Pitt State welcomes the first student from a partner university, TTPU

# Academic Council began its work on awarding scientific degrees in technical sciences At Turin Polytechnic University in Tashkent.

According to the decision of the Higher Attestation Commission under the Cabinet of Ministers of the Republic of Uzbekistan dated February 1, 2022, an Academic Council was established at Turin Polytechnic University in Tashkent to award the academic degree of Doctor of Philosophy (PhD) and Doctor of Science (DSc) in technical sciences.

Dissertations are defended at the Academic Council in the following specialties:

**05.08.06** — "Wheeled and tracked vehicles and their operation";

**05.01.08** — "Automation and control of technological processes and production";

**05.09.01** — "Building structures, buildings and structures"

According to the decision, the Academic Council of Turin Polytechnic University, consisting of 17 people, was approved. The Rector of the University, Doctor of Technical Sciences Inoyatkhodjaev Jamshid Shukhratullaevich was appointed Chairman of the Council.

The Academic Council consists of the youngest scientists, including 9 Doctors of Technical Sciences and 8 PhDs. Most of its members have defended dissertations abroad, and an Italian professor has also joined the council.

### A seminar-training on women's psychology was held at TTPU

Motivational training on the topic "Life is beautiful because I am there!" was conducted by qualified psychologists at TTPU. The training was organized by the Women's Council of TTPU and was attended by female students and staff of the University.

The seminar-training included a meaningful conversation on topics such as women's psychology, prevention of various stressful situations in everyday life, self-love, freedom from negative thoughts, forgiveness, creating a flow of positive thoughts and living with gratitude and appreciation for today.

During the seminar-training, participants were divided into groups, interesting surveys and psychological games were organized.





### **Enjoy Chemistry in Europe**

TTPU'S 3RD LEVEL STUDENTS AND GRADUATES NOW HAVE A GREAT OPPORTUNITY TO EARN MASTER'S DEGREE IN THEORETICAL CHEMISTRY AND COMPUTATIONAL MODELING IN EUROPE FOR FULL SCHOLARSHIP AND 1000 EUR/MONTH DURING 24 MONTHS. GO TO THE LINK BELOW FOR MORE.

DEADLINE 15TH FEBRUARY



### EXPANDING COOPERATION

#### INTERNATIONAL

We are happy to announce that representatives of Turin Polytechnic University in Tashkent are undergoing an international training course within the project Erasmus Plus CBHE: Establishment of training and research centers and courses development on "Intelligent Big Data Analysis (IBDA) in Central Asia — ELBA at The Faculty of Mathematics, Natural Sciences and Information Technologies of the University of Primorska, Koper, Slovenia. The project is offering multidisciplinary package of the module based courses, disciplines "Intelligent Big Data Analysis" (IBDA) that will be implemented to the existing bachelor and master programs, to the advanced training specialists.

Within the framework of the project, the academic potential of Central Asian universities in the field of teaching and using IBDA technologies and related software is being strengthened by European experts.











## Want to study abroad without paying for hosting university's tuition fees?

Then, join on TTPU's exchange programs. We can make your dream come true!

In fact, TTPU annually organizes trips for its students to study at foreign universities. We have collaboration with more than 40 leading universities of Italy, Germany, USA, Poland, Malaysia, the Russian Federation, Japan, the South Korea, Kazakhstan and others.

TTPU strives to create lifetime opportunities for students so that they could enjoy the richness of course choices and embrace the cultural experience of its partner universities.

Although COVID-19 has ruined big plans worldwide, this academic year TTPU's talented students will continue their studies at Politecnico di Torino (Italy), Bauhaus-Universitat Weimar (Germany) and Silesian University (Poland).

