Incoming student mobility

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	Graduate Mathematics and Informatics Education Study Programme

Study level	Graduate (master)

Course title	Computational Thinking and Programming I
Course code (if any)	I061
Language of instruction	English
Brief course description	Syllabus. 1. Basic data types in Python: boolean type, whole numbers, the sliding point and complex numbers, alphanumeric characters. Arithmetic, logical and relational operators. Initialize variables. 2. Branching. Loop. Functions. 3. Lists. Strings. Dictionaries. 4. Exceptions. Debugging. Testing program. 5. Classes and objects. The organization of the program. 6. Manage files. The construction of the module. Parse text files. 7. Using Python library Matplotlib and Pandas for data visualization and analysis.
Form of teaching	
Form of assessment	In lectures, students will learn programming with a focus on the use of available data structures. In exercises, students solve programming tasks where they use data structures and algorithms. During the semester, students solve assignments, which consist of programming tasks. The theoretical and practical knowledge will be examined in the written exam. Satisfactory scores on programming assignments and quizzes can replace written exam.
Number of ECTS	5

Class hours per week	2+2+0
Minimum number of students	
Period of realization	Winter semester
Lecturer	Ivana Kuzmanović Ivičić