

## 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	Mathematical Logic in Computer Science
Course code	M088
Language of instruction	English
Brief course description	<p>Syllabus.</p> <ol style="list-style-type: none"> <li>Propositional Logic: Syntax and Semantics. Proof Theory of Propositional Logic: The Gentzen System G'. Resolution.</li> <li>First-Order Logic: Syntax and Semantics of First-Order Languages. Proof Theory of First-Order Languages.</li> <li>Gentzen's Cut Elimination Theorem and Applications. Herbrand's theorem.</li> <li>Resolution in First-Order Logic. SLD resolution and logic programming.</li> <li>Temporal Logic: Syntax and semantics. Deductive System.</li> <li>Program verification: Deductive System for verification of sequential programs. .</li> </ol>
Form of teaching	Consultative teaching.
Form of assessment	Classes are organized through lectures and exercises. During lectures students will be familiarized with basic terms and results in mathematical logic through illustrative examples and/or proofs. Exercises are auditory. During exercises students apply the acquired abstract knowledge to concrete problems. Lectures and exercises are obligatory. Final examination consists of a written and an oral part which is taken after completion of lectures. Acceptable mid-term exam scores replace the written examination. Homework and

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EU programme for education, training, youth and sport

	seminar papers made during the semester could influence the final result of the exam.
Number of ECTS	6
Class hours per week	2+2+0
Minimum number of students	
Period of realization	Summer semester
Lecturer	Zoran Tomljanović