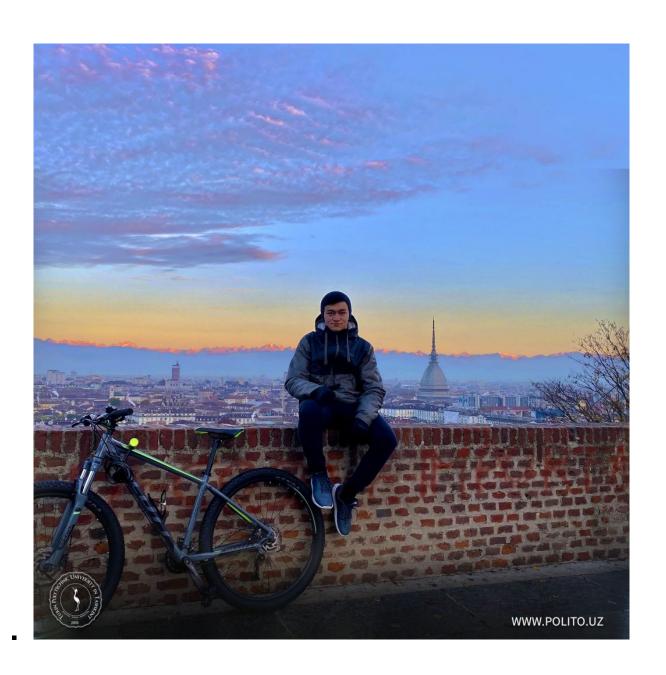
For now, we decided to share with you awesome pictures of our students on exchange programs and enrolled in graduate programs.

You may find yourself in their stead next years if you become TTPU student! Way to go TTPU, you are the best!











### BIM WORKFLOW TO SEISMIC STABILITY ASSESSMENT

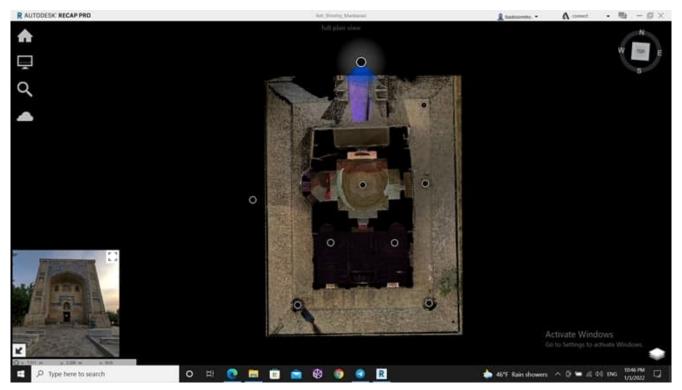
Assessment of seismic stability of historical monuments is one of the big challenges faced by many civil engineers. This is because historical monuments are sophisticated in nature and made of comprehensive architectural elements such as domes, arches, beam roofs, facades, ornamental frames and rosettes.

Computer modeling of these unique monuments with these geometric figures are not always easy. But this issue may be resolved with the usage of tools in Building Information Modeling and workflows.

Digital Architecture Team has organized a demo project to assess the seismic stability of Ash-Shoshiy Mausoleum in Khasti Imom Complex in Tashkent. First of all, the interior and exterior sides of Mausoleum were scanned with the usage of FARO M70 instrument and all point clouds were registered. Then Sketch Up and Revit model was constructed by using registered point clouds. In Revit model, properties of construction materials of Mausoleum are also provided.

