 ASTANA MEDICAL UNIVERSITY	<b>NCJSC “Astana Medical University”</b>	Стр 1 из 9
	<b>Entrance Examination Program</b>	


## ENTRANCE EXAMINATION PROGRAM

**For the Educational Program Group: Pharmacy** (based on secondary vocational pharmaceutical education)

**Duration of Study:** 2 years


**Mode of Study:** Full-time.

Astana 2026.

 <b>ASTANA MEDICAL UNIVERSITY</b>	<b>NCJSC “Astana Medical University”</b>	Стр 2 из 9
	<b>Entrance Examination Program</b>	

## Contents

1	Purpose and Scope	3
2	Normative References	3
3	Main Section	3
3.1	General Information	3
3.2	Contact Information	3
3.3	Venue of the Entrance Examination	3
3.4	Format of the Entrance Examination	3
3.5	Application Schedule and Entrance Examination Dates	3
3.6	Appeals Procedure	4
3.7	Examination Materials	4
3.8	Entrance Examination Results	7
	Appendices	8
	Approval Sheet	10

	<b>NCJSC “Astana Medical University”</b>	Стр 3 из 9
	<b>Entrance Examination Program</b>	

## **1. PURPOSE AND SCOPE**

1.1 This Program is intended for applicants seeking admission to the Educational Program 6B10104 “Pharmacy.”

The required prior level of education is secondary vocational pharmaceutical education.  
Duration of study: 2 years.

## **2. NORMATIVE REFERENCES**

2.1 This Program is based on the following regulatory document:

Order of the Minister of Education and Science of the Republic of Kazakhstan No. 600 dated October 31, 2018, “On Approval of the Standard Rules for Admission to Educational Organizations Implementing Educational Programs of Higher and Postgraduate Education.”

## **3. MAIN SECTION**

### **3.1 General Information**

Entrance examinations for the accelerated study program are intended to select applicants for admission to an accelerated educational program. These examinations are conducted to assess applicants’ knowledge, skills, competencies, and preparedness for an intensive and condensed course of study.

The entrance examination test questions are developed taking into account the disciplines previously completed and the applicant’s prior educational background.

### **3.2 Contact Information**

School of Pharmacy, Astana Medical University Office 301, 49A Beibitshilik Street, Astana, Kazakhstan Tel.: +7 (7172) 53-94-32, E-mail: omari.a@amu.kz

### **3.3 Venue of the Entrance Examination**

Astana Medical University, 51 Beibitshilik Street, Astana, Kazakhstan

### **3.4 Format of the Entrance Examination**

Computer-based testing.

The list of examination questions was approved at Meeting No. 2 of the School of Pharmacy Council dated May 4, 2026.

### **3.5 Application Schedule and Entrance Examination Dates**


The registration and entrance examination schedule for applicants is provided in Table 1.

Table 1.

<b>Application Period</b>	<b>Entrance Examination Dates</b>	<b>Examination Time</b>	<b>Appeal Submission Deadline</b>	<b>Examination Venue</b>
July 1 – August 3	August 5–14	10:00 – 12:00 14:00 – 16:00	Until 1:00 p.m. on the day following the announcement of results	51 Beibitshilik Street, 5th Floor, Rooms 501 and 509

\*The entrance examination schedule (exact date, time, and applicant’s full name) will be published on our website in the “**Applicants**” section under “**Accelerated Study Program.**”

Applicants are admitted to the examination room upon presentation of a valid identification document. The entrance examination is conducted in classrooms equipped with video and/or audio recording systems.

 <b>ASTANA MEDICAL UNIVERSITY</b>	<b>NCJSC “Astana Medical University”</b>	Стр 4 из 9
	<b>Entrance Examination Program</b>	

### **List of Required Documents:**

- 1) Application addressed to the Rector of the University in the prescribed form (Appendix 1);
- 2) Educational document (diploma and transcript; original and copy);
- 3) Identification document (original and copy);
- 4) Six (6) photographs measuring 3 × 4 cm;
- 5) Medical certificate Form 075/u (original and copy), fluorography image, and a copy of Form 063/u (vaccination record);
- 6) Individuals holding technical and vocational or post-secondary education qualifications, who have confirmed their qualification and have at least one year of work experience in the specialty, shall additionally submit one of the documents provided for in Article 35 of the Labor Code of the Republic of Kazakhstan.

### **3.6 Appeals Procedure**


Appeals against the entrance examination results shall be submitted personally by the applicant to the Chairperson of the Appeals Committee.

Appeal applications are accepted until **1:00 p.m. on the day following the announcement of the entrance examination results** and are reviewed by the Appeals Committee within **one working day** (Appendix 2).

