



Erasmus+



Tashkent chemical – technological institute

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The Republic of Uzbekistan is located in Central Asia and borders with Kazakhstan and Kyrgyzstan, Tajikistan, Turkmenistan and Afghanistan.



Tashkent



Samarkand



Bukhara

Modern development of Uzbekistan

- During the years of independence, Uzbekistan began to pursue reforms in the economic and social spheres. As a result of the reforms initiated under the leadership of the first President of Uzbekistan Islam Karimov, impressive results were achieved on the modernization and technological re-equipment of a number of economic industries.
- **Macroeconomic indicators of the country for the years of independence from 1991 to 2016:**
- The **GDP grew from 61.5 billion soums to 199325.1 billion soums, ie 3241 times,**
- the **volume of industrial output increased from 63 billion soums to 111267.2 billion soums, ie in 1766.1 times.**
- As a result of investments in the production sectors of the economy, **absolutely new industries such as automotive, oil and gas chemistry, oil and gas and railway machinery, modern construction materials, consumer electronics, pharmaceuticals, modern food and textile industries and others were created in the country.**
- **The Bukhara Oil Refinery, the Shurtan Gas Chemical Complex, the Kungrad Soda Plant, the Dekhkanabad Potash Fertilizer Plant and a number of other high-tech industries have been built in the framework of the program to ensure energy independence and development of oil and gas refining industries in cooperation with foreign companies. Ustyurt Gas Chemical Complex was put into operation on the basis of Surgilskoye field.**



Tashkent chemical – technological institute , www.tkti.uz

- ❑ Tashkent chemical – technological institute is one of the most prestigious universities in Uzbekistan in the field of **chemistry and chemical engineering (organic and inorganic substances, oil-and-gas, ceramics, glass, building materials, rare and noble metals, polymers), food chemistry and technology, biotechnology, mechanical engineering, as well as environment protection, materials sciences**, and other chemistry-based fields of study. It is a public higher education institution pursuing scientific, research, development, and implementation activities.
- ❑ TCTI is accredited to provide four-year Bachelor (BSc) programmes, two-year Masters (MSc.) programmes, and Doctor of sciences (3 year of PhD and 3 year of DSc) programmes.

4335 Bachelor
students

489 Master
students

89 PhD
students

15 BSc programs

31 MSc programs

10 PhD programs

Faculties and Departments of TCTI at main Campus in Tashkent

CHEMICAL TECHNOLOGY OF INORGANIC SUBSTANCES

- Technology of silicate materials and rare noble metals
- Technology of inorganic substances
- Processes and devices
- Industrial Ecology
- Analytical, physical and colloid chemistry
- General and Inorganic Chemistry

CHEMICAL TECHNOLOGY OF FUEL AND ORGANIC SUBSTANCES

- The technology of high-molecular compounds and plastics
- Organic chemistry and technology of basic organic synthesis
- Chemical technology of oil and gas processing
- pulp and wood technology

TECHNOLOGY OF FOOD PRODUCTION

- Food processing
- Food safety
- Computer science, automation and control
- Basics of mechanics and engineering graphics

MANAGEMENT AND PROFESSIONAL EDUCATION

- Industrial management
- Product Quality Management
- Professional education
- Languages

TECHNOLOGY OF WINEMAKING AND INDUSTRIAL VITICULTURE

- Biotechnology (Biotechnology, bioenergy)
- Industrial Ecology (Environmental Protection and Ecology)
- Enology (Enology, technology of fermentation products and soft drinks, Catering technology, organization and service)

Bachelor Degree Programs

(full time 4 year, part time 5 year of study)



Specialties for bachelor's degree

Full-time education

5111000	Professional education
5230200	Management
5310900	Metrology, standardization and product quality management
5311000	Automation and control of production and technological processes
5320300	Technological machines and equipment (by branches)
5320400	Chemical technology (by type of production)
5320500	Biotechnology (by industry)
5321000	Food technology (by product type)
5321300	Technology of oil and gas processing
5321400	Technology of petrochemical industry
5321800	Manufacture of rubber materials
5610100	Services (catering and service)
5630100	Ecology and environmental protection
5640100	Life safety

Part-time education

5230200	Management
5310900	Metrology, standardization and product quality management
5320300	Technological machines and equipment (by branches)
5320400	Chemical technology (by type of production)
5320500	Biotechnology (by industry)
5321000	Food technology (by product type)
5321300	Technology of oil and gas processing
5630100	Ecology and environment protection
5640100	Life safety

The institute provides training at the bachelor, master, PhD (basic doctoral) and DSc (PhD) levels, covering 15 types of bachelor's directions and 22 types of magistracy specialties. For the award of a PhD and DSc degree studies are conducted in all areas, including manufacturing and other engineering specialties.