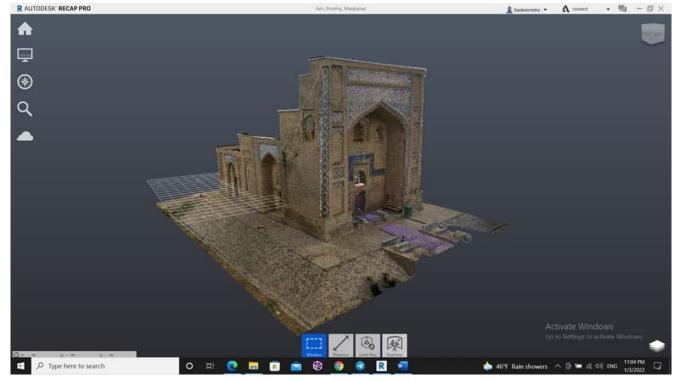


Ash-Shoshiy Mausoleum, Khasti Imom Complex in Tashkent

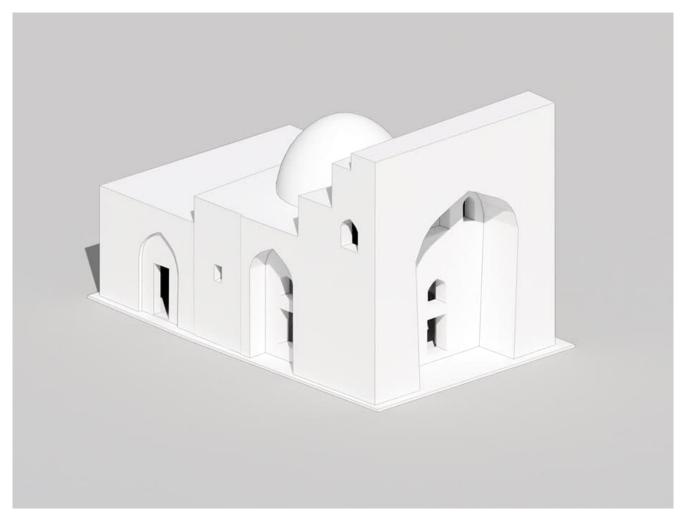


Top view of Ash-Shoshiy Mausoleum and location of FARO M70 laser scanner

In the final stage, Revit model of Mausoleum was uploaded to LIRA 10 software with its material properties to assess seismic stability. Next, acquired solid experience will be used in historic cities of Uzbekistan.



Registered point cloud of Ash-Shoshiy Mausoleum



Revit model of Ash-Shoshiy Mausoleum

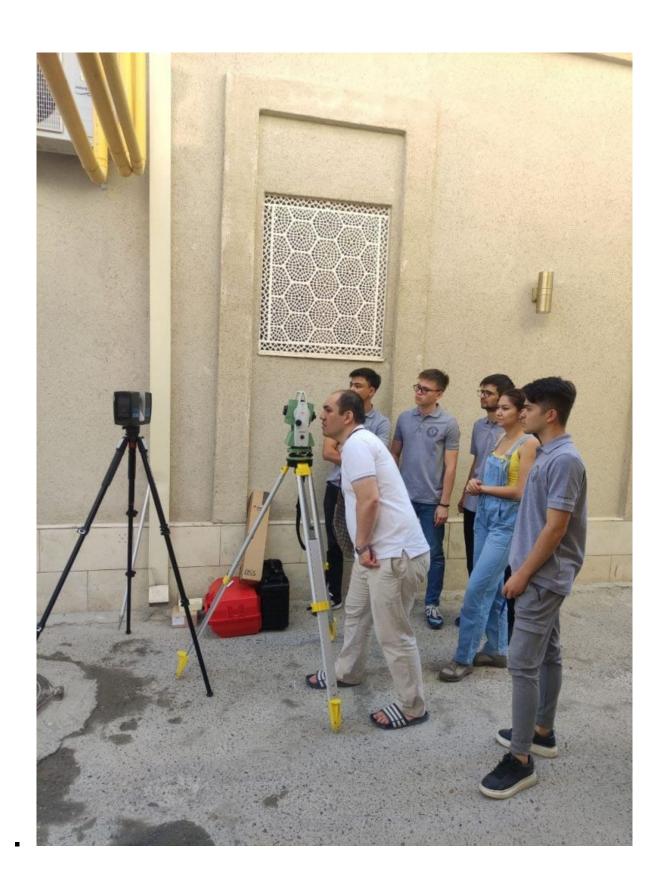
### "Traditional Bukharian Jewish Houses" Project

In the fall of 2021, Digital Architecture Team (DAT) of Turin Polytechnic University in Tashkent (TTPU) joined the "Traditional Bukharian Jewish Houses" project in the city of Bukhara to bring its own technical expertise to a unique project implemented by the International Institute for Central Asian Studies (IICAS) and Bukhara National University. Its funding comes from the World Monuments Fund (WMF).

The aim of the project is to utilize the latest digital technologies for electronic documentation and creating the best conservation practice guidelines for Bukharian Traditional Jewish Houses.

