

## 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	<ul style="list-style-type: none"> <li>Undergraduate university study programme in Mathematics and Computer Science</li> <li>Undergraduate university study programme in Mathematics</li> </ul>
Study level	Undergraduate (Bachelor)
Course title	Modern Computer Systems
Course code	I045
Language of instruction	English
Brief course description	<p>Syllabus.</p> <ol style="list-style-type: none"> <li>1. Introduction. Boolean Logic. Boolean Arithmetic and ALU.</li> <li>2. Sequential logic.</li> <li>3. Memory elements. CPU. Machine language. Computer Architecture. Assembler.</li> <li>4. Virtual Machine: Stack Arithmetic. Program Control.</li> <li>5. High-level Language.</li> <li>6. Compiler: Syntax Analysis. Code Generation.</li> <li>7. Operating System.</li> </ol>
Form of teaching	Consultative teaching.
Form of assessment	Lectures will contain many examples with in-depth explanations. Exercises will be held in specialized computer-based laboratories where students will use hardware description language (HDL) to implement the structure and behavior of electronic circuits and digital logic circuits. Final exam will be held after the completion of lectures and exercises and it will contain practical tasks each student will have to complete independently.
Number of ECTS	6

## ERASMUS+

EU programme for education, training, youth and sport

Class hours per week	2+2+0
Minimum number of students	
Period of realization	Winter semester
Lecturer	Domagoj Matijević