### **3.7 Examination Materials**

#### **1. Organization and Economics of Pharmacy with the Basics of Management and Marketing**

- 1) Basic principles of organization of medical and pharmaceutical care for the population of the Republic of Kazakhstan.
- 2) Legislative and regulatory documents governing the legal basis of pharmaceutical policy in the Republic of Kazakhstan.
- 3) Pharmaceutical market and its state regulation.
- 4) Organization of wholesale pharmaceutical market activities.
- 5) Organization of retail pharmaceutical market activities.
- 6) Pharmacies, their tasks, functions, and departments.
- 7) Organizational structure of a pharmacy, equipment and facilities.
- 8) Licensing of pharmaceutical activities.
- 9) Sanitary and hygienic regime in pharmaceutical organizations.
- 10) Production activities of pharmaceutical organizations.
- 11) Organization of pharmacy point operations.
- 12) Organization of quality control of medicinal products.
- 13) Pharmaceutical provision for inpatients.
- 14) Basic principles of determining demand and studying the need for medicines.
- 15) Organization of pharmaceutical warehouse operations.
- 16) Main issues of storage of medicines and medical devices.
- 17) Fundamentals of pharmaceutical economics management.
- 18) Features of pharmaceutical economics.
- 19) Forecasting of key economic indicators of pharmacy organization activities.
- 20) Basics of accounting and reporting in pharmacy organizations.
- 21) Accounting of fixed assets, movement of goods and other material assets.
- 22) Accounting of cash and settlement operations.
- 23) Inventory of material assets in pharmacy organizations.

 <b>ASTANA MEDICAL UNIVERSITY</b>	<b>NCJSC “Astana Medical University”</b>	Стр 5 из 9
	<b>Entrance Examination Program</b>	

24) Fundamentals of management in pharmacy.

25) Fundamentals of marketing in pharmacy.

## **2. Pharmaceutical Chemistry**

1) Subject, content, objects, and main tasks of pharmaceutical chemistry.

2) State regulation and quality control of medicinal products.

3) Quality assurance of medicinal products.

4) Chemical classification of medicinal products.

5) Selection of methods, general and specific tests, requirements for identification of medicinal products.

6) Physicochemical properties of medicinal substances.

7) Identification of medicinal products.

8) Quantitative determination of medicinal products according to the State Pharmacopoeia of the Republic of Kazakhstan.

9) Determination of quantitative content of medicinal products by physicochemical methods.

10) Standardization of medicinal products.

11) Stability and storage of medicinal products.

12) Differences between inorganic and organic medicinal products according to functional groups.

13) Quality control of medicinal products (incoming control, in-pharmacy control, organoleptic, physical, chemical express analysis).

14) Purity tests based on physical and chemical properties.

15) Fundamentals of laboratory techniques for pharmaceutical analysis.

16) Titrimetric methods of analysis.

17) Medicinal products derived from elements of Periodic System I–VIII.

18) General characteristics of organic medicinal substances.

19) Aromatic compounds.

20) Halogen derivatives of acyclic hydrocarbons.

21) Fatty carboxylic acids and their derivatives.

22) Phenols. Aromatic acids and their derivatives.

23) Amino acids and their derivatives.

24) Alkaloids.

25) Vitamins.

## **3. Pharmacognosy**

1) Natural resources and reserves of Kazakhstan.

2) Raw material base of medicinal plant materials.

3) Fundamentals of procurement of medicinal plant materials.

4) Pests of medicinal plant materials.

5) Medicinal plants as sources of biologically active substances.

6) Medicinal plants and raw materials affecting the nervous system.

7) Medicinal plants and raw materials used in cardiovascular diseases.

8) Medicinal plants and raw materials affecting the urinary system.


9) Medicinal plants and raw materials used in digestive diseases.

10) Medicinal plants and raw materials affecting the blood system.

11) Medicinal raw materials of animal origin.

12) Methods for determining reserves of medicinal plant materials.

13) Legislative foundations of plant ecology.

 ASTANA MEDICAL UNIVERSITY	<b>NCJSC “Astana Medical University”</b>	Стр 6 из 9
	<b>Entrance Examination Program</b>	

- 14) General concepts of plant ecology.
- 15) Collection and primary processing of medicinal plants.
- 16) Drying and storage of medicinal plant materials.
- 17) Methods of analysis of medicinal plants and medicinal plant materials.
- 18) Sampling rules for medicinal plant materials.
- 19) Standardization of medicinal plant materials.
- 20) Diagnostics of roots and rhizomes.
- 21) Medicinal plants containing cardiac glycosides.
- 22) Microscopy of leaves and flowers.
- 23) Medicinal plants containing tannins.
- 24) Medicinal plants containing alkaloids.
- 25) Homeopathic preparations and labeling requirements.