The first phase of the project was conducted from 25 of September and the first day of October of 2021 in the historical areas of Bukhara.

Only a cohort of students joined DAT under the strong leadership of professors from Civil Engineer and Architecture Department at TTPU in a joint collaboration with a specialist of IICAS. So far, the project members successfully reached the objectives put forward in the first phase of the project.



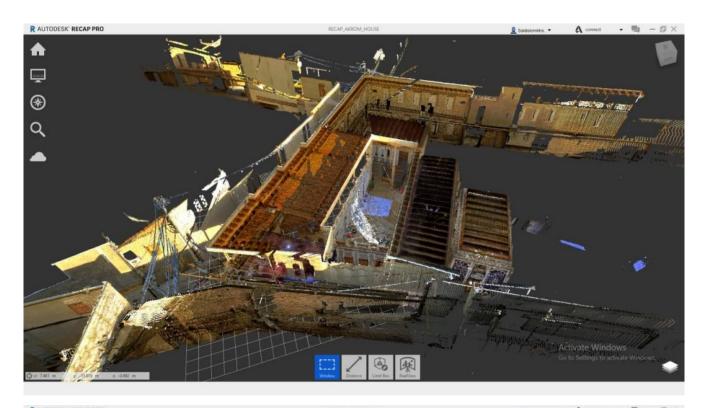


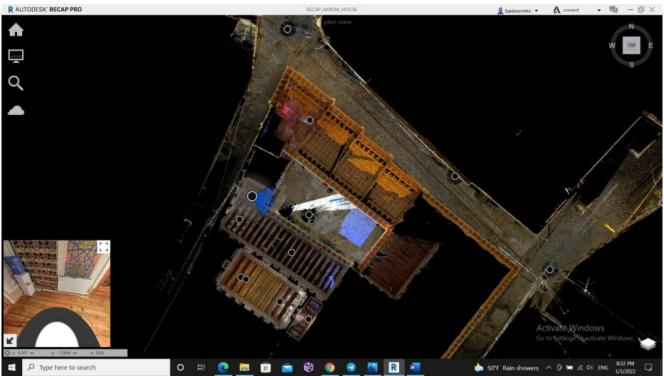




The objectives were both to survey the three traditional Jewish Houses and to document them electronically with the usage of FARO M70 terrestrial laser scanner and other geodetic surveying instruments. It should be noted that these geodetic instruments were purchased in the framework of ERAMCA project which stands for Environmental Risk Assessment And Mitigation

On Cultural Heritage Assets In Central Asia
https://eramca.com/.

