Faculty of Architecture
Department of Construction of Buildings and Structures
Professional Area: Architecture, Civil Engineering and Geodesy
Major: Fire and Emergency Safety of Buildings and Structures
Educational and Qualification Degree: Master

1. **Course unit title: Modern design methods**
2. **Course unit code: INF1099**
3. **Type of the course unit: compulsory**
4. **Cycle: Master**
5. **Year of study when the component is delivered:** first
6. **Semester:** first
7. **Number of ECTS credits allocated:** 2
8. **Name of lecturer(s):** Assoc. Prof. Milena Kichekova, PhD
9. **Learning outcomes:** the course aims at introducing the students to the principles of computer modeling of building structures and to give them basic skills for the practical use of the SAP2000 and Tower 6 programs in the static calculations.
10. **Mode of delivery:** face-to-face
11. **Prerequisites and co-requisites:** it is assumed that the students have already received the necessary theoretical and practical training to work with computers.
12. **Course content (annotation):** Modeling of building structures with Tower 6 - building the geometric scheme, characteristics of the materials and sections, inserting support links, generating the network of finite elements.
13. **Recommended or required reading and other learning resources/tools:**

SAP2000 Getting Started
SAP2000 Graphic User Interface Manual
SAP2000 Basic Analysis Reference
SAP2000 Analysis Reference (Volume I and Volume II)
Бобев, Т., Кратко ръководство за работа със SAP 2000, електронен формат, 2008
Tower 6 – ръководство с инструкции за работа с програмата

14. **Planned learning activities and teaching methods**: lectures, contact hours, self-study
15. **Assessment methods and criteria:** The exam tests the students' skills to use the computer programs studied.
16. **Language of instruction:** Bulgarian
17. **Placement:** none