

**Compliance Matrix of the Learning Outcomes of YSU “XXX” Bachelor’s Degree Programme
with the 6th Level Descriptors of “Mathematics” Sectorial Qualifications Framework**

6 th Level Descriptors of “Mathematics” Sectorial Qualifications Framework	Programme Learning Outcomes ¹	Degree of Compliance ²
KNOWLEDGE AND UNDERSTANDING		
1. Has sufficient knowledge to carry out work in professional and related fields.	A1, A3	xxx
2. Has basic knowledge of basic mathematical subjects.		xxx
3. Has basic programming knowledge.	A6, A8	xx
4. Has preliminary knowledge about applications of mathematics in related sciences and various fields of activity.		xxx
5. Has sufficient knowledge to continue studies in mathematics or a related field at the next level of education.		x
SKILLS		
1. Can make systematic, logical and reasoned judgments and present them.	B1, B2	xxx
2. Is able to formulate, prove and analyze the main theorems and statements learned during the study, to explain the scope of their application.		x
3. Can distinguish the analogs within his knowledge for new situations and phenomena and modify the chain of judgments existing there, in accordance with the new situation.	B4, B6	xxx
4. Is able to perceive new information, analyze and generalize it, to separate patterns, to emphasize a particular sub-case of a general case.		xxx
5. Can describe mathematical models of phenomena and processes, formulate relevant problems encountered in natural science and other fields in mathematical language, offer solution approaches and necessary tools.		xx
6. Can perform data and information collection, storage, processing, analysis and presentation works.		
7. Is able to use modern information technologies and professional software packages to solve professional problems.		
8. Is aware of the structure and working principles of a computer, knows a programming language, as well as a statistical and mathematical software packages.		
9. Is able to describe an algorithm for solving problems, perform symbolic and numerical calculations.		
10. Can prepare professional reports, present them to professional and non-professional audiences.		
11. Is able to communicate on professional issues in native and foreign languages.		
12. Is able to make logical analyses, judgments and conclusions.		
13. Is able to conduct mathematical debates, to justify proposed theses and point of view.		

14. Can describe the sequence of systematic steps to solve different situations, considering different possible development scenarios.		
15. Is able to use mathematical and related scientific literature and other sources of information.		
16. Is able to work in a team, to cooperate effectively with team members.		
17. Is able to effectively manage time and other resources.		

COMPETENCES

1. Is able to consciously and responsibly choose his future career, to pursue the set goals.		
2. Can work in mathematical, related and other fields, carry out business activities, make decisions independently, take responsibility for the consequences of decisions.		
3. Can manage and coordinate team work.		
4. Is able to independently deepen knowledge in the professional and related field and use it in the course of activity.		
5. Is able to continue studies at the next level of education in mathematics or related fields.		

1. The list of the Programme Learning Outcomes is presented below.

2. xxx high, xx- medium, x-low, «-» absence of compliance.

Learning Outcomes of the "XXX" Bachelor's Degree Programme

A. Professional knowledge and understanding		B. Practical professional skills	
A1		B1	
A2		B2	
A3		B3	
A4		B4	
A5		B5	
A6		B6	
A7		B7	
A8		B8	
A9		B9	
A10		B10	
C. Generic (transferable) competences			
C1		C4	
C2		C5	
C3		C6	

Compliance Matrix of the Learning Outcomes of YSU “YYY” Master’s Degree Programme with the 7th Level Descriptors of “Mathematics” Sectorial Qualifications Framework

7 th Level Descriptors of “Mathematics” Sectorial Qualifications Framework	Programme Learning Outcomes ¹	Degree of Compliance ²
KNOWLEDGE AND UNDERSTANDING		
6. Has deep knowledge to carry out activities in the professional field.	A1, A3	xxx
7. Has deep and comprehensive knowledge of basic mathematical theories, principles and methods, demonstrates deep knowledge of theories, advanced principles and methods of related fields.		xxx
8. Has deep professional knowledge to effectively organize and implement research work.	A6, A8	xx
9. Has comprehensive knowledge about the current basic problems of the profession, their significance and importance, the research carried out in the direction of the solution.		xxx
10. Has knowledge about the applications of mathematics in related fields of science and activity.		x
11. Has the necessary knowledge to continue studying at the next level of education in the field of mathematics or in a related field.		
SKILLS		
1. Can obtain justified generalizations, new results and applications based on well-known mathematical theories, methods and results.	B1, B2	xxx
2. Can mathematically model the phenomena and processes encountered in various fields of science, analyze and investigate these models from theoretical and numerical points of view, make conclusions and adjustments.		x
3. Can lead research projects at undergraduate level.	B4, B6	xxx
4. Can separate the range of data and materials necessary for solving existing problems, evaluate and analyze them, use them in a purposeful way.		xxx
5. Can effectively use the combination of modern information technologies, professional programs, developed algorithms to solve professional problems, develop new algorithms if necessary.		xx
6. Can use modern professional article and report preparation packages in his professional activities.		
7. Can present the results of the conducted research in the form of a report or a technical essay, in Armenian or a foreign language.		

8. Can present a report at professional seminars and conferences, conduct professional debates and discussions in native and foreign languages.		
9. Is able to make reasoned and justified decisions in different situations		
10. Can abstract, generalize, particularize, show a creative approach in various legal situations and problems.		
11. Can analyze existing problems, formulate new problems and propose approaches and necessary tools for solving them.		
12. Is able to conduct discussions with related field members, work in an inter-field team.		
13. Can propose evidence-based ideas and programs and pursue their successful implementation.		
<i>COMPETENCES</i>		
1. Is able to assess his educational and professional needs, to make a decision regarding further studies, professional growth and career, to make the decision a reality.		
2. Is able to plan, organize and effectively manage research or other team work, showing initiative and independence.		

1. The list of the Programme Learning Outcomes is presented Bellow.

2. xxx high, xx- medium, x-low, «-» absence of compliance.

“YYY” Master’s Degree Programme Learning Outcomes

A. Professional knowledge and understanding		B. Practical professional skills	
A1		B1	
A2		B2	
A3		B3	
A4		B4	
A5		B5	
A6		B6	
A7		B7	
A8		B8	
A9		B9	
A10		B10	
C. Generic (transferable) competences			
C1		C4	
C2		C5	
C3		C6	

