

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: **Special Steel Structures**
2. Course code: **MAS 3004**
3. Type of course: **compulsory**
4. Level of course: **Master**
5. Year of study: **first**
6. Semester when the course is delivered: **first**
7. Number of ECTS credits allocated: **7,5 (4,5 – lectures and 3 – seminars and course project)**
8. Name of lecturer: **Assoc. Prof., Eng. Todor Georgiev, PhD**
9. Learning outcomes of the course: as a result of the course students will know about the major structural systems and their characteristics of beam structures, frames with large openings, pre-stressed steel structures, sheet, etc. structures, will be able to define their methods of calculation, sizing and detailing according to the Bulgarian and European standards.
10. Mode of delivery: **face-to-face**
11. Prerequisites and co-requisites: students have to possess the necessary theoretical and practical knowledge in Steel Structures – parts 1 and 2, which is taught in the Bachelor's course of Construction Engineering.
12. Course contents: to form knowledge regarding the principles of design and calculation methods for non-trivial facilities, such as sheet structures, pre-stressed steel structures, metal chimneys, construction of cold rolled profiles, hanging coatings, antennas, towers, masts, etc.
13. Recommended or required reading:
 - Даков, Д., Стоманени конструкции от тръбни профили, ЕТ „Ваньо Недков”, София, 2008.
14. Planned learning activities and teaching methods: **lectures, seminars, course project, contact hours, independent work.**
15. Assessment methods and criteria: defense 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**