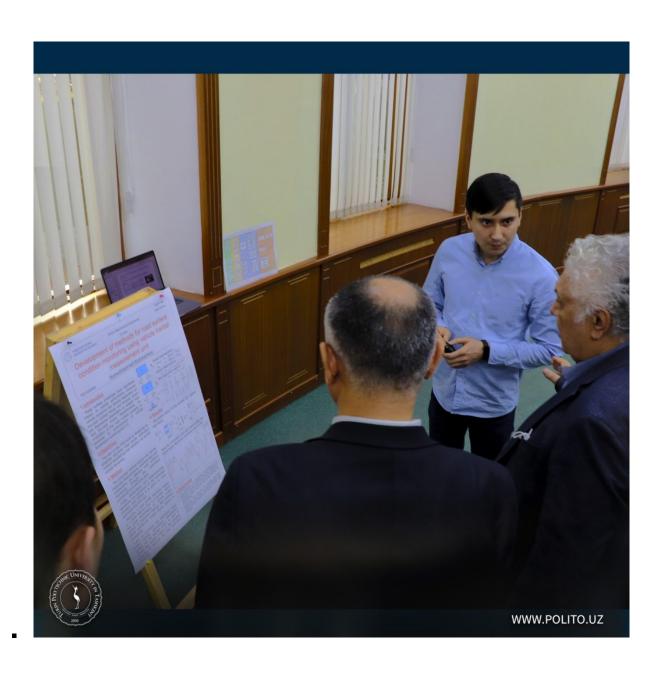




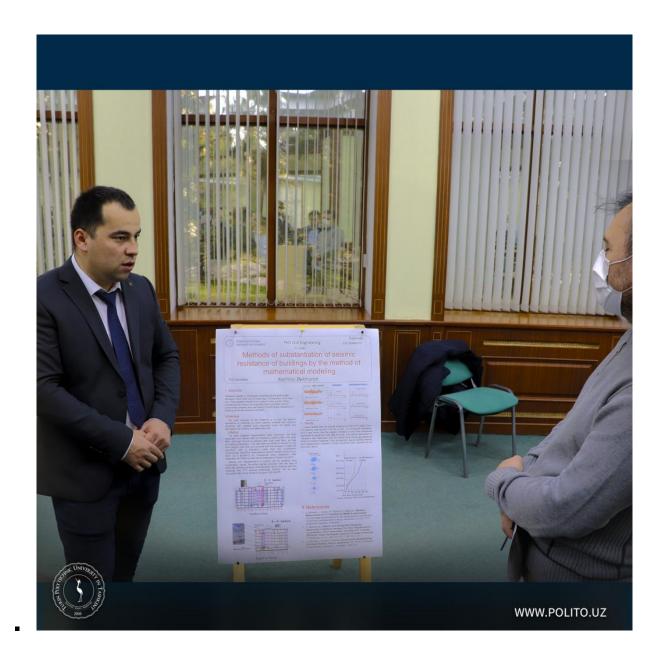
The second phase of the project is to be conducted in the summer of 2022 within the historical part of Bukhara, Uzbekistan. Details of the process of research and structural modeling of buildings.

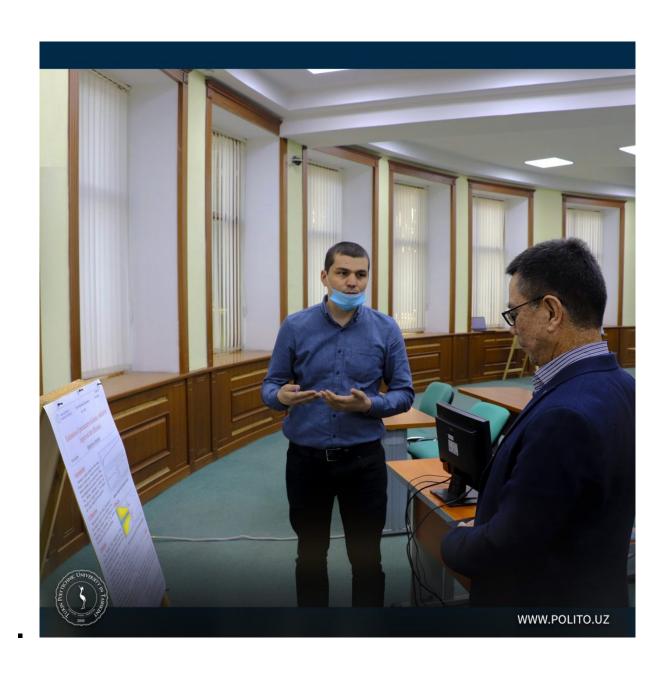
#### PhD POSTER DAY 2021

On December 23, an annual poster presentation was held at Turin Polytechnic University in Tashkent. Ph.D. students of the university who study at the Department of "Mechanical Engineering" and Aerospace Engineering" and "Architecture and Civil Engineering" presented their report presentations to professors and teachers of the university on the results of their work for 2021. This is the second poster presentation of these doctoral students. It was noted that this year everything went at a higher level, doctoral students were more confident and much better-answered questions about their work.











accessories are equipment!

