

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:** Structural Mechanics – part 1
2. **Course unit code:** CIE 2015
3. **Type of course unit:** compulsory
4. **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. Eng. Nelly Trizlova, PhD
9. **Learning outcomes of the course unit:** Knowledge can be applied to design new buildings and facilities, for earthquake security of building constructions. They are a prerequisite for increase in quality, reliability and durability of the new buildings.
10. **Mode of delivery:** face-to-face
11. **Prerequisites and co-requisites:** good knowledge of mathematics and physics
12. **Course contents:** Structural Mechanics 1 is the subject, which makes the connection between the exact sciences (physics and mathematics) and the theory of building constructions. It comprises questions from theoretical mechanics, mainly Statics and chosen chapters from Kinematics and Dynamics connected mainly with earthquake security of building constructions.
13. **Recommended or required reading:**
 1. Бабанов В.В., Теоретическая механика для архитекторов. Москва, ИЦ „Академия“ 2008г.
 2. Яблонский А.А., Сборник заданий для курсовых работ по теоретической механике. Москва, ИЦ „Академия“ 2006г.
 3. Ferdinand P. Beer., E. Russell Johnston, Jr., Vector Mechanics for Engineers, Statics, McGraw-Hill Book Company, -9 th ed., 2007.
 4. Пиперков Д.Л., Кожухаров Д.Н., Теоретична механика, I част. София, 2011г.
 5. Павлов П., Дойчева А., Курсови задачи и инструкции по теоретична механика, София, УАСГ, 2008г.
14. **Planned learning activities and teaching methods:** lectures, seminars, tests, project assignment
15. **Assessment methods and criteria:** The course finishes with a written examination at the end of the semester, with 4 hours time limit. It includes two problems from Statics and some theoretical questions and short problems from the entire lecture course. Each component weighs equally and a student passes only if the three components are fulfilled. When a final grade is formed, it is taken into consideration the tests grades, the continuous assessment and the participation of the student in the classes during the semester
16. **Language of instruction:** Bulgarian
17. **Work placement(s):** none