#### ERASMUS+

EU programme for education, training, youth and sport

# Incoming student mobility

## UNIOS University Unit: DEPARTMENT OF MATHEMATICS

### COURSES OFFERED IN FOREIGN LANGUAGE FOR ERASMUS+ INDIVIDUAL INCOMING STUDENTS

Department of Mathematics
Graduate university study programme in mathematics (Master
level)
Branches:
Financial Mathematics and Statistics
Mathematics and Computer Science
Graduate Mathematics and Informatics Education Study
Programme

Study level	Graduate (master)

Course title	Mathematical aspects of electoral systems
Course code (if any)	MI005
Language of instruction	English
Brief course description	<ol> <li>Syllabus.</li> <li>Classification of electoral systems. Plurality and proportional electoral systems fundamental methods of seat allocation. Examples of electoral methods and procedures of social choice. General model of electoral system. Properties of electoral systems (indicators; proportionality,representation).</li> <li>2. Designing of electoral systems. Some well known electoral paradoxes. Basic properties of electoral methods in plurality electoral system and in proportional electoral system. Integer optimization approach to electoral formulas.</li> </ol>
Form of teaching	Consultative teaching.
Form of assessment	Basic terms, characteristics and mathematical aspects of electoral systems are introduced at lectures. The second part of teaching appointments is used for students' seminar works in relation to problems of electoral system. Lectures and seminars are obligatory. Examination consists of written and oral part, and it holds after attended lectures. Successfully made seminar work influences on a

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	final mark.
Number of ECTS	3
Class hours per week	1+0+1
Minimum number of students	
Period of realization	Summer semester
Lecturer	Tomislav Marošević