ERASMUS+
EU programme for education, training, youth and sport

Incoming student mobility

Name of UNIOS University Unit: DEPARTMENT OF MATHEMATICS

COURSES OFFERED IN FOREIGN LANGUAGE
FOR ERASMUS+ INDIVIDUAL INCOMING STUDENTS

Department or Chair within the UNIOS Unit	**Department of Mathematics**

Study program	• ***Undergraduate university study programme in Mathematics and Computer Science*** • ***Undergraduate university study programme in Mathematics***

Study level	Undergraduate (Bachelor)

Course title	**Full Stack Web Development**
Course code	I057
Language of instruction	English
Brief course description	**Syllabus.** 1. Modern HTML and CSS (Cascading Style Sheets) standards. Structures, elements, forms, styles. 2. Introduction to JavaScript dynamic language. 3. JavaScript on client side. Document Object Model (DOM). DOM manipulation. Events. 4. Concept of prototyping in JavaScript. 5. JQuery. JSON. Ajax. 6. Responsive web design (e.g. Bootstrap grid). 7. At least one modern client-side JS framework (such as AngularJS or React). 8. At least one modern server-side JS framework (such as NodeJS). 9. Accessing data through REST API-ja (e.g. in NodeJS). HTTP protocol. 10. Code testing. Tools for JavaScript code testing. 11. Multiplatform Mobile App Development with Web Technologies (e.g. Cordova hybrid application framework, Ionic framework)
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 learn how to program in JavaScript and associate

	frameworks. The final exam will be held after the completion of lectures and exercises and it will contain practical tasks (final project) each student will have to complete as part of a team of four students at most.
Number of ECTS	**8**
Class hours per week	**3+2+1**
Minimum number of students	
Period of realization	**Winter semester**
Lecturer	Zoran Tomljanović