

Study program: Engineering Management				
Type and level of studies: Master studies (second level of studies)				
Course unit: Mathematical Methods in Management				
Teacher in charge: Nada Damljanović, Dragan Djurčić				
Language of instruction: English				
ECTS: 6				
Prerequisites: -				
Semester: Summer				
Course unit objective Acquiring the necessary knowledge of higher mathematics and preparing students for research work in the field of engineering management.				
Learning outcomes of Course unit At the end of this course students are qualified to use mathematical ideas, concepts and methods for practical application in scientific research in the field of engineering management.				
Course unit contents <i>Theoretical classes</i> The theory of functional series, analysis of real multivariable functions, differential equations of first and higher order, financial mathematics, integral calculus, economic dynamics, application of the dynamics of market prices, application of the Solow's model of economic growth, application of the analysis of inflation and unemployment. <i>Practical classes</i> Solving practical problems which implement exposed theoretical concepts and principles.				
Literature [1] R. Barnett, M. Ziegler, K. Byleen, Applied mathematics for business, economics, life sciences, and social sciences, MATE, 2006. [2] A. Chiang, Fundamental methods of mathematical economics, MATE, 1994.				
Number of active teaching hours				Other classes
Lectures: 2	Practice: 2	Other forms of classes	Independent work:	
Teaching methods Lessons, consultations, study and research work				
Examination methods (maximum 100 points)				
Exam prerequisites	No. of points:	Final exam	No. of points:	
Student's activity during lectures	-	oral examination	20	
Practical classes/tests	20	written examination	40	
Seminars/homework	20		
Project	-			
Other				
Grading system				
Grade	No. of points		Description	
10	91-100		Excellent	
9	81-90		Exceptionally good	
8	71-80		Very good	
7	61-70		Good	
6	51-60		Passing	
5	less than 50		Failing	