Master Degree Programs (2 year study) at TCTI



The educational process in this degree for the relevant areas of education (the specialty of master's degree) is organized on the basis of developed by a leading higher education institution, examined by the State Test Center under the Cabinet of Ministers, discussed in the coordination commission on the activities of the educational and methodical management in educational areas of higher and secondary specialized education of the Higher Educational State Standard of the Ministry of Higher and Secondary Special Education and on the basis of curricula.



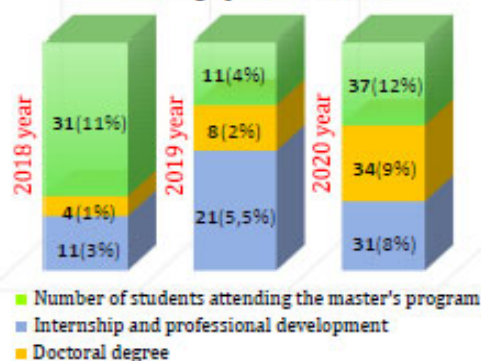
- | | |
|----------|------------------------------------------------------------------------------------------------|
| 5A230201 | Management (by types of industries) |
| 5A310901 | Product safety and certification |
| 5A310902 | Metrology, standardization and quality management |
| 5A311001 | Automation of technological processes and production |
| 5A320305 | Machines and equipment for chemical production and building materials |
| 5A320306 | Pulp and paper production technology and processes |
| 5A320307 | Wood technology and wood science |
| 5A320401 | Chemical technology of inorganic substances |
| 5A320402 | Chemical technology of organic substances |
| 5A320404 | Chemical technology of silicate and hard materials |
| 5A320405 | Chemical technology of high-molecular compounds |
| 5A320407 | Processes and devices of chemical technology |
| 5A320501 | Biotechnology (by type of product) |
| 5A321001 | Technology of production and processing of food products (by type of products) |
| 5A321003 | Food safety |
| 5A321302 | Chemical technology and oil and gas processing |
| 5A321303 | Processes and equipment for oil and gas processing |
| 5A321401 | Chemical and petrochemical industry technology |
| 5A321801 | Manufacture of rubber materials |
| 5A610101 | Service sector (catering) |
| 5A630101 | Environmental protection (by industry) |
| 5A640101 | Occupational Safety and Health. Safety of technological processes and production (by branches) |

International Cooperation

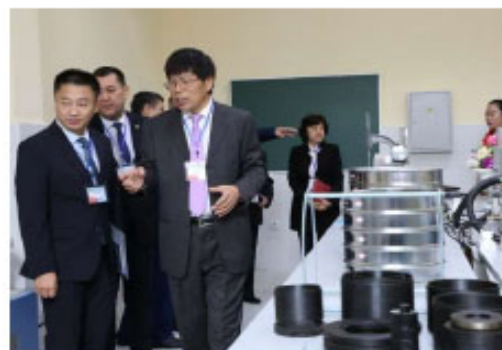
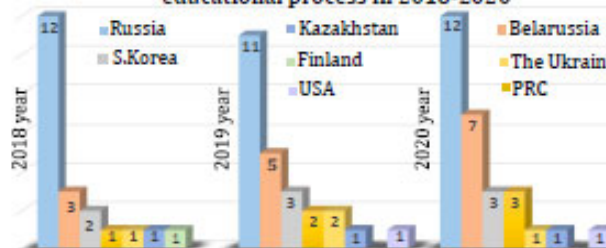
INTERNATIONAL COOPERATION

TCTI seeks to become one of the centers of international educational and scientific relations. The international activity of the institute is determined by educational concept of the institute, and we consider international cooperation as one of the factors of the successful development of education and science.