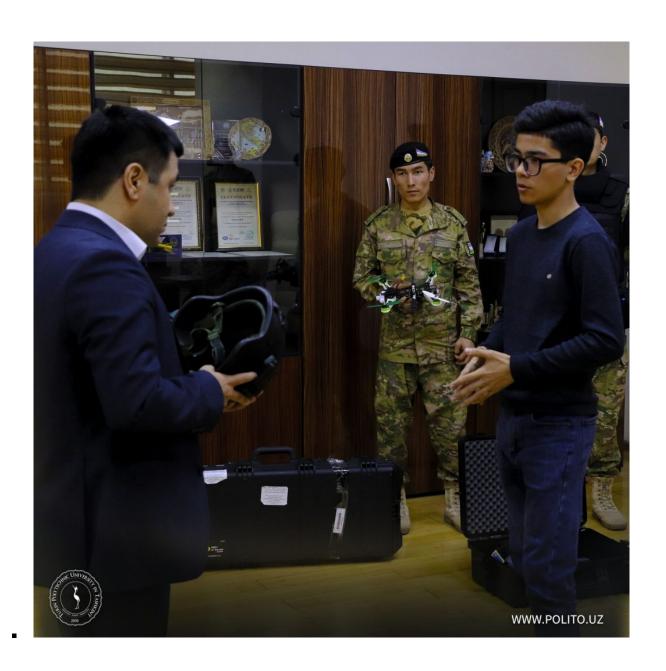
Innovative devices and being developed for military

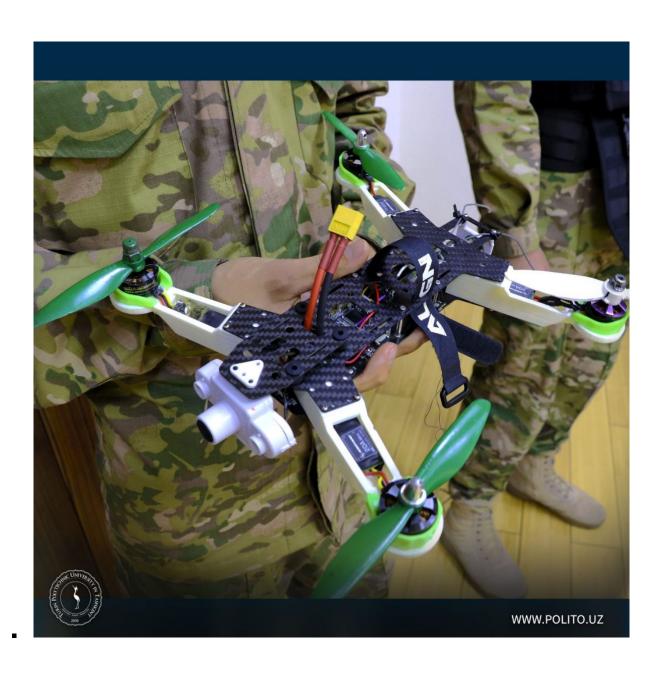
Students of Turin Polytechnic University in Tashkent prepared

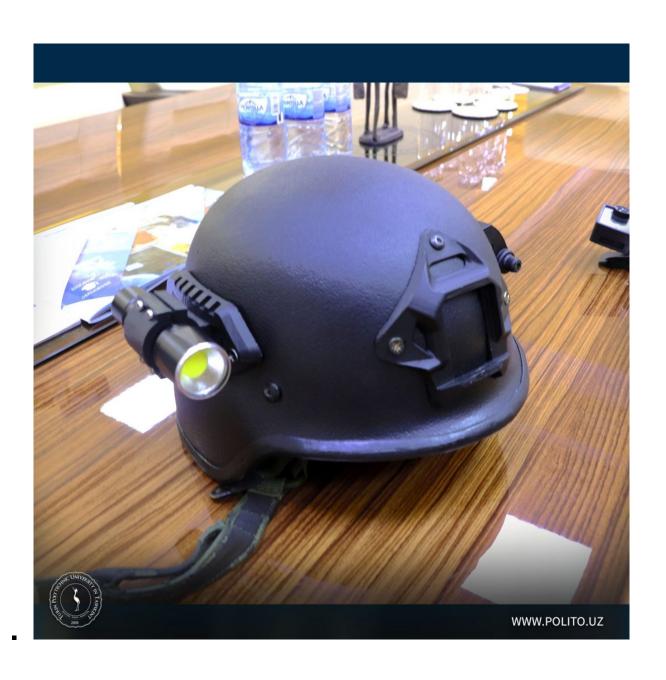
a model with changes in the helmet used in special forces of the Ministry of Defense of the Republic of Uzbekistan. This model allows to install a flashlight (night light), night vision, a laser device and a camera. All additional tools were prepared using 3D printers.

