

## Tbilisi State Medical University

Tbilisi State Medical University Faculty	Pharmacy
Program Title	Master's educational program - Pharmacy Management
Awarded academic qualification/degree	Master of Pharmacy Management
Program Director	Assistant Professor -Nana (Nanuli) Dughashvili
Credit Value of the Program	120 ECTS credits
Language of Instruction	Georgian
Program Objectives	<p><b>The aim of the program is:</b></p> <p><b>1. To equip graduates with deep and systematic knowledge:</b></p> <p>1.1. about management methods and management systems in pharmacy;</p> <p>1.2. about competitive marketing strategy and tactics in pharmacy, marketing research;</p> <p>1.3. about pharmaceutical business, fundamentals of finance and Pharmacoeconomics;</p> <p><b>2. Training of highly qualified "Pharmacy Management" masters, who will be able to independently carry out:</b></p> <p>2.1. High-level managerial activities: management and supervision of pharmaceutical products supply, storage and sales processes, material, commodity-financial resources and pharmaceutical institutions, highly qualified consultation on rational pharmacotherapy;</p> <p>2.2. Implementation of competitive marketing activities in such segments of pharmaceutical activity as: pharmaceutical product production, distribution, pharmacy, import, quality control, logistics, pharmacoeconomic activities;</p> <p>2.3. Using modern methods and the latest approaches, researching external and internal challenges affecting the pharmacy system/organization, administration and critical analysis of the obtained results, making substantiated conclusions, communicating with the academic and professional community in Georgian and/or English, liberal value assessment, participating in their establishment. Generating new ideas and searching for ways to solve complex problems in professional activities.</p>
Prerequisite(s)/Requirements for admission to the program	Admission to the program is regulated by the rule established by the legislation of Georgia and by the regulation approved by the Academic Council of the Tbilisi State Medical University

	<p>regarding the master's degree (Decisions of the Academic Council of TSSU: No. 24/5, 7.05.2012, No. 24/3, 15.05.2017):</p> <ul style="list-style-type: none"> <li>- A person with a bachelor's degree or an equivalent degree has the right to study at the master's level;</li> <li>- In order to obtain the right to continue studying at the master's program, it is necessary to pass the general master's exam (A test) and the exams established by the Tbilisi State Medical University in the specialty and English language (overcoming the 50%+1 threshold).</li> <li>- Only those candidates for master's degree who have passed the minimum competence threshold established by Georgian legislation in the common master's degree exam have the right to participate in the exam/exams established by the higher educational institution;</li> <li>- Enrollment in the master's degree program is carried out within the framework of the pre-announced admission quota, according to the competition rules.</li> </ul> <p>Access to mobility is accepted in accordance with the legislation of Georgia and TSU regulations.</p>
<p><b>Program short description</b></p>	<p>Brief description of the program The Master's program includes both educational, practical and research components. The program duration is 2 years or 4 semesters.</p> <p>The educational program includes 120 ECTS credits:</p> <ul style="list-style-type: none"> <li>Basic courses - 60 credits;</li> <li>Professional practice - 18 credits;</li> <li>Elective courses - 12 credits;</li> <li>The master's thesis - 30 credits.</li> </ul> <p>The fourth semester is fully devoted to the research component, which includes independent research conducted by the master's student in the relevant direction, the results of which are reflected in the master's thesis.</p> <p>A Master of Pharmacy Management can be employed with the relevant competence or to continue studying at the third level of education - in doctoral studie</p>
<p><b>Student Knowledge Assessment System</b></p>	<p>Assessment of students' achievements is carried out in accordance with the Order No. 3 of the Minister of Education and Science of Georgia dated January 5, 2007.</p> <p>The European Credit Transfer and Accumulation System (ECTS) operates at the university, which is based on learning outcomes, transparency of the learning process and student-oriented system. Its purpose is to facilitate the planning, implementation, assessment/recognition of study units, as well as student mobility.</p> <p>The assessment components are the midterm assessment and the final assessment, their sum determines the final assessment of the student. The maximum evaluation of the training course is 100 points, which is the sum of intermediate evaluations (minimum competence level - 31 points) and final evaluation. The right to</p>

