

Name of the Educational Institution	Shota Rustaveli State University Address: №35 Rustaveli st. Batumi 6010, tel / Fax: (+995 222) 27 17 87 e-mail: info@bsu.edu.ge
Title of Educational Program	Educational program Mathematics
Qualification awarded	Bachelor of Mathematics
ECTS	The program includes 240 ECTS and its optimal implementation period is 4 years. 165 ECTS of the total 240 ECTS are required to be earned in core specialty, 15 ECTS are allotted to optional courses and 60 credits to the Minor components.
Goal of Educational Program	<p>The increasing demand towards the undergraduate educational programs of Math is due to the interest towards the mathematical methods, applied in the research in such fields a natural sciences and social and economic sciences and in all the areas of the practical activity where there is a need for mathematical modeling, analytical thinking and forecasting.</p> <p>The program aims to:</p> <p>The program aims to:</p> <ul style="list-style-type: none"> • give students theoretical and practical education in classical mathematical programming and technology trends; • develop the skills of the students, which can be used in various fields of science for comprehension, analysis, evaluation, modeling of the practical problems arising, and for the corresponding software solution; • provide training of the competitive specialists with high civic awareness and activism, democratic and liberal values who will be able to assert themselves in the labor market and / or continue their studies in higher education at the next level. • satisfy the aspirations of the students who have diverse interests and give them comprehensive education through the elective courses within the program, and / or train them in additional

	<p>specialty.</p> <ul style="list-style-type: none"> • train the students skills in using computer software packages for mathematical modeling. <p>Relevant to the Educational program learning outcomes and competencies the graduates will be able to continue studies at the next level, as in math and other areas;</p> <p>The employment market is open for the alumni in the educational institutions, the economic, social, statistical and other types of the state, non-governmental and private institutions.</p>
<p>Learning outcomes (GENERAL AND TRANSFERABLE SKILLS)</p>	<p>To give knowledge of theories and methods in the Fundamental directions of mathematics:</p> <ul style="list-style-type: none"> • extensive knowledge of the research methods of the geometrical objects in the Euclidean and non-Euclidean spaces by means of linear algebra, differential accounting and topology; • extensive knowledge of: research functions of the real and complex variable by means of the differential and integral calculus, how to solve the differential equations and build probability and statistical model using them; • extensive knowledge of the number theory, mathematical logic and theoretical basis of the algebraic structures, extensive knowledge of research methods; • extensive knowledge of the functions proximity, linear algebra, numerical production and integers, some numerical methods for solution of nonlinear equations. <p>2. Modern approaches to the various directions of Mathematics and information about the achievements.</p> <p>3. knowledge of the presentation software packages and the programming languages, necessary for solutions of different types of mathematical problems.</p> <p>use of the specialized software packages for mathematical calculations.</p> <p>4. has enhanced skills in Elementary Mathematics – intro to algebra, geometry and analysis.</p> <p>5. is aware of the possibility and importance of the use of classical and modern methods of mathematics in Math and other disciplines.</p>

- | | |
|--|---|
| | <p>6. can introduce concepts and definitions of formal mathematics and formulation of mathematical proposals through them;</p> <p>7. can formulate mathematical proposals of relevant complexity in various disciplines of Math and defend them.</p> <p>8. Proposing a problem of relevant complexity, perception of it, constructing a mathematical model and study of it with mathematical methods:</p> <ul style="list-style-type: none"> • of the geometrical objects in the Euclidean and non-Euclidean spaces by means of linear algebra, differential accounting and topology; • axiomatic construction of geometry; • research of the functions of real and complex variable by means of the differential and integral calculus; • use of numerical theory, mathematical logic and algebraic methods to solve Math and non- Math problems of relevant complexity. • Solving of the differential equations and building of probability and statistical model with their use. • to solve mathematical problem of relevant complexity with the use of the Software packages and programming languages; <p>Programming and use of some numerical methods of solution for the functions proximity, linear algebra, numerical production integers and nonlinear equations.</p> <p>9. is able to research and analyze with the Math methods the characteristic data related to specific tasks.</p> <p>10. is able of reasoning and making accurate conclusions based on it.</p> <p>11. is able to formulate Math postulates and lead strictly mathematical reasoning.</p> <p>12. is able to develop written and oral reports in the Georgian and English languages on the
the complexity of mathematical problems and their solutions.</p> <p>13. is able to find and use E-resources in Math by means of using information and communication technologies.</p> <p>14. determine the necessary and interesting area from various directions of mathematics to enhance their knowledge and education at the next level.</p> |
|--|---|

<p>Assessment criteria</p>	<p>Assessment rules:</p> <p>here are five kinds of positive and negative assessment:</p> <p>A) Excellent - 91% or more;</p> <p>B) is very good - 81- 90% of the maximum;</p> <p>C) good - 71- 80% of the maximum;</p> <p>D) complete - 61-70% of the maximum;</p> <p>E) enough - 51-60% of the maximum;</p> <p>Negative assessments:</p> <p>A) (FX) Fail - 41-50% of the maximum, which means that students need to extra work, and will have to retake the exam.</p> <p>B) (F) Fail - 40% or less, which means that the student's work is not sufficient and should retake the course.</p> <p>Students are also negatively assessed under the following conditions:</p> <p>A) If they have not been allowed to take the final exam;</p> <p>B) If they failed the final or supplementary examination.</p>
<p>Contact</p>	<p>Head of the program:</p> <p>Professor Vladimir Baladze</p> <p>Phone: (+99593) 36 96 09; (+995222) 7 94 15; E-mail: vbaladze@gmail.com</p>