#### **4. Technology of Dosage Forms**

1) Definition of pharmaceutical technology as a scientific and academic discipline. Tasks of pharmaceutical technology. Main directions of their solution. Current state and development prospects.

2) Quality standardization of dosage forms and substances. Concept of quality of medicinal substances and dosage forms.

3) Nomenclature and classification of excipients. Stabilizers of dosage forms as physicochemical systems. Preservatives, prolongators, solubilizers, corrigents, etc. Brief characteristics and applications.

4) Powders as a dosage form. Definition. Characteristics. Requirements for powders. Classification of powders. Stages of powder technology. Quality assessment of powders. Storage.

5) Herbal mixtures as a dosage form. Definition. Classification according to method of use, purpose, and dosage. General and specific technology of herbal mixtures.

6) Solutions as a dosage form. Classification of solutions. Modern nomenclature of solutions and prospects for their expansion in pharmacy and industrial conditions.

7) Technology of solutions. Quality assessment of solutions. Storage.

8) Infusions and decoctions. Importance of extraction dosage forms. Characteristics and classification of aqueous extracts.

9) Tinctures. Classification. Preparation of tinctures. Nomenclature of tinctures. Purification of tinctures. Standardization of tinctures. Storage.

10) Special cases of preparation of aqueous extracts: marshmallow root infusion, aqueous extracts from raw materials containing alkaloids, glycosides, tannins, saponins, etc.

11) Stages of technology of infusions and decoctions. Apparatus. Infusion apparatus. Introduction of medicinal substances into infusions and decoctions.

12) Preparation of aqueous extracts from extracts specially prepared for this purpose. Quality assessment of aqueous extracts. Packaging. Storage.

13) Medical capsules and microcapsules. Characteristics. Types of medical capsules.


14) Suspensions as dosage forms. Classification of suspensions. Storage.

15) Emulsions as dosage forms. Classification of emulsions. Storage.

16) Ointments and pastes. Features of technology of dermatological, rectal, and vaginal ointments.

17) Suppositories as a dosage form. Definition. Characteristics. Classification of suppositories. Requirements for suppositories.


18) Bases for suppositories, requirements for them. Classification of suppository bases.

 ASTANA MEDICAL UNIVERSITY	<b>NCJSC “Astana Medical University”</b>	Стр 7 из 9
	<b>Entrance Examination Program</b>	

- 19) Injectable dosage forms. Requirements for injectable dosage forms.  
20) Ophthalmic dosage forms. Definition. Drops, ointments, medicinal films.  
Characteristics. Requirements for ophthalmic dosage forms.

### **3.8 Entrance Examination Results**

Passing score: 50 points;  
Maximum score: 100 points;  
Examination duration: 1 hour 40 minutes (1 minute per test question);  
Total number of questions: 100;  
Each question has one correct answer;  
Each correct answer is worth 1 point.

 ASTANA MEDICAL UNIVERSITY	<b>NCJSC “Astana Medical University”</b>	Стр 8 из 9
	<b>Entrance Examination Program</b>	

Appendix 1

To the Chairperson of the Board – Rector of  
NCJSC “Astana Medical University”

From \_\_\_\_\_  
full name

\_\_\_\_\_ residential address

\_\_\_\_\_ mobile phone number

\_\_\_\_\_ Home phone number

E-mail: \_\_\_\_\_

\_\_\_\_\_ ID number, date of issue, issuing authority

**APPLICATION**


I hereby request permission to take the entrance examination in the form of  
\_\_\_\_\_ for the educational program \_\_\_\_\_.

The following documents are attached to this application:

- 1) Educational document (original);
- 2) Six photographs sized 3 × 4 cm;
- 3) Identity document (original and copy);
- 4) Medical certificate in Form 075/u;
- 5) Extract confirming completion of the psychometric examination;
- 6) Employment record book.

I hereby give my consent to the collection, processing, and dissemination of personal information related to the examination results.

Signature/Date \_\_\_\_\_

 <b>ASTANA MEDICAL UNIVERSITY</b>	<b>NCJSC “Astana Medical University”</b>	Стр 9 из 9
	<b>Entrance Examination Program</b>	

Appendix 2

To the Chairperson of the Appeals Commission

Full name of the applicant \_\_\_\_\_

IIN (Individual Identification Number) \_\_\_\_\_

**APPEAL APPLICATION**

I hereby request a review of the results of my special/entrance examination, as the test question \_\_\_\_\_

(specify the reason for submitting the appeal — e.g., incorrect wording of the question, etc.).

Date of announcement of the special examination results \_\_\_\_\_

/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/

Signature

Full name

Date