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: **Steel Reinforced Concrete Structures**
2. Course code: **CIE 3010**
3. Type of course: **compulsory**
4. Level of course: **Master**
5. Year of study: **second**
6. Semester when the course is delivered: **third**
7. Number of ECTS credits allocated: **4,5** (**3 –** lectures and **1,5 –** seminars and course project)
8. Name of lecturer: **Prof., Eng. Petar Staykov, PhD**
9. Learning outcomes of the course: as a result of the course students will know about the main computational parameters, physical and mechanical properties of materials – concrete reinforcement, steel bars and connectors, will acquire skills for designing and calculating the steel sheet-concrete slabs, combined beams and columns; types of fasteners and determining of the bearing capacity..
10. Mode of delivery: **face-to-face**
11. Prerequisites and co-requisites: students have to possess the necessary theoretical and practical knowledge in all subjects taught in the Bachelor's course of Construction Engineering.
12. Course contents: to form knowledge regarding the designing and calculating of steel sheet concrete slabs, combined beams and columns; types of fasteners and determining of the bearing capacity.
13. Recommended or required reading:
    - Димитров, Б., Междуетажни конструкции, Арткомерс, София, 1993.
    - Игнатиев, Н., Стоманобетон и масивни конструкции, Техника, София, 1976.
    - Венков, Л. и др., Стоманени конструкции, Техника, София, 1991.
    - БДС EN 1994-1-1:2005, Еврокод 4: Проектиране на комбинирани стомано-стоманобетонни конструкции, Част 1-1: Общи правила и правила за сгради, БИС, 2005.
    - Венков, Л., Захариева-Георгиева, Б., Проектиране на комбинирани стомано-стоманобетонни конструкции в сгради по Еврокод 4, КИИП, София, 2013.
14. Planned learning activities and teaching methods: **lectures, seminars, course project, contact hours, independent work**.
15. Assessment methods and criteria: written examination – defence of a course project – a separate grade, written and oral examination. 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.
16. Language of instruction: **Bulgarian**
17. Work placement(s): **none**