

## TREATY



PLATFORM FCD
"MECHATRONICS AND DESIGN"

Nurturing deep tech talents for clean and sustainable energy transition.







# THE FCD PLATFORM "MECHATRONICS AND DESIGN"

The FCD PLATFORM "MECHATRONICS AND DESIGN" was launched on the basis of the Faculty of Construction and Design.



The FCD PLATFORM proposes a space where every participant has the most comfortable conditions for the development of their own talents in the technical field. The work of the PLATFORM is related to innovative projects in the field of technology development and new technical means, mechatronics, robotics, execution of design projects, application of artificial intelligence, etc.

#### **GOAL OF THE PLATFORM**

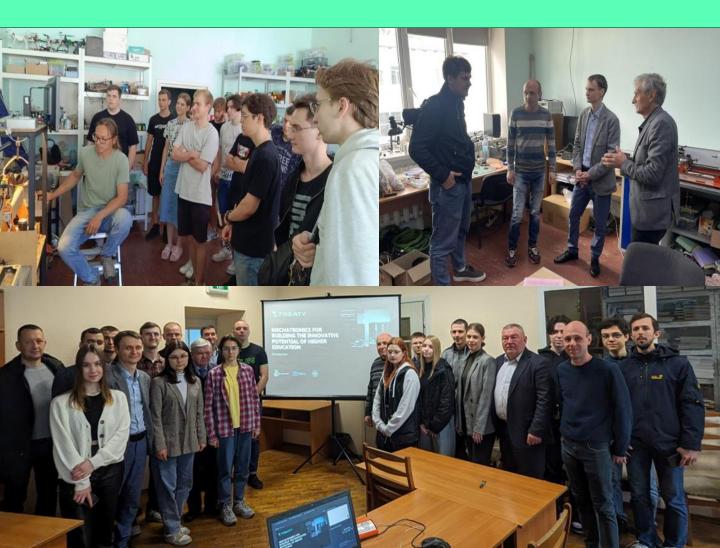
The main goal of the **PLATFORM** is to create a common vision among the participants and other related communities (engineers, business, teachers, and production workers) of ways to improve the quality of life. This is achieved by conducting numerous diverse mentoring programs, master classes, practical conferences and seminars, meetings of interested persons, and involvement of student assets and young scientists. The topics of these events are related to the construction of modern equipment, the development of technological solutions in the field of clean and sustainable energy, alternative energy, rational agricultural production, and support for implemented projects.

Labs of Robotics, Machine Dynamics, Virtual and mixed reality, and a Design office are at the service of the participants of the **PLATFORM**. These laboratories are equipped with modern computer equipment and software for the implementation of design projects and developments.



## **CONSULTATION CENTER**

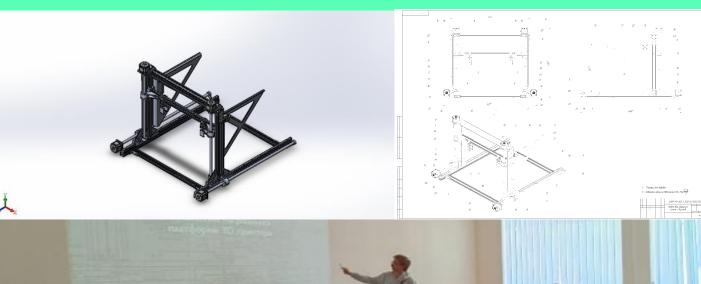
This wing of the **PLATFORM** provides consulting support for technical projects. Its covers all stages of project implementation: from the birth of an idea to the commissioning of objects with their further improvement. Here, specialists with many years of experience in the field of construction and a significant portfolio of completed projects provide consulting support to participants in production processes (from top management to an ordinary worker) on a wide range of issues. It includes the design, production and application of modern equipment in the field of energy-efficient agricultural production, the processing industry of the agro-industrial complex, rational environmental management, etc.



### **DESIGN BUREAU**

The **PLATFORM** Design Bureau ensures the implementation of technical projects of customers in the field of agro-industrial complex, energy, transport, etc. Scholars who have significant experience in project activities work here permanently. In 2024, all of them were involved in TREATY courses (<a href="https://nubip.edu.ua/node/133447">https://nubip.edu.ua/node/133447</a>)

In addition, bachelors and masters of the Faculties of Construction and Design and Mechanical and Technological are actively involved. Almost all implemented projects are innovative. Students who took part in their implementation prepare and defend bachelor's and master's theses on these topics. They use this experience in their future professional activities. The long-term work of the Design Bureau has shown the success of the approach to involving students in project activities.

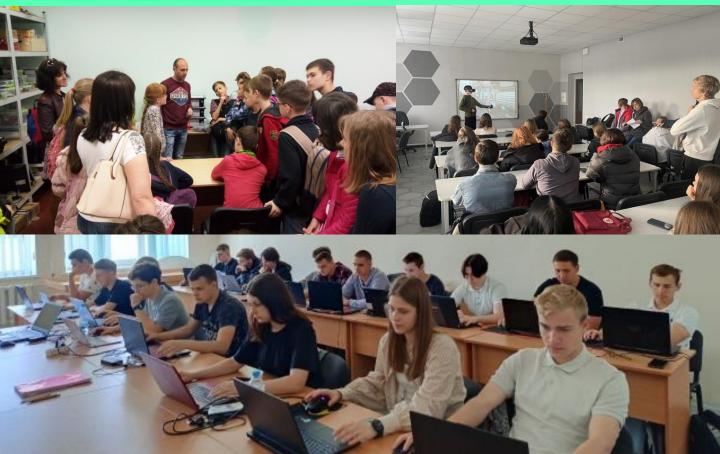




## **CONTINUOUS ROBOTICS COURSES**

CONTINUOUS ROBOTICS COURSES allowed to consolidate the efforts of the academic community, educators of the secondary level (schools and lyceums), employers, and business representatives for the development of technical talents of schoolchildren and junior students. The activities of these courses made it possible to mobilize the most capable and motivated pupils and students in the development of basic skills in designing mechatronic systems, robotics, unmanned aerial vehicles, developing IoT projects, and artificial intelligence. Such activity lays the foundation for the professional growth of course participants and prepares the basis for further improvement of their competencies. All this contributes to the evolution of their vision of the development of technologies that change people's lives for the better.

Currently, the courses are provided by 4 teachers, the number of participants ranges from 30 to 40 trainees.



### **PLANS FOR THE FUTURE**

It is planned to continue the operation of the **PLATFORM** after the end of the TREATY project implementation period. At present, documents are being prepared for registration of the PLATFORM as a structural unit of the Faculty of Construction and Design at the Department of Machines and Equipment Design.



Learn more

treaty-project.eu











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