Training of specialists of the TCTI in foreign partner universities



Foreign specialists involved in the educational process in 2018-2020



The TCTI cooperates with the following HE institutions of the world:

- Austria, Technical University of Vienna
- Austria, University of Vienna
- Bulgaria, Sofia University of Chemical Technology and Metallurgy
- Germany, University of Magdeburg;
- Germany, Technical University of Munich;
- Germany, University of Gottingen Georg-August;
- Italy, University of Padova;
- Latvia, University of Latvia;
- PRC, Lanzhou University of Technology;
- PRC, Institute of Biology at the Shandong Academy of Science;
- PRC, Institute of Automation at the Shandong Academy of Science;
- Poland, Silesian University of Technology;
- Poland, Warsaw University of Life Sciences;
- Poland, University of Science and Technology;
- Republic of Belarus, Belarusian State Technological University;
- Republic of Belarus, Mogilev State University of Food Technologies;
- Russia, Moscow State Academy of fine chemical technology named after M.V.Lomonosov;
- Russia, Russian chemical-technological University named after D.I.Mendeleev;
- South Korea, Changwon National University;
- South Korea, Kumoh National Institute of Technology;
- South Korea, University of Sogang;
- South Korea, University of Ulsan;
- Spain, Universidad de Cantabria;
- Spain, Universidad de Santiago de Compostela;
- Spain, Universidad de Granada;
- UK, Open University.

OUR PARTNERS



International relations of TCTI



The Tashkent Chemical-Technological Institute have more than 90 MoU and Agreements with Higher Education Institutions and research institutes around the world.

Academic Exchange Programs (ERASMUS+, Mevlana, American Councils) at TCTI

Country	University-partner	Participants
Denmark	University of Copenhagen	Academic staff, PhD candidates
USA	Kansas University	Academic staff, PhD candidates
Poland	Silesian University of Technology	Academic staff, PhD candidates
Poland	AGH University of Science and Technology	Academic staff, PhD candidates
Spain	University of Cantabria	Students and academic staff
Spain	University of Oviedo	Students and academic staff
Italy	Turin Polytechnic University	Students and academic staff
Czech Republic	Czech University of life sciences	Students
Romania	I Decembrie 1918 University, Alba Iulia	Students and academic staff
Romania	West University of Timișoara	Students and academic staff
Turkey	Aydin Aydnan University	Students and academic staff
Turkey	Konya Technical University	Students and academic staff

Double degree BSc, MSc and PhD Programs at TCTI

Country	University-partner	Participants
Belorussia	Belorussian State Technological University	Bachelor program (BSc): Chemical Technology; Technological equipment and Machines; Automation and Control of technological processes
Belorussia	Belorussian STU	Master program (MSc): Mechanical Engineering
Belorussia	Mogilev state University of food products	Bachelor program: Technology of food products; Machines and equipment of food industry; Functional nutrition and baby food technology;
Belorussia	Mogilev state University of food products	Master program (MSc): Machinery and aggregates of the food industry Food production and processing technology (by product type) Sphere of services (organization of production and service in catering establishments)
Russian Federation	Kazan State University	Bachelor program (BSc): Mechatronics and robotics; Machines and aggregates of refrigeration cryogenic techniques and stabilization systems; Materials Science and New Materials Technology; Professional safety and health
Russian Federation	Kazan State University	Master program (MSc): Innovatics; Material Science
Spain	University of Cantabria	PhD Cotutelle program : Automation and Control of Processes

International Projects of Institute.

TCTI involved in following international projects:

