

<b>Study program: Civil Engineering</b>			
<b>Course: Resistance of Materials</b>			
<b>Professor/Assistant: PhD Resistance of Materials / Simona Smiljković</b>			
<b>Status of course: compulsory</b>			
<b>ECTS credits: 5</b>			
<b>Pre-requisites: none</b>			
<b>Aims of the course:</b> Train students to acquire knowledge in the field of material resistance and apply this knowledge in further study.			
<b>Learning outcomes:</b> Complex examination of the problems of theory of applying different materials and the problem of their applicability in practice.			
<b>Syllabus:</b> <u>Theoretical part</u> Basic stand of the stress analysis, components of stress and stress tensor, deformation analysis, Hook's law, Poisson law, axial stress, tensile and pressure, deformations and displacements, pure bending, Bernoulli flat-crossing hypothesis, clear bending, torsion, pure shear, Zhuravsky theory, statically unspecified beam carriers, three-moment equation, Klaipeir's equation, spinning, slenderness of a rod. <u>Practical part</u> It consists of auditory exercises that are carried out in the fields specified throughout theoretical classes. Independent production of 3 graphic works.			
<b>Literature:</b> 1. Tomić, B., <i>Material Resistance</i> , Scientific Paper, Belgrade, 1973. 2. Veličković, D., <i>Material Resistance 1</i> , University of Niš, Niš, 1981. 3. Spajić, R., <i>Resistance to Material</i> , Niš, 2000.			
<b>Number of active classes</b>			<b>Other forms of teaching:</b>
Lectures: 2	Practical classes: 2	Laboratory classes: 0	
<b>Teaching methods:</b> Combined, interactive with case management from practice.			
<b>Grading system</b> (maximum 100 points), <b>grading scale</b> from 5 to 10: below 51 points grade 5, grade 6 from 51-60 points, grade 7 from 61-70 points, grade 8 from 71-80 points, grade 9 from 81-90 points, grade 10 from 91-100 points.			
<b>Pre-commitments</b>	<b>points</b>	<b>Final exam</b>	<b>points</b>
activity during lectures and practical	5 + 5	written exam	30
practical training	-	oral exam	-
colloquium(s)	20 + 20		
seminar paper(s)	20		
<b>Sum</b>	<b>70</b>	<b>Sum</b>	<b>30</b>