

DEPARTMENT OF TECHNOLOGIES OF ENVIRONMENTAL PROTECTION AND LABOR PROTECTION



Faculty of Engineering
Systems and Ecology

KNUBA

**The department trains specialists in
two specialties:
101 – ECOLOGY**

*Educational program
Ecology, environmental protection and
balanced nature use (ECB)*



and 183 – ENVIRONMENTAL PROTECTION TECHNOLOGIES

Educational program Environmental protection technologies (EPT)



There is an active struggle for environmental protection all over the world. New laws on nature protection, strict environmental standards are being approved, sewage treatment plants are being built at enterprises, closed loop technologies are introduced.



An environmentalist is a professional responsible for reducing harmful emissions, disposing of waste, using resources wisely, changing production practices, and restoring biosystems from damage caused by humans.

A modern ecologist must have a set of professional competencies approved by the professional standard "Ecologist" (May 4, 2022 (No. 1111-32))



What do we do?

Ensuring compliance with environmental requirements during the design, construction and operation of buildings and structures of various purposes and other spheres of human activity



The concept of sustainable development is gaining special importance for Ukraine today, when there is a war on our land. Destroyed settlements must be rebuilt and this should be done according to the new modern technologies of "green construction".



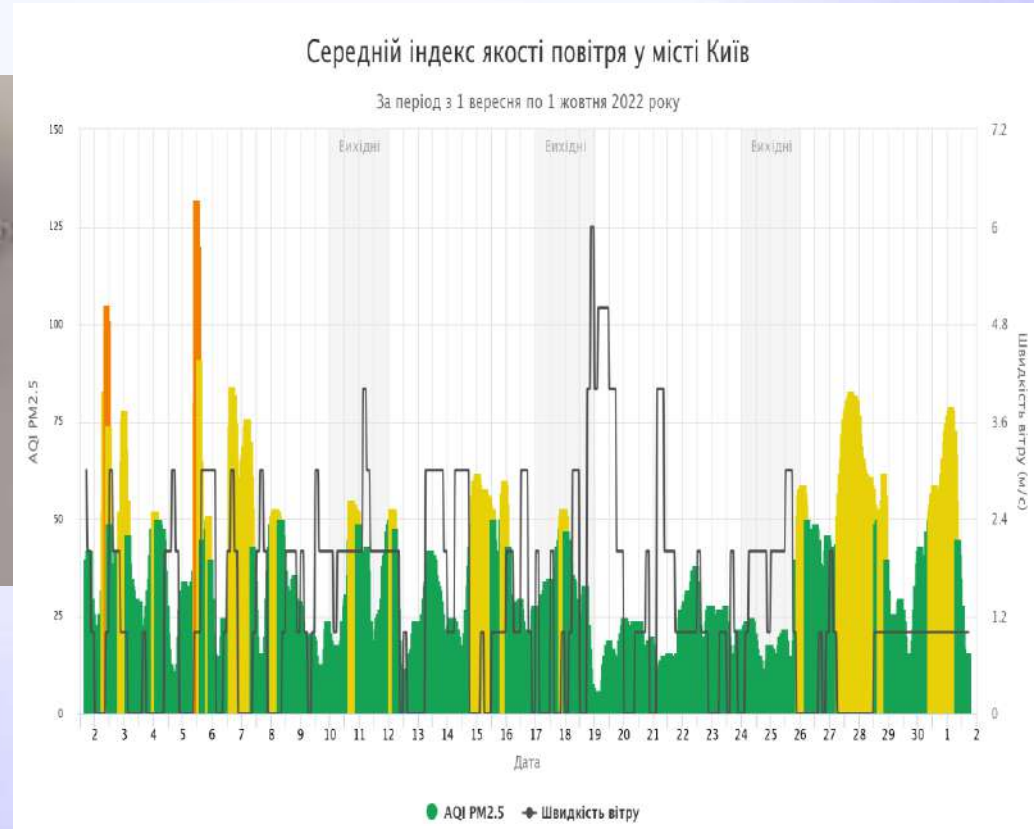
What do we do?

Ecologists study the problems of global climate warming, the possibilities of adaptation and prevention of further exacerbations, simulate various scenarios of the development of climate changes and heat waves



What do we do?

If the content of harmful substances is above the critical level, we identify the reasons and make a forecast of the development of the situation



Середнє арифметичне значення індексу якості атмосферного повітря за формулою NowCast (US EPA) для дрібнодисперсного пилу фракції PM2.5.
Дані швидкості вітру: Український гідрометеорологічний центр.

What do we do?

Environmental specialists study the consequences of launching space rockets, monitor the activities of harmful industries, monitor the disposal of radioactive waste



What do we do?

Environmental specialists study the consequences of launching space rockets, monitor the activities of harmful industries, monitor the disposal of radioactive waste



What do we do?

At production enterprises, environmental engineers are engaged in the entire range of measures that exclude the enterprise's impact on the environment: cleaning of sewage, emissions into the atmosphere, radiation, etc.



What do we do?

- control of compliance with environmental legislation at the enterprise;
- participation in environmental examination of projects, technologies, equipment of the enterprise;



What do we do?

- assessment of industrial environmental hazards and risks;
- environmental impact assessment;
- reporting on the implementation of environmental protection measures;



What do we do?

