**Faculty of Architecture** 

**Department**: Architecture and Urbanism

Professional area: Architecture, Civil Engineering and Geodesy

Major: Architecture

**Educational-and-qualification Degree**: Master

## COURSE DESCRIPTION

Course unit title: Geodesy
 Course unit code: GED 2001
 Type of course unit: compulsory
 Level of course unit: Master

5. Year of study: first

6. Semester when the course unit is delivered: second

7. Number of ECTS credits allocated: 4,5

8. Name of lecturer: Assoc. Prof. Eng. Yuriy Ivanov Dachev, PhD

- 9. **Learning outcomes of the course unit**: The course gives knowledge and skills necessary for the students' future practice as architects when studying and designing different engineer facilities.
- 10. Mode of delivery: face-to-face
- 11. Prerequisites and co-requisites: none.
- 12. **Course contents:** shape and size of the earth, measuring angles and lengths, measuring excesses.

The course studies issues about the shape of the earth, the processing of geodetic surveying with identical precision, structure and work with geodetic tools, methods of measuring angles, lengths and excesses, co-ordinates and geodesy networks on the territory of Bulgaria, ways of defining co-ordinates, excesses and sea levels of points, topographical plans and maps, geodesy tracing works, vertical planning of terrains and solving practical problems connected with these issues.

## 13. Recommended or required reading:

- Вълков Д. и др., Геодезия и приложението й в строителството, ВСУ, Варна, 2002.
- Дачев Ю., Упр. и учебна практика по геодезия и инж. геодезия, ВСУ, Варна, 2008.
- Милев Г., Духовников Хр., Геодезия в строителството, Техника, София, 2006.
- Ценков Ц. и др., Ръководство за упражнения по Геодезия, София, 2008.
- 14. Planned learning activities and teaching methods: lectures, seminars
- 15. **Assessment methods and criteria**: written examination in two parts. During the first part two practical problems are solved. If the student fails the first part, he fails the exam, too. The second part is a written exam in two variants a test consisting of 20 questions from the synopsis or 2 theory questions from the synopsis. Students choose the variant they want beforehand. If they are given a positive grade on the second part, the final exam grade is an average of the two grades. If the student fails the written part he fails the final exam. Students also get a grade for their individual project assignments. During the semester students also get a grade for being active at the seminars and their performance at the laboratory and practical seminars. The grade from the exam and the combined grade from the individual project assignment and the performance form the final mark:

Final grade = exam grade x = 0.7 + project assignment grade and the performance grade x 0,3

16. **Language of instruction:** Bulgarian

17. **Work placement(s):** none