

# Systemic View of Industry Education as a Factor in Outstripping Development of the Pharmaceutical Industry of the Republic of Uzbekistan

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## Key social indicators

Population **36.521 million**

Birth rate **900,000 per year.**

Annual population growth **2.4%**

Urban population **51.6%**

Average life expectancy **74.3 years**

## Number of pharmaceutical manufacturing sites in Uzbekistan

|   |     |
|---|-----|
| Manufacturers of medicines                          | 82  |
| Manufacturers of medical equipment                  | 37  |
| Manufacturers of medical devices                    | 90  |
| Manufacturers of both medicines and medical devices | 8   |
| Distributors of medicines and medical devices       | 559 |

## Facilities holding GxP certificates in the Republic of Uzbekistan



| Standard   | GxP | Number of certified facilities |
|--|-----|--------------------------------|
| O'z DSt 2766:2018<br>Good Manufacturing Practice - GMP | GMP | 39                             |
| O'z DSt 2764:2018<br>Good Distribution Practice - GDP  | GDP | 117                            |
| O'zDSt 2763:2018<br>Good Storage Practice - GSP        | GSP | 1                              |
| O'z DSt 2762:2018<br>Good Laboratory Practice - GLP    | GLP | 1                              |





# TASHKENT PHARMA PARK

## Key Facts



### THE CLUSTER WILL INCLUDE:

Agency for the Development of the Pharmaceutical Industry

State Unitary Enterprise Center of Good Practices

State institution Center for Pharmaceutical Products Safety

Research and development centers

- scientific research laboratories, vivarium, pharmacopoeia

Pharmaceutical university with an international diploma

- Symposium center, hotel, campuses for foreign professors, experts, students







\$98.6 mil



2023-2026



 **Korea Eximbank**  
THE EXPORT-IMPORT BANK OF KOREA

- **4,000** students **per year** majoring in specialties in demand.
- **Bachelor's program:**
  - Bachelor of Pharmaceutical Science;
  - Bachelor of Biopharmaceutical Science;
  - Bachelor of Cosmetic Science;
- **Master's program:**
  - Master of Pharmacy;
  - Master of Pharmaceutical Biotechnology
  - Master of Pharmaceutical Quality by Design;
  - Master of Quality by Design for the Pharmaceutical Industry;
  - Master of Cosmetic Science.



\* The University will have a sports complex, a dormitory and an ICT center for the entire pharmaceutical cluster.





# Tashkent Pharmaceutical Institute



The Tashkent Pharmaceutical Institute was founded in 1937 on the basis of the Tashkent Medical Institute.

## Faculties:

- Industrial Pharmaceutical Science;
- Pharmaceutical Science;
- Further training of pharmacists

- **1,000** students **per year** majoring in specialties in demand.

## *Bachelor's degree programs*

- Pharmaceutical Science (by type)
- Industrial Pharmaceutical Science (by type)
- Pharmaceutical Biotechnology
- Standardization, Certification of Medicines and Quality Control
- Vocational education

*9 master's specialties*

*4 programs for further training of pharmacists*







**Institute of Pharmaceutical Education and Research started its activities in 2021.**

**Bachelor's program:**

- **Pharmaceutical Science**
- **Industrial Pharmaceutical Science**
- **General Medicine**
- **Medical Prophylaxis**

***7 master's specialties***

***8 programs for further training of pharmacists***

## **Cooperation with the United States Agency for International Development (USAID), 2017-2023**

Within the framework of the project Promoting the Quality of Medicines Plus (PQM+) approved by the Government of the Republic of Uzbekistan):

- Preparation of the National Inspectorate for Entry into the Pharmaceutical Inspection Cooperation System (PIC/S)
- Assistance in Organizing a Quality Management System for Quality Control Laboratories in Accordance with International Standards (WHO prequalification and ISO 17025)
- Conducting Trainings for Industry Employees, with the Involvement of International Experts

## **Further training of GMP inspectors by the Eurasian Academy of Good Practices**

Professional retraining program:

Rules for Organizing Production and Quality Control of Medicines - Theory and Practice of Inspecting Manufacturers of Medicines

Module 1 - Theory, May, 2021 (174 academic hours)

Module 2 – Practice at Production Sites, May-June, 2022 (52 academic hours)







VIII ALL-RUSSIA  
GMP CONFERENCE

## ORGANIZERS



## GENERAL PARTNER



## STRATEGIC PARTNER



GEDEON RICHTER  
Health is our mission

## GENERAL INFO PARTNER



## GENERAL INFO AND ANALYTICAL PARTNER

*Фармацевтический*  
**ВЕСТИНИК**

## STRATEGIC INFO PARTNER

**ФАРМ  
МЕД  
ПРОМ**