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: Steel and Timber Structures
- 2. Course unit code: CIE 2013
- 3. Type of course unit: compulsory
- 4. Level of course unit: Master
- 5. Year of study: third
- 6. Semester when the course unit is delivered: sixth
- 7. Number of ECTS credits allocated: 6
- 8. Name of lecturer: Assoc. Prof. Todor Georgiev, PhD
- 9. Learning outcomes of the course unit: Students are acquainted with the physical and mechanical properties of metal, timber and plastics used as a constructive building material and the requirements to them.
- 10. Mode of delivery: face-to-face
- 11. **Prerequisites and co-requisites**: Students should have successfully passed their examinations in Building Mechanics and Physics in Construction.
- 12. **Course contents**: Types of metal timber and plastic structures used in the civil, agricultural, transport and industrial engineering; advantages and disadvantages of these structures and the occasions when they have to be preferred; methods for measuring constructive elements made of metal, timber and plastic; types of connecting means and their calculation. The constructive characteristics when designing and building different types of plate and truss girders girders, frames, arcs, combined and others.
- 13. Recommended or required reading:
  - Даков, Д., Тотев, Й. Дървени и пластмасови конструкции, ВИАС, С., 1989.
  - Чавов, Т., Дървени конструкции, Т., С., 1973.
  - Гочев, С. Носещи конструкции от стомана и дърво, Т., С., 1985.
- 14. Planned learning activities and teaching methods: lectures, seminars, contact hours, project assignment
- 15. Assessment methods and criteria: written and oral examination and a project assignment grade
- 16. Language of instruction: Bulgarian
- 17. Work Placement(s): none