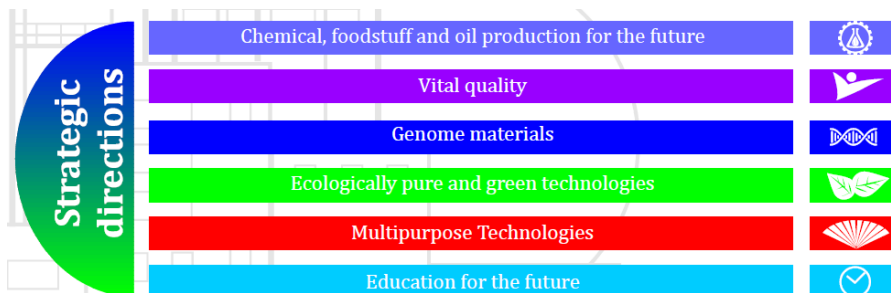
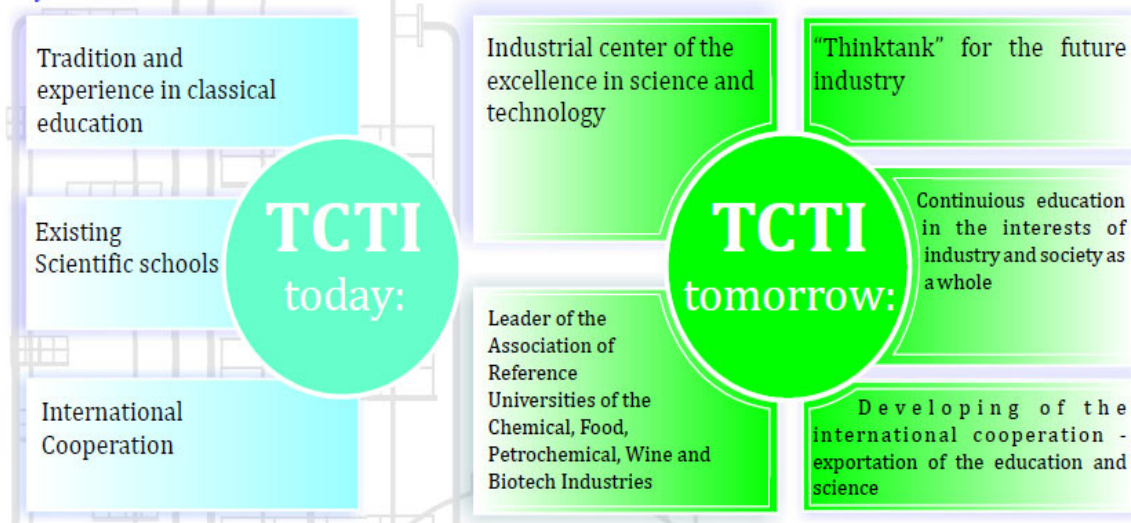
- ❑ **TEMPUS project COCUZ: CD_JEP-25221- 2004 “Computational Science with Chemistry Applications”. Budget - 491000 €.**
- ❑ **TEMPUS project MCFS: JEP-24104-2003 “Curriculum Development for a Master Course in Food Safety”. Budget – 463 000 €.**
- ❑ **TEMPUS project JEP-158918-TEMPUS-1-2009-1-AT-TEMPUS-JPSR «CANDI: “Teaching Competency and Infrastructure for e-Learning and Retraining”. Pool – 977 791 €.**
- ❑ **511172-TEMPUS-1-2010-1-DE-TEMPUS-JPCR CIBELES**
- ❑ **NATO project ESP.EAP.SFPP 983945-“Assessing transboundary water pollution in Central Asia”. Budget – 569000 €**
- ❑ **Erasmus+ Project "IQAT: Enhancing capacities in implementation of institutional quality assurance systems and typology using Bologna process principles“ (2015-2017)**
- ❑ **Erasmus+ Project UZDOC 2.0. - Furthering the quality of doctoral education at Higher Education Institutions in Uzbekistan (2016-2019)**
- ❑ **Erasmus+ Project ICM – 9 partner universities in EU**
- ❑ **eAGROFORST- Food security and livelihood improvement through agroforestry in Central Asia**
- ❑ **World Bank Fund of Academic Innovations Project "Strengthening the integration of HEU-production (for example, the ceramic industry)“ (2019-2020)**
- ❑ **British Council Project EnSPIRE-U “«English for Specific Purposes, Integrated Reforms in Uzbekistan ” 87-04-1622 (2015-2019)**
- ❑ **American Councils Project “Exploratory Makerspace Capacity Building Project” USA University of Wisconsin-Madison-Uzbekistan (2019-2020)**

**TCTI is open for international students and teachers/staff,
who have special privileges for working/studying at the institute.**

