

## 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                             | Undergraduate university study programme in Mathematics  |
| Study level                               | Undergraduate (Bachelor)   |
| Course title                              | Set Theory   |
| Course code                               | M106   |
| Language of instruction                   | English  |
| Brief course description                  | <p>Syllabus.</p> <ol style="list-style-type: none"> <li>1. Axioms of the empty set, of the partitive set and of the union. Cartesian product and axiom of the pair. Set of the natural numbers and Peanno's axioms. Relations.</li> <li>2. Equipotent sets. Cantor-Schroeder-Bernstein theorem. Finite and infinite sets. Countable and uncountable sets.</li> <li>3. Axioms of the set theory. Axiom of choice and Zorn's lemma. Partially ordered sets and well ordered sets.</li> </ol> |
| Form of teaching                          | Consultative teaching.   |
| Form of assessment                        | Attendance at lectures and exercises is required. The exam consists of written and oral part, and can be taken after completion of lectures and exercises. During the semester students can take colloquiums that replace the written examination.   |
| Number of ECTS                            | 4  |
| Class hours per week                      | 1+1+0  |
| Minimum number of students                |  |

## ERASMUS+

EU programme for education, training, youth and sport

|                       |                        |
|-----------------------|------------------------|
| Period of realization | Summer semester        |
| Lecturer              | Mihaela Ribičić Penava |