ERASMUS+

EU programme for education, training, youth and sport

Incoming student mobility

Name of UNIOS University Unit: SCHOOL OF APPLIED MATHEMATICS AND INFORMATICS

COURSES OFFERED IN FOREIGN LANGUAGE
FOR ERASMUS+ INDIVIDUAL INCOMING STUDENTS

Department or Chair within the UNIOS Unit	School of Applied Mathematics and Informatics

Study program	Undergraduate university study programme in Mathematics

Study level	Undergraduate (Bachelor)

Course title	Mathematical Tools
Course code	I027
Language of instruction	English
Brief course description	Syllabus. 1. WRI Mathematica. Kernel, GUI interface, Notebook. Basic arithmetic operations. Symbolic computation. Lists. Graphics. Sound. Functions. Packages. Mathematica as a Programming Language. Application to some problems from analysis and linear algebra. 2. MATLAB. Matrix calculus. Variables. Operators. Functions. Programming in MATLAB (scripts and functions). Graphics. Overview of functions integrated in Matlab. Application to some problems from analysis and linear algebra. 3. LaTeX. Basics about LaTeX. Styles and environment. Text editing. Writing mathematical formulae. Preparing large documents. Definition of own commands. 4. Graphics. The most common errors.
Form of teaching	Consultative teaching.
Form of assessment	During the course students will practise examples from different areas of mathematics, physics, economics and engineering. Through lectures and exercises mathematical tools will be processed with emphasis on writing of simple programs and mathematical texts. Lectures and exercises are obligatory. The exam consists of a written and an oral part, and it will be taken after the completion of lectures

	and exercises. Acceptable mid-term exam scores replace the written examination.
Number of ECTS	4
Class hours per week	1+2+0
Minimum number of students	
Period of realization	Winter semester
Lecturer	Ivana Kuzmanović Ivičić