

**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: Mechanics of Demolition**
- 2. Course unit code: PHY3014**
- 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: 5**
- 8. Name of lecturer(s): Assoc. Prof. Eng. Gencho Panicharov, PhD**
- 9. Learning outcomes:** To familiarize the students with the set of methods of analysis that enable the safe construction of structures containing cracks to be secured.
- 10. Mode of delivery: face-to-face**
- 11. Prerequisites and co-requisites:** Knowledge of theoretical, structural mechanics and resistance of materials acquired during the bachelor's degree programme is required.
- 12. Course content (annotation):** The course provides the students with a necessary theoretical training which enriches their knowledge in terms of the stressed and distorted state of construction structures, subjected to a preliminary impact - temperature, force, cyclic, leading to the presence of defects caused by cracks.
- 13. Recommended or required reading and other learning resources/tools**
  - Kachanov, L. M., Introduction to Continuum Damage Mechanics, M.Nijhoff Publ., Dordrecht, 2016.
  - . . . . ., 2015.
  - . . . . . — . . . . . 2012.
- 14. Planned learning activities and teaching methods:** lectures, contact hours, self-study
- 15. Assessment methods and criteria:** The assessment during the course includes: attendance at classes - 10%, test 20%; final exam (test) – 60%
- 16. Language of instruction: Bulgarian**
- 17. Placement: none**