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| 1. Field of study | Mathematics |
| 2. Faculty | Faculty of Science and Technology |
| 3. Academic year of entry | 2022/2023 (winter term) |
| 4. Level of qualifications/degree | second-cycle studies |
| 5. Degree profile | general academic |
| 6. Mode of study | part-time |
| 7. ISCED code | 0541 (Mathematics) |
| 8. Connection between the field of study and university development strategy, including the university mission | The course in mathematics offers postgraduate studies aimed at educating the graduate who will be able to undertake further training for a Ph.D. degree at all research centres at home and abroad, or working as a mathematician in various branches of the global economy based on creativity. The staff guarantee the highest quality of the learning process, as they take into consideration the constantly increasing educational requirements and pass on to the students the mathematical ideas and principles; yet simultaneously making their own contribution to mathematics by conducting international scientific research and involving the brightest students therein. The studies offer areas of specialization from the first term in order to sustain the students' personal interests, guarantee the highest course quality, and ensure relevance of the human capital. The offered areas of specialization are suited to the demands of the labour market and are continuously updated with a view to innovation and according to the knowledge triangle: education – research – economy. |
| 9. Number of semesters | 4 |
| 10. Degree | magister (Master's Degree) |
| 11. Specializations | Mathematical Methods in Computer Science Mathematics for Finance and Economics Teaching Specialty - Teaching of Mathematics |
| 12. The semester from which the specializations starts | 1 |
| 13. Percentage share of scientific or artistic disciplines in education (along with the indication of the leading discipline) | <ul style="list-style-type: none"> • <i>[leading discipline]</i> mathematics (natural sciences): 100% |
| 14. Percentage of the ECTS credits for each of the scientific or artistic disciplines to which the learning outcomes are related to the total number of ECTS credits (along with the indication of the leading discipline) | <p>Mathematical Methods in Computer Science:</p> <ul style="list-style-type: none"> • <i>[leading discipline]</i> mathematics (natural sciences): 100% <p>Mathematics for Finance and Economics:</p> <ul style="list-style-type: none"> • <i>[leading discipline]</i> mathematics (natural sciences): 100% <p>Teaching Specialty - Teaching of Mathematics:</p> <ul style="list-style-type: none"> • <i>[leading discipline]</i> mathematics (natural sciences): 100% |
| 15. Number of ECTS credits required to achieve the qualification equivalent to the level of study | Mathematical Methods in Computer Science: 120, Mathematics for Finance and Economics: 120, Teaching Specialty - Teaching of Mathematics: 120 |
| 16. Percentage of the ECTS credits for optional modules in relation to the total number of ECTS credits | Mathematical Methods in Computer Science: 79%, Mathematics for Finance and Economics: 79%, Teaching Specialty - Teaching of Mathematics: 79% |

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| 17. | Total number of ECTS credits that a student must obtain in the modules taught | Mathematical Methods in Computer Science: 120, Mathematics for Finance and Economics: 120, Teaching Specialty - Teaching of Mathematics: 118 |
| 18. | Number of ECTS credits that a student must obtain in modules assigned to disciplines within the humanities or social sciences (not less than 5 ECTS) - in the case of fields of study assigned to disciplines within the fields other than, respectively, humanities or social sciences | Mathematical Methods in Computer Science: 5, Mathematics for Finance and Economics: 5, Teaching Specialty - Teaching of Mathematics: 9 |
| 19. | Graduation requirements for a particular specialization | <u>Mathematical Methods in Computer Science</u> <u>Mathematics for Finance and Economics</u> <u>Teaching Specialty - Teaching of Mathematics</u> |
| 20. | Organization of the process of obtaining a degree | |
| 21. | Internships (hours and conditions) in the case of practical programmes and in general university programme - if such requires internship | |
| 22. | Total number of ECTS credits that a student must obtain in internships | Mathematical Methods in Computer Science: 0, Mathematics for Finance and Economics: 0, Teaching Specialty - Teaching of Mathematics: 2 |
| 23. | Number of ECTS credits - higher than 50% of the total number of credits - that a student must obtain: <ul style="list-style-type: none"> in general university programmes within a module connected with research carried out in the scientific or artistic disciplines to develop his/her knowledge and research skills; in practical programmes within a module to develop practical skills | Mathematical Methods in Computer Science: 109, Mathematics for Finance and Economics: 109, Teaching Specialty - Teaching of Mathematics: 93 |
| 24. | General description of the programme | Postgraduate mathematical studies (Course in Mathematics) aim to educate the graduate who possesses comprehensive and deepened mathematical knowledge which will enable him or her to enroll in doctoral programmes or work as a mathematician and use mathematical tools in IT, financial, commercial or manufacturing sectors; or alternatively be qualified to teach mathematics at school. The postgraduate of the course in mathematics: |

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| | | <ul style="list-style-type: none">- possesses deepened knowledge in the realm of mathematics and its applications,- has the ability to construct mathematical reasonings and test the validity of mathematical hypotheses,- can present advanced mathematical contents both in the oral and written form,- can construct, extend and use complex mathematical models indispensable in applications,- uses advanced IT tools in solving theoretical and practical mathematical problems,- has the ability to broaden and improve mathematical knowledge within the scope of current research results,- is prepared to continue education at doctoral studies. |
| 25. | General description of the specialization | <u>Mathematical Methods in Computer Science</u> <u>Mathematics for Finance and Economics</u> <u>Teaching Specialty - Teaching of Mathematics</u> |