material. Students are given an opportunity to do a preliminary test which is considered final if assessed with more than 70 points. The final grade includes the result from the test and student's work during the semester. Bonuses are given for regular presence at lectures (up to 12 p.), penalty points for absence of seminars (-5p. for an absence). Minimum of 60 points are needed to pass the exam successfully.
- 16. Language of instruction: Bulgarian
- 17. Work placement(s): none