





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 Good Manufacturing Practice - GMP	GMP	39
O'z DSt 2764:2018 Good Distribution Practice - GDP	GDP	117
O'zDSt 2763:2018 Good Storage Practice - GSP	GSP	1
O'z DSt 2762:2018 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





Pharmaceutical Technical University







\$98.6 mil



2023-2026





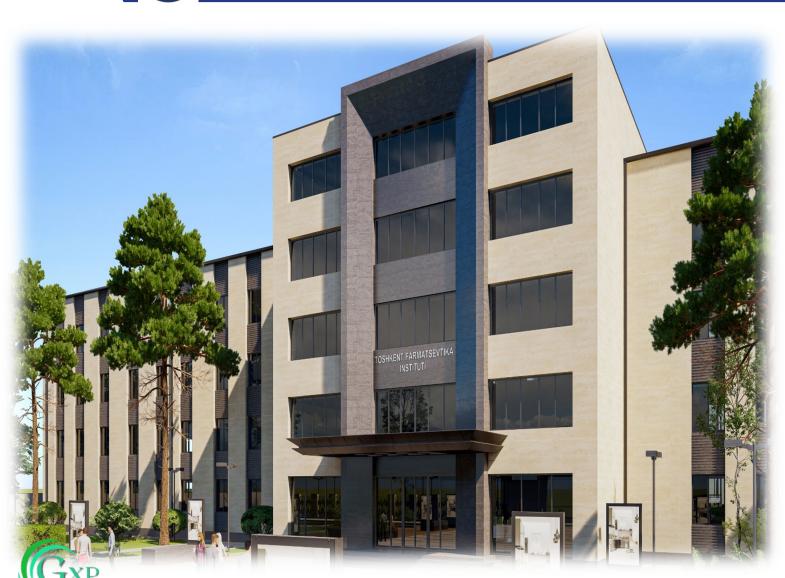
- **4,000** students **per year** majoring in specialties in demand.
- Bachelor's program:
- Bachelor of Pharmaceutical Science;
- Bachelor of Biopharmaceutical Science;
- Bachelor of Cosmetic Science;
- Master's program:
 - Master of Pharmacy;
 - Master of Pharmaceutical Biotechnology
 - Master of Pharmaceutical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

GMP

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 (IPER)





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)





ORGANIZERS





SS-GROUP

GENERAL PARTNER



STRATEGIC PARTNER



GENERAL INFO PARTNER



GENERAL INFO AND ANALYTICAL PARTNER

Фармацевтический ВІЕСППНІМІК STRATEGIC INFO PARTNER

ФАРМ МЕД ПРОМ