

DESCRIPTION OF STUDY MODULE (FOR ERASMUS+ STUDENTS)

PROGRAMMING C++

Volume of	6.0 ECTS
subject	
Lecturer in	Prof. dr. Vitalij Denisov
charge	
Annotation	This course is designed to introduce students to the fundamental methodologies of modern programming and to teach them programming using the C/C++ programming languages. During the course, students learn to use complex conditional statements and loops, create functions, read data from files, and write data to files. In solving problems, they use arrays and develop data structures. The course also introduces students to recursive functions and basic algorithms. Upon completing the course, students should be able to solve non-standard problems using programming tools.
Topics	 Evolution of programming languages Language syntax, operators, variables Libraries and their usage Conditional statements Loops with a known number of iterations Conditional loops Functions Recursive functions Working with files One-dimensional arrays Two-dimensional and multidimensional arrays Data structures
D 1 C	• Pointers
Procedure for	✓ 20 percent – midterm tests.
assessment of	✓ 20 percent – individual work.
knowledge and	✓ 60 percent – final exam.
competences	