


# General information about the National Technical University «Kharkiv Polytechnic Institute»

NTU «KhPI» is one of the best technical universities in Ukraine!



From education  
to advanced research and technologies







## History. Who are we?

Kharkiv Practical Technological Institute (the first original name of the university) was founded in 1885.

NTU "KhPI" ranks 2-4th among all higher education institutions in Ukraine in leading world rankings, including QS World University Rankings and The Times Higher Education World University Rankings.

In 2025, the university was ranked for the second time in the QS World University Rankings by Subjects:

- Engineering – Mechanical, Aeronautical & Manufacturing – second place among universities in Ukraine;
- Computer Science & Information Systems – sixth place among universities in Ukraine;
- Petroleum Engineering – first place in Ukraine and 101-150 in the world.

According to the THE University Impact Rankings 2024, NTU "KhPI" participated in 8 areas of the rating and took 1st place among Ukrainian HEIs for SDG 9.





## Scientific Potential of NTU «KhPI»

The university comprises 9 educational and research institutes that unite 114 departments, the Military Institute of Tank Troops, the «Molniya» Research and Design Institute, and the Institute of the Ionosphere

**Despite the full-scale war, the university has preserved its scientific and pedagogical potential, including: 1,580** full-time academic and research staff; **230** Doctors of Science and Professors; **913** Candidates of Science. Among them are **38** Honored Scientists and Educators of Ukraine, **42** State Prize laureates, **3** Academicians of the National Academy of Sciences (NAS) of Ukraine, **2** Corresponding Members of the NAS of Ukraine, **1** Corresponding Member of the National Academy of Educational Sciences of Ukraine, and **27** Academicians of sectoral academies of sciences.

**The university's research institutes and laboratories employ 250 full-time researchers,** including **12** Doctors of Science and **50** Candidates of Science and PhDs, among them **6** laureates of Ukraine's State Prizes in Science and Technology. **There are a total of 80 scientific and educational laboratories and centers, including:** Startup Center «SPARK», Innovation Business Incubator, Technology and Innovation Support Center, Center for Modern Metallography Technologies, NTU «KhPI» Science Park LLC, Intersectoral Engine Building Center for Armored Vehicles, «Arsenal of Ideas Ukraine» Center, and others.







## World-Class Innovations by Scientists and Graduates of NTU "KhPI"



**George Bothezat**, a 1907 graduate of our university, created the first helicopter in the USA and successfully completed 100 flights in 1922.



The T-34 tank and its diesel engine were developed by NTU "KhPI" graduates and scientists: **V. Tsvetkov, K. Chelpan, Ya. Vikhman, I. Trashutin, M. Koshkin, and O. Morozov.**



### **Anton Karlovych Walter**

On October 10, 1932, scientists from the Ukrainian Physico-Technical Institute, who were also professors at NTU "KhPI" – K. Synelnikov, O. Leipunsky, A. Walter, and H. Latyshev – conducted a groundbreaking experiment to split the lithium nucleus.

### **The "Shelter 2" structure at the Chornobyl Nuclear Power Plant**





### Innovation Campus NTU «KhPI»

The first unique program for training IT specialists in Ukraine based on a university, which combines IT training, an entrepreneurship school and coworking.

This unique educational program took second place among the best projects in Europe at the international competition QS-Wharton Reimagine Education Awards 2022.

In total, more than 1,200 projects from companies, institutes and other organizations from 70 countries of the world participated in it.

<http://www.youtube.com/watch?v=4kgNiCAslas>

We offer cooperation in the field of new educational innovative technologies







## Innovative ecosystem

**Scientific research and development.** Leading research centers and laboratories. Cooperation with international organizations (Horizon Europe, NATO, etc.). Projects in the fields of artificial intelligence, energy, materials science and defense technologies.

**Educational innovations.** Educational programs that integrate modern trends and technologies. Laboratories with augmented and virtual reality for student training. Double diplomas under international programs.

