

Study program: Industrial Engineering – Mechanical Engineering			
Course title: Mathematics 1			
Professor: Olga D. Miljković			
Type of course: Compulsory			
ECTS credits: 6			
Prerequisites: None			
Aims of the course: To recognize and master logical thinking in solving problems in professional life and engineering. To use well-known mathematical formalisms that can ease the process of solving multidisciplinary problems.			
Learning outcomes: After passing the exam the student will independently use methods of mathematical logic, systems of linear equations, knowledge from vector algebra and analytic geometry to solve engineering problems.			
Syllabus: <ol style="list-style-type: none"> 1. Basics of mathematical logics. 2. Basics of theory of sets. 3. Algebraic structures and numbers. 4. Vector algebra and analytical geometry. 5. Systems of linear equations. 			
Literature: <ol style="list-style-type: none"> 1. O. Miljković, M. Lazić, Matematika za menadžere, Fakultet za inženjerski menadžment, 2010, Beograd. 2. Grupa autora, Matematika za više tehničke škole, Savremena administracija, 1990, Beograd. 			
Total number of active classes: 90		Lectures: 45	Practical classes: 45
Teaching methods: Lectures and auditory exercises.			
Grading system (maximum 100 points) grading scale from 5 to 10: below 51 points – student fails the exam, 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.			
Pre-exam obligations:	Points:	Final exam:	Points:
Activity during lectures	max 5	Written exam	max 50
Practical training	max 5		
Written test(s)	max 40		
Minimum requirement for the final exam	30		