	<p>pass the final exam is granted to a student who can get 51 points with the sum of the minimum positive evaluation of the intermediate evaluation and the final exam.</p> <p>The evaluation of the student's work provides for:</p> <p>a) Intermediate assessment, which represents the sum of points obtained according to the knowledge assessment methods/parts (students' weekly/daily ongoing academic, practical activities, presentation/s, colloquium(s), etc.) provided by the syllabus of the study course and is determined by 0-60 points.</p> <p>b) evaluation of the final exam. Out of 100 points of the maximum evaluation of the training course, the maximum evaluation of the final exam is assigned 0-40 points.</p> <p>Five types of positive and two types of negative evaluations are allowed by the evaluation system.</p> <p>- <b>Positive evaluations are:</b></p> <p>(A) excellent – 91-100 points,  (B) very good – 81-90 points,  (C) good – 71-80 points,  (D) satisfactory – 61-70 points,  (E) Sufficient – 51-60 points.</p> <p>- <b>negative assessments are:</b></p> <ul style="list-style-type: none"> <li>➤ (FX) failed – 41-50 points, which means that the student needs to work more to pass and is allowed to take the additional exam once;</li> <li>➤ (F) Failed – 40 points or less, which means that the work done by the student is not sufficient and he/she has to retake the course of study.</li> </ul> <p>The additional requirements established for the assessment of student achievements in a separate study course are described in detail in the relevant syllabus and are known to students.</p>
<p><b>Learning Outcomes</b></p>	<p><b>Knowledge and awareness:</b></p> <ul style="list-style-type: none"> <li>✓ Knows pharmaceutical ethics, analytical writing, industry English, pharmaceutical business social responsibility, pharmacy policy, appropriate (good) pharmaceutical practices of FIP recommendations, safety of medicinal products at production, distribution and logistics stages through the CAPA (Quality Process Prevention and Correction) system, about ways of solving efficiency and quality;</li> <li>✓ Knows the methods of management, management systems and marketing strategy and tactics; Effective management of pharmaceutical establishments and pharmaceutical activities, universal functions of management: team working, leadership, preparation of decisions, acceptance and implementation process, projects, logistics management, risks and opportunities, quantitative and qualitative characterization of information and statistical processing; knows the</li> </ul>

methods of pharmacoeconomic research, the organization of pharmaceutical business; Management of specific pricing strategies, pharmaceutical and medical products expertise; pharmaceutical care management and supervision; on innovative information technologies;

- ✓ Knows and understands the challenges facing the industry
- ✓ The importance of evaluating solution directions, the importance of in-depth study of new ideas, in order to develop appropriate actionable measures.

**Ability to:**

- ✓ Effective management of material, commodity, financial, human resources, quality, operating systems, risks, management and supervision of pharmaceutical institutions; developing effective mechanisms for identifying threats and opportunities and responding to them; management and supervision of highly qualified counseling on rational pharmacotherapy;
- ✓ Determination of marketing strategy, implementation of marketing research and statistical processing of quantitative and qualitative research indicators;
- ✓ Determination and forecasting of the main economic indicators; development of a business plan; Strategic planning - production of financial calculations. conducting pharmacoeconomic studies;
- ✓ Statistical processing, critical analysis, innovative synthesis of information and formation of justified conclusions;
- ✓ Providing information and discussion with the professional community and consumers about pharmacy policy, good pharmaceutical practices, quality system, pharmaceutical care, pharmacovigilance, pharmacoeconomic, management, marketing research results using Georgian/or English language, ethics and modern communication technologies. creation and dissemination of new knowledge in these directions.