In order to determine the condition of the soldier, a multifunctional meta monitoring device is connected to the body armor. As a result, the soldier's heart rate and temperature are determined using a device connected to the ECG module, and the location information is sent to the monitoring database using a GPS device.

Also, tuning was done to AK74 with additions, the plastic was attached to a molded convenient device using a 3D printer. With this device, you can install lasers, flashlights and binoculars. An additional gripping device has also been installed to make it easier to hold.









## Corruption is an obstacle to our development!

On the occasion of the 29th anniversary of the Constitution day and the World Anti-Corruption day on December 9, a roundtable discussion on "Transparency in the Prosecutor's Office" was held on December 9 in the conference hall of our university. The guests of the event were senior prosecutors of

the office of the Prosecutor general of the Republic of Uzbekistan, Kurbanova Mohira Jaylavovna and Mamarahimova Shahodat Yusupovna. They informed our youth about the mutual rights and obligations of the individual, society and the state in the Constitution and their guarantees, the reforms based on social protection during the pandemic time. They also provided evidence that corruption is an obstacle to the development of any society. Another guest of the event, Eshkulov Mardonbek, deputy head of the department for Youth affairs of Educational Institutions, spoke about the ongoing reforms in the field of youth policy, and gave detailed answers and instructions to the questions of students.

# Researchers of Turin Polytechnic University in Tashkent study the seismic resistance of buildings and structures.

In accordance with paragraph № 7 of the Decree of the President of the Republic of Uzbekistan dated July 30, 2020 № PP-4794 "On measures to radically improve the system for ensuring seismic safety of the population and the territory of the Republic of Uzbekistan" at Turin Polytechnic University in Tashkent was created a scientific and technical laboratory for the experimental study of buildings and structures.

In accordance with the Decree of the Cabinet of Ministers of the Republic of Uzbekistan "On the introduction of system for assessing the seismic resistance of buildings and structures and formation of electronic technical passports" on December 4-6, 2021, professors, researchers and specialists of the university with the help of special equipment collected all the necessary data to assess the seismic resistance of a 13-story house located on Alisher Navoi Avenue in Andijan. At the same time, a digital model of the building was created using a German-made Faro Focus M70 laser scanner. Three-dimensional data of the structure were obtained, which will be used to create a digital model using a special computer program (Lira CAD) and an analysis of seismic resistance with the necessary loads and parameters.

To determine the building's response to external vibrations, accelerometers were installed on each of the four floors to measure seismic vibrations along three axes. In this way, data were collected to study the response of the building to certain vibrations and external dynamic vibrations. Special equipment Metal Detector, Hummer Schimdt, Profometer were used to collect such data as the thickness of the reinforcement used in the building foundation, the thickness of the concrete foundation, the concrete grade.

Currently, the collected data are being analyzed by professors and researchers of the Scientific and Technical Laboratory for Experimental Research of Buildings and Structures at Turin Polytechnic University in Tashkent.

In accordance with the protocol of the meeting  $\mathbb{N}$  51, held on September 21, 2021 under the chairmanship of the Deputy Prime Minister of the Republic of Uzbekistan dedicated to measures for the preparation and conduct of the presidential elections of the Republic of Uzbekistan at the highest level, employees

and teachers of the university took an active part in the election campaign, which took place from 5 to October 15 of this year among the population of the "Chimboy" and "Gulzor" makhallas of the Almazar region. Following employees and university professors, who took an active part in the propaganda work were financially awarded:

- 1. Alibekov Doniyor Nurmamatovich
- 2. Mavlonov Otabek Anvarovich
- 3. Usmonov Saidislom Mannonovich
- 4. Azamatov Abdulaziz Irgashevich
- 5. Xoltursinov Erkin Berkinbayevich
- 6. Eshqobilov Olimjon Yusupovich
- 7. Yaxshilikov Jamshid Alisherovich
- 8. Sharipov Alisher Kalbayevich
- 9. Usmonov Umidjon Ravshan oʻgʻli
- 10. Nabixanova Fariza Sirajitdinovna
- 11. Allamova Gulbaxor Azatovna.

