

Study program: Mechanical engineering			
Type and level of studies: undergraduate studies			
Course unit: Computer Applications in Engineering 1			
Teacher in charge: Prof. Dr Vladimir Milićević			
Language of instruction: English			
ECTS: 4			
Prerequisites: none			
Semester: Winter			
Course unit objective: Improvement of general computer literacy and familiarization of students with the use of software tools in engineering calculations.			
Learning outcomes of the course unit A student should learn to use a computer at a user level in solving engineering tasks.			
Course unit contents			
<i>Theoretical classes</i> Interactive work. Data: input, access, deletion. Arrays and array manipulation functions. Mathematical operations. Arithmetic, relational, and logical operators. Operations on individual elements of arrays. Script files. Graphical representation of results. Numerical data processing. Writing and reading data from files.			
<i>Practical classes</i> Working in the development environment of the software tool Matlab. Interactive problem solving approach.			
Literature Pršić Dragan, Matlab sa primerima, Fakultet za mašinstvo i građevinarstvo u Kraljevu, Kraljevo 2015. Walter Gander, Learning MATLAB - A Problem Solving Approach, Springer 2015			
Number of active teaching hours			Other classes
Lectures: 15	Practice: 30	Other forms of classes: Independent work: 1	
Teaching methods Lectures and exercises in a computer classroom			
Examination methods (maximum 100 points)			
Exam prerequisites	No. of points:	Final exam	No. of points:
Student's activity during lectures	10	oral examination	/
practical classes/tests	25	written examination	30
Seminars/homework	35	
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 51	Failing	