**Responsibility and autonomy:**

- ✓ In the process of effective management of pharmaceutical activity, based on the knowledge based on the latest achievements, understanding one's own place, role and responsibility, evaluating the attitudes of others and contributing to the establishment of new values in professional activity;
- ✓ Based on the objective assessment of his own knowledge and skills, he is able to understand the peculiarities of the learning process, for the purpose of professional development, determine the need for learning and,

	independently, plan and implement it at a strategically high level.
<b>Fields of Graduate Employment</b>	<p>Master of Pharmacy Management can be employed within the scope of competence based on the knowledge and skills acquired:</p> <ul style="list-style-type: none"> <li>✓ In the pharmacy;</li> <li>✓ In pharmaceutical industry;</li> <li>✓ In the drug quality control and chemical-toxicological analysis laboratory;</li> <li>✓ In the establishment of sale of chemical reagents and medical equipment;</li> <li>✓ In the Forensic Chemical Expertise Bureau;</li> <li>✓ In a professional administrative-regulatory, scientific-research and educational institution.</li> </ul>

## Curriculum

### Master program - "Pharmacy Management"

#	Components	Number of credits	Hours		Credit distribution by semesters			
			Among them		I	II	III	IV
			contact	independent				
<b>Mandatory</b>								
1	Analytical writing	2	24	36	2			
2	Information technologies in science	2	24	36	2			
3	Social pharmacy (pharmaceutical activity regulations and international standards)	6	72	108	6			
4	Pharmaceutical care management and supervision	3	36	54	3			
5	Management of pharmaceutical information in drug distribution and pharmaceutical care	3	36	54	3			
6	Organizational Behavior and Human Resources	4	48	72	4			
7	Management in pharmaceutical institutions	3	36	54	3			
8	Statistics and qualitative and quantitative characteristics of the study	3	36	54	3			
9	Professional English	2	24	36		2		
10	Strategic management	2	24	36		2		
11	Pharmaceutical marketing and international market	2	24	36		2		
12	Pharmaceutical quality management	4	48	72		4		
13	Strategic marketing and operational	4	36	54		4		
14	organization of activities	3	36	54		3		
15	Pharmacoeconomics	2	24	36		2		
16	Management of the pharmaceutical enterprise	5	60	90		5		
17	Practice 1 (Pharmacy)	5	60	90		4		
18	Practice 2 (Enterprise)	6	72	108			6	
19	Marketing research and the pharmaceutical market	3	48	72			3	

20	Management of logistics	2	24	36			2	
21	risk management	2	24	36			2	
22	Operational Management Systems in Pharmacy	2	24	36			2	
23	Practice 3 (Pharmacy)	4	48	72			4	
24	Practice 4 (Pharmaceutical care management and supervision in a therapeutic hospital)	3	36	54			3	
25	Practice 5 (pharmaceutical activity administration)	2	24	36			2	
26	master's thesis	30	360	540				30
		<b>108</b>	<b>1296</b>	<b>1944</b>	26	28	24	<b>30</b>
	<b>Elective courses</b>	<b>12</b>	<b>144</b>	<b>216</b>	<b>4</b>	<b>2</b>	<b>6</b>	
	<b>Total</b>	<b>120</b>	<b>1440</b>	<b>2160</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>30</b>
	<b>Elective study courses</b>							
1	Rational use of medicines	2	24	36				
2	Drug policy	2	24	36				
3	Basics of sociology and psychology	2	24	36				
4	Pharmaceutical product standardization and	2	24	36				
5	Registration	2	24	36				
6	Expertise management of pharmaceutical and medical products	2	24	36				
7	Practical part of pharmacoeconomics	2	24	36				
8	Public health and health policy	2	24	36				
9	Personal sales in the field of pharmacy	2	24	36				
10	Pharmacy and funding policy	4	48	72				
11	Business English	2	24	36				
12	Pharmacoeconomics and outcomes research in Pharmacy	2	24	36				
	The total number of credits for elective courses	26						