Scientific, research, systematic training in environmental protection technologies and ensuring environmental safety in architecture, construction and related sectors of the economy



Co-funded by the Erasmus+ Programme of the European Union

ClimEd

ПЛАТИНОВИЙ СЕРТИФІКАТ

Цим засвідчуємо, що

Тетяна Кривомаз

пройшла та успішно завершила тренінг (онлайн) за проектом Erasmus+ ClimEd з Компетентнісного підходу до розробки навчальної програми для кліматичної освіти

19 квітня - 12 травня 2021 року

Проект Erasmus+ ClimEd
"Багаторівнева освіта та професійне навчання з питань кліматичних послуг, адаптації до змін клімату та їх пом'якшення в локальному, національному та регіональному масштабах"
(619285-EPP-1-2020-1-FI-EPPKA2-CBHE-JP)
<http://climed.network>

Мареk Франкович
Експерт з вищої освіти Ягеллонський університет у Кракові

Юрій Рашкевич
Національний експерт з реформування вищої освіти
Національний університет "Львівська політехніка"

Ганна К. Лапалайнен
Університет Гельсінкі

Сергій Степаненко
Одеський державний екологічний університет

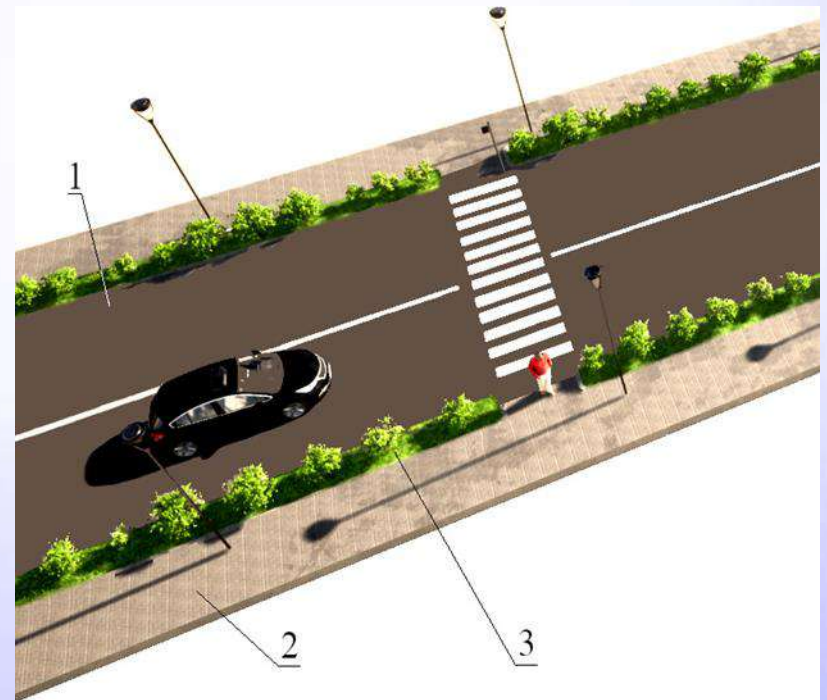
Калев Сеп
Естонський університет наук про життя

project «ERASMUS+» - Grant agreement 619285-EPP-1-2020-1-FI-EPPKA2-CBHE-JP "Multi-level local, national and regional education and training in climate services, climate change adaptation and mitigation" (ClimEd)»

CREATION OF PROSPECTIVE TECHNOLOGIES FOR THE FORMATION OF A SAFE BUILDING ENVIRONMENT THROUGH THE COMBINATION OF "GREEN CONSTRUCTIONS", PHYTO-DESIGN AND ENGINEERING SYSTEMS

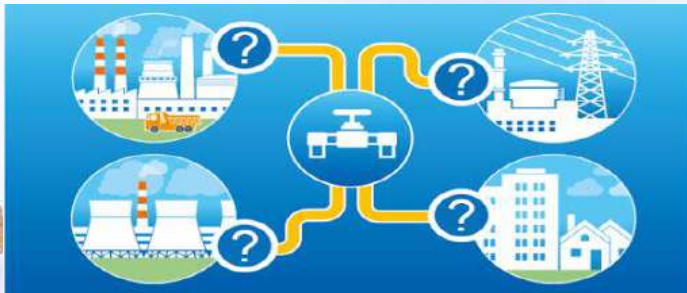
Topic № 0122U001197

state budget topics with financing



Preparation is carried out according to educational levels:

- **Bachelor:** specialty 101, 183
- **Master's degree:** specialty 101, 183
- **Doctor of Philosophy (PhD):** specialty 101, 183, 263
- **Doctor of Science:** specialty 101, 183, 263
- **Double degree program**
- **Semester exchange of students**



Own modern laboratories



Conferences, competitions, scientific projects



Наукова робота

Кафедра працює за науковими напрямками:

1. The possibility of creating energy-efficient and environmentally friendly green technologies in the conditions of Ukraine.
2. The influence of military actions in Ukraine on the development of global environmental problems.
3. Management of ecological security of territories and water areas. Creation of clean technologies in the conditions of Ukraine.
4. Regulation of rainwater wastewater with the help of "green structures" .
5. Assessment of the formation of the filtration flow and the migration of pollutants in the territories near landfills and tailings of liquid waste. Landslide risk of inundation of built-up slopes.



- 6. Innovative means of atmospheric air monitoring in conditions of global climate change.**
- 7. Assessment of production and environmental risks in construction.**
- 8. Organization of biodestruction of building materials. Biodegradation of solid waste. Research of myxomycetes. Investigation of radiation accumulation by myxomycetes and fungi.**
- 9. Research and modeling of processes taking place in the components of the environment.**
- 10. Implementation of environmental and legal norms of the EU into the legislative framework of Ukraine in the conditions of martial law on the path of integration into the single European economic space.**



**Thank you
for your
attention!**

