

<b>Study Programme: Computing And Control Engineering</b>			
<b>Course Unit Title: Basics of geoinformatics</b>			
<b>Course Unit Code: E241</b>			
<b>Name of Lecturer(s): Govedarica Miro, Sladić Dubravka, Radulović Aleksandra</b>			
<b>Type and Level of Studies: bachelor</b>			
<b>Course Status (compulsory/elective): elective</b>			
<b>Semester (winter/ summer): summer</b>			
<b>Language of instruction: english</b>			
<b>Mode of course unit delivery (face-to-face/distance learning): face-to-face</b>			
<b>Number of ECTS Allocated: 4</b>			
<b>Prerequisites: none</b>			
<b>Course Aims:</b> Students will gain fundamental and applied knowledge in the field of geomatics and geoinformatics. Introduction to the current geospatial technologies and areas of application.			
<b>Learning Outcomes:</b> The acquired knowledge is used in engineering courses and in solving engineering problems using geospatial technologies.			
<b>Syllabus.</b> Place and role of geospatial technologies. Basic terms and terminology. Reference frame. Sensors systems, Geosensors systems and networks. Acquisition of geospatial data (GNSS, photogrammetry, remote sensing, laser scanning), GPS – technology bases and applications. Data acquisition using GNSS technology. Photogrammetry - principles and applications. Remote sensing - principles and applications. Data classification and segmentation. Laser scanning - principles and applications. Interpretation and presentation of geospatial data. Visualization. Technology bases and applications of visualization. Application of geoinformation technologies in various fields. Interaction with geoinformation systems.			
<b>Required Reading:</b> Relevant literature in English, tbd			
<b>Weekly Contact Hours: 2</b>	<b>Lectures: 2</b>	<b>Practical work: 0</b>	
<b>Teaching Methods:</b> Teaching methods include lectures, computer practice, consultations, independent work on obligatory assignments. Evaluation: guided and independently developed obligatory assignments; written tests; final examination is oral.			
<b>Knowledge Assessment (maximum of 100 points):</b>			
<b>Pre-exam obligations</b>	points	<b>Final exam</b>	points
Attendance			
Computer exercises			
Tests (4x)			

