**COURSE** | **SATELLITE GEODESY**
---|---
**LECTURER** | Ass. Prof. Medžida Mulić

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<th>STUDY</th>
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<td>B – G</td>
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**OBJECTIVES**

- Basic knowledge of Celestial mechanics and GNSS. GNSS measurements, using of different software and methods for calculation of GNSS data. Appliance of broadcast, rapid and extra rapid ephemerides. Use of IGS and BiHPOS service data. Appliance of dynamical and continental coordinate systems. Transformation of coordinates between global geodetic systems and state’s coordinate system. Calibration of antennas and usage of data from absolutely calibrate antennas. Appliance of different geoid models and height systems, and defining

**LEARNING OUTCOMES**

After that course students will:

- have an understanding in GNSS signal structure and GNSS signal tracking
- systematize and understand the various influences and errors sources for GNSS observations
- become familiar with GNSS field observations and data processing.

**COURSE CONTENT**

- Modern satellite geodesy. Celestials coordinate systems (ICRS) and their realizations (ICRF). Terrestrial coordinate systems (ITRS) and their realizations (ITRF). Continental coordinate systems (ETRS89, SIRGAS), NNR NUVEL1A kinematic model of the Earth’s plates. Time scales.

**RECOMMENDED LITERATURE**


**Assesments:**

During semester students have to collect at least 50% of points, as folowing:
- two theoretical tests in writing. Each test is scored as 15 points (in total 30 points for bouth test).
- homeworaks and activities during lectures and practical execises are scored as 20 points,
- What is in total 50 points during semester.

There is final written exam on the end of semester. Students who got at least 55% (of 30 points) have to pass an oral exam (20 pints).
Grading: 6 to 10, in accordance with Law of Higher Education.