#### **Buongiorno Tutti!**

The Italian Embassy in Tashkent, together with Turin Polytechnic University in Tashkent (TTPU) organized Italian language classes for schoolchildren of one of the Almazar district secondary schools, located near TTPU. Extracurricular activities are held for grades 2, 3, 4 of School No. 196 and

involve more than 60 pupils. The curriculum offers the study of the Italian language, culture and literature.

Today, this is the first school in Uzbekistan where this unique project has been launched. The introduction of the Italian language into primary education will prepare students for higher educational institutions in Italy, which will help in the future to raise a generation of new specialists for various fields of activity in Uzbekistan and Italy.

Director of School No. 196 Yakubova Dildora expressed gratitude to the Italian Embassy in Tashkent and the Turin Polytechnic University in Tashkent for the help and support in opening Italian language classes.



## **Enlightenment ignorance**

### against

On December 2, 2021 at 10:00 in the conference hall of Turin Polytechnic University in Tashkent was held seminar on topic "Enlightenment against ignorance" in cooperation with

representatives of religious committee in Tashkent, Chief Specialist of City Committee on Religious Affairs Melikuziev Jahongir Valijonovich and senior lecturer of the International Islamic Academy of Uzbekistan Saidafjal Saudkhanbalovich.

### Space — From infinity to Business!

On December 1, 2021, at the Turin Polytechnic University in Tashkent, together with the Agency for Space Research and Technology under the Cabinet of Ministers of the Republic of Uzbekistan, an event was held with the participation of foreign experts, such as Anastasia Stepanenko and Vitaly Egorov, to widely highlight space achievements.

Anastasia Stepanenko is a participant in the international space projects Mars-160 and Sirius-19.

At the event, experts familiarized the participants with the space sector and spoke about their personal life experiences in this area. In addition, the participants were aware that there is currently a wide range of opportunities for the private sector in this industry.





### MARATHON OF TECHNOLOGICAL DEVELOPMENT IN UZBEKISTAN

In the national administration of innovation and technology transfer under the Ministry of Innovative Development of the Republic of Uzbekistan, together with the Agency for Youth Affairs, the Tashkent city administration and Uzcard, a technological development marathon TECHNOWAYS was held on

November 15-24, 2021.

This marathon is aimed at the comprehensive development of projects of talented youth and the enrichment of their technological knowledge. More than 300 projects from all over Uzbekistan took part in the marathon.

Our student Asadbek Urunov won the TECHNOWAYS marathon and got a ticket to Expo 2020 in Dubai. We all congratulate him.

## On November 23, the second stage of the event "Planting a tree, we will create a garden".

The jury members took a lot of useful information and facts and made conclusions for themselves.

In conclusion, the winners were awarded commemorative prizes:

1st place — External Hard Drive

2nd - Powerbank

3rd — Wireless keyboard and mouse.

It is worth noting that some professors also participated in this event and shared their knowledge in this area, as well as gave advice on when and where it is better to plant fruit trees.

### Our university participates in "INNO WEEK"

Innovative Development hosted an event "INNO WEEK" within the framework of the "Week of International Innovative Ideas" project, in which innovative projects were presented from our University, such as:

- $\hfill \square$  Hydrogen welding Hydrogen flame is used instead of acetylene flame.
- ☐ SMART TABLE-Super modern table, made for the convenience of people.

There are also a lot of interesting projects. Many invited guests and active youth watched with great interest the projects of our engineers and students. And they were delighted with the work done.

## Today, November 18, 2021, the Rector of TTPU met with first-year students.

The meeting was held in the "Open conversation" format [] The following issues were discussed:

- → About Exchange programs
- →□ About Accreditation of the Diploma
- → About the benefits of studying at our University

And also all the questions of interest to which the students received full answers.