1.	Field of study	**Mathematics**
2.	Faculty	Faculty of Science and Technology
3.	Academic year of entry	2023/2024 (winter term)
4.	Level of qualifications/degree	second-cycle studies
5.	Degree profile	general academic
6.	Mode of study	full-time
7.	ISCED code	0541 (Mathematics)
8.	Number of semesters	4
9.	Degree	magister (Master's Degree)
10.	General characteristics of the field of study and the assumed concept of education	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: - 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.
11.	Information on the relationship between the studies and the university's strategy as well as the socio-economic needs that determine the conduct of studies and the compliance of learning outcomes with these needs	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.
12.	Specializations	Mathematical Methods in Computer Science Mathematical Modelling Mathematics for Finance and Economics Teacher Training Programme with Chemistry Teaching Specialty - Teaching of Mathematics Teaching Specialty - Teaching of Mathematics and Computer Science Theoretical Mathematics
13.	General description of the specialization	Mathematical Methods in Computer Science Mathematical Modelling Mathematics for Finance and Economics

		Teacher Training Programme with Chemistry Teaching Specialty - Teaching of Mathematics Teaching Specialty - Teaching of Mathematics and Computer Science Theoretical Mathematics
14.	The semester from which the specializations starts	1
15.	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)	Mathematical Methods in Computer Science: • *[leading discipline]* mathematics (natural sciences): 100% Mathematical Modelling: • *[leading discipline]* mathematics (natural sciences): 100% Mathematics for Finance and Economics: • *[leading discipline]* mathematics (natural sciences): 100% Teacher Training Programme with Chemistry: • *[leading discipline]* mathematics (natural sciences): 100% Teaching Specialty - Teaching of Mathematics and Computer Science: • *[leading discipline]* mathematics (natural sciences): 100% Teaching Specialty - Teaching of Mathematics: • *[leading discipline]* mathematics (natural sciences): 100% Theoretical Mathematics: • *[leading discipline]* mathematics (natural sciences): 100%
16.	Number of ECTS credits required to achieve the qualification equivalent to the level of study	120
17.	Percentage of the ECTS credits for optional modules in relation to the total number of ECTS credits	Mathematical Methods in Computer Science: 81%, Mathematical Modelling: 81%, Mathematics for Finance and Economics: 81%, Teacher Training Programme with Chemistry: 77%, Teaching Specialty - Teaching of Mathematics: 79%, Teaching Specialty - Teaching of Mathematics and Computer Science: 79%, Theoretical Mathematics: 81%

18.	Total number of ECTS credits that a student must obtain in the modules taught	Mathematical Methods in Computer Science: 68, Mathematical Modelling: 68, Mathematics for Finance and Economics: 66, Teacher Training Programme with Chemistry: 72, Teaching Specialty - Teaching of Mathematics: 73, Teaching Specialty - Teaching of Mathematics and Computer Science: 70, Theoretical Mathematics: 69
19.	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: 6, Mathematical Modelling: 6, Mathematics for Finance and Economics: 6, Teacher Training Programme with Chemistry: 7, Teaching Specialty - Teaching of Mathematics: 7, Teaching Specialty - Teaching of Mathematics and Computer Science: 7, Theoretical Mathematics: 6
20.	Number of ECTS credits - higher than 50% of the total number of credits - that a student must obtain: • 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: 99, Mathematical Modelling: 99, Mathematics for Finance and Economics: 109, Teacher Training Programme with Chemistry: 68, Teaching Specialty - Teaching of Mathematics: 89, Teaching Specialty - Teaching of Mathematics and Computer Science: 72, Theoretical Mathematics: 114
21.	Total number of ECTS credits that a student must obtain in internships	Mathematical Methods in Computer Science: 0, Mathematical Modelling: 0, Mathematics for Finance and Economics: 0, Teacher Training Programme with Chemistry: 3, Teaching Specialty - Teaching of Mathematics: 2, Teaching Specialty - Teaching of Mathematics and Computer Science: 3, Theoretical Mathematics: 0
22.	Internships (hours and conditions) in the case of practical programmes and in general university programme - if such requires internship	Internships are an integral part of the study program, carried out by students in individual fields, levels, profiles and forms of study. Internships are to help in confronting the knowledge acquired during studies with the requirements of the labour market, acquiring skills useful in the profession, learning about practical issues related to working in positions for which the student is prepared during the course of studies. The internship is to familiarize the student with professional language relevant to a specific industry and work culture. The rules for the organization of internships are set out in the Rector's ordinance. Detailed rules of apprenticeship taking into account the specifics of particular fields of study are set out in the field's of study apprenticeship regulations, in particular: learning outcomes assumed to be achieved by the student during the apprenticeship, framework apprenticeship program including a description of issues, dimension of apprenticeship (number of weeks of practice); form of internship (continuous, mid-year), criteria for choosing the place of internship, obligations of the student staying in the internship, obligations of the academic tutor, conditions for completing the internship by the student and conditions for exemption from the internship obligation in whole or in part. The number of ECTS and the number of hours are specified in the course structure.

23.	Graduation requirements	The condition for admission to the diploma examination is to achieve the learning outcomes provided for in the study program, to obtain a certificate of an appropriate level of language proficiency in a foreign language and to obtain positive grades for the diploma dissertation. The condition for graduation is to pass the diploma examination with at least a satisfactory result. A graduate receives a higher education diploma confirming obtaining the qualifications of the appropriate degree. Detailed rules of the diploma process and the requirements for the diploma thesis are set out in the Rules and Regulations of Studies at the University of Silesia and the diploma regulations.