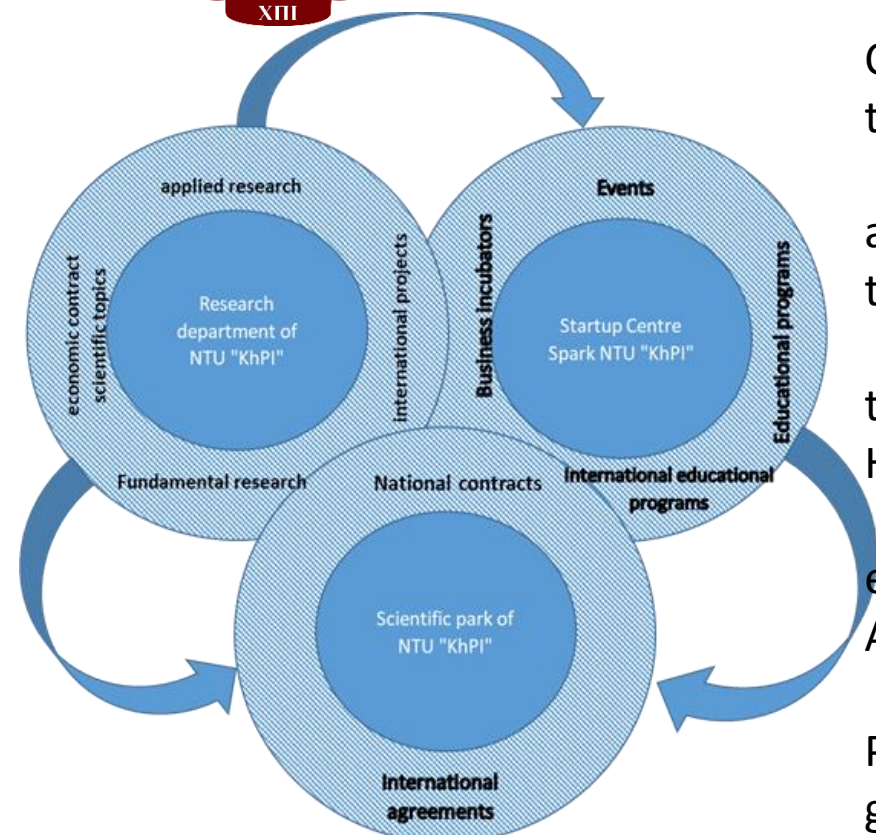
**Entrepreneurial environment.** Business incubator "Spark" for student and teacher startups. Innovation hub for commercialization of scientific developments. Holding hackathons, startup competitions and acceleration programs.

**Infrastructure for innovation.** Ultra-modern campus: co-working, technopark, equipped laboratories. Science park for the development of high-tech business. Access to international databases and platforms (Scopus, IEEE, Web of Science).

**International cooperation.** Partnership with universities in the USA, Germany, Poland, China. Joint scientific research and student exchange programs. Attracting grant funding from the EU and other donors.

**Training specialists for the future.** Training in modern technologies: 3D printing, robotics, Big Data. Soft skills development programs: leadership, critical thinking, project management. Specialized programs for IT, engineers, innovation managers.

**Support for environmental initiatives.** Use of "green" technologies in education and scientific projects. Energy saving and sustainable development programs.



## Our start-ups



Elomia



HealthHelper



ReMnemo

## Cooperation in the field of armored vehicles

Ukraine,

Family of Engines

5ТДФ - 850 hp

6ТД1 - 1000 hp

6ТД2 - 1200 hp

Engines for armored vehicles of Ukrainian design and production, meeting world-class performance standards

USA, Achates Power

<https://achatespower.com/military/>

Family of Engines

COMBAT: 1500, 1000, 750 hp

TACTIKAL: 600, 450, 300 hp



**Proposals for research cooperation in the field of engine engineering for armored vehicles and special equipment, implementation of NATO standards for electromagnetic resilience and compatibility, and the creation of mobile demining facilities.**







### The Military Institute of Tank Troops named after the Verkhovna Rada of Ukraine, NTU «KhPI»



**High level of training.** Our institute is one of the leading educational institutions in Ukraine for training tank officers.

**Career opportunities.** After graduation, graduates are guaranteed to receive an officer's rank and the prospect of service in the Armed Forces of Ukraine with the possibility of professional growth.

**Modern material and technical base.** The institute is equipped with advanced equipment, tank simulators, training equipment and modern technology, which allows you to effectively master military specialties.

**A combination of theory and practice.** Training includes real military practices, field training and internships in military units. This helps future officers confidently use their knowledge in real conditions.

**We offer cooperation in the field of training engineering and technical specialists in armored vehicles, information support specialists, and command personnel.**





# Ready for collaboration!



## Contact Us:

NTU "KhPI", 2, Kyrpychova str.,  
61002, Kharkiv, Ukraine

Tel: +38 (057) 700-15-64

E-mail: [omsroot@kpi.kharkov.ua](mailto:omsroot@kpi.kharkov.ua)

<https://www.kpi.kharkov.ua/eng>



The QR code contains information about the destruction of the university, where you can help restore the educational and scientific laboratories if you wish and are able.