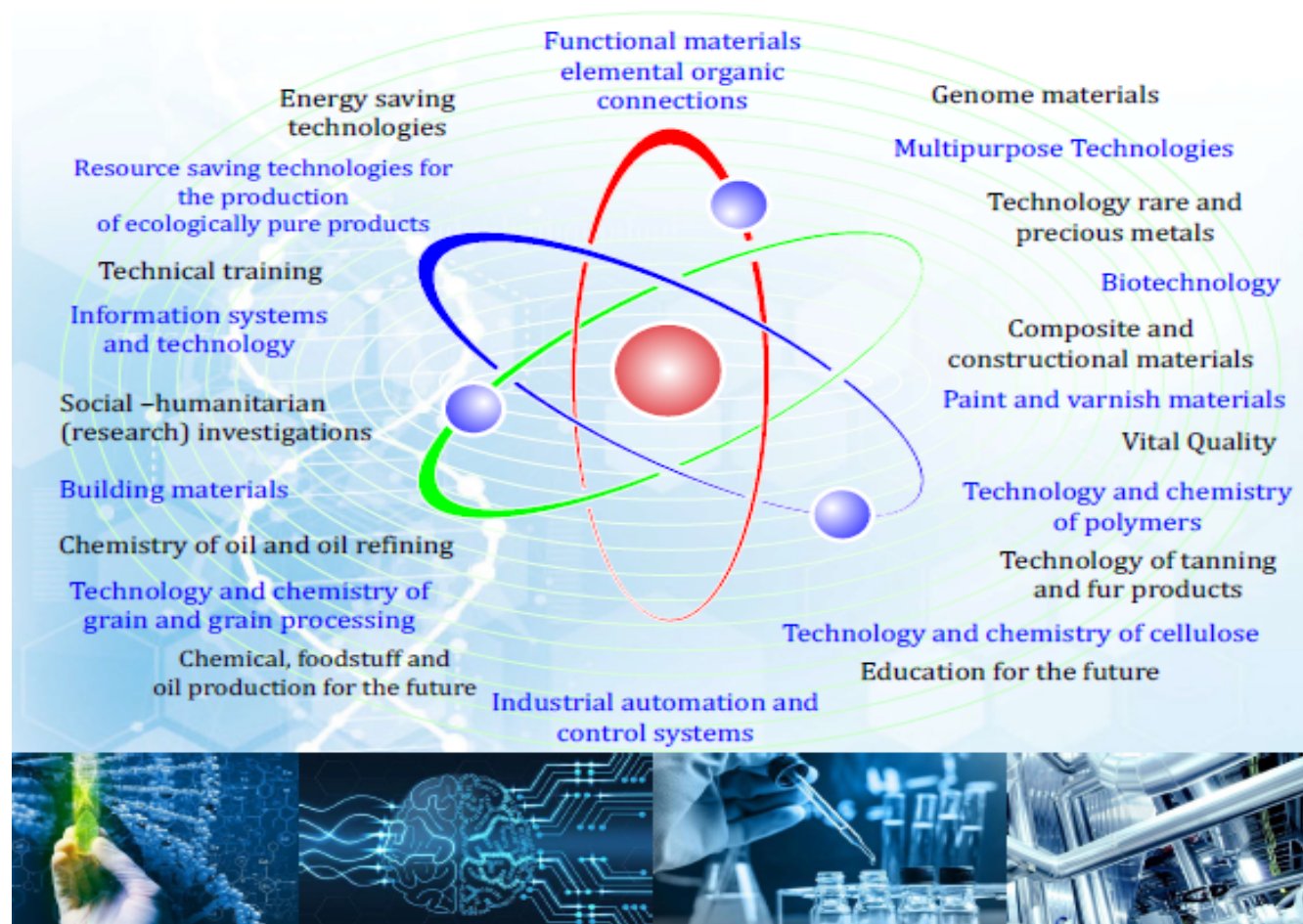
Development Strategy TCTI-2025

Development strategy of the Institute until 2025

Formation of the conditions under which TCTI will become the key industry institution of higher education - the center of excellence for scientific and technological consortia and the reference university in project-based learning systems.



Perspective directions of scientific activity of the TCTI





***Thank you
for attention!***

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