









National Center "Junior Academy of Sciences of Ukraine"
Donetsk State University of Internal Affairs
Vinnytsia National Technical University
Center for Ukrainian and European Scientific Cooperation

The All-Ukrainian scientific and pedagogical advanced training

## STEM and STEAM Education: Innovative Approaches, Technologies, and Implementation Practices

November 3 – December 14, 2025

We invite academic and research staff of higher education and scientific institutions, practitioners, undergraduate, postgraduate and postdoctoral students, and all interested in STEM education to participate in the All-Ukrainian scientific and pedagogical advanced training.

The professional program of advanced training is based on the latest scientific approaches to the organization of adult learning, achievements of psychological-pedagogical, social, and behavioral sciences. It is focused on the development and advancement of psychological-pedagogical, communicative, communication competencies, as well as practical skills and attainments of interactive communication and professional-personal growth to improve professional communication and the implementation of teaching activities.

All participants will be provided with *a collection of abstracts* and <u>an</u> <u>electronic</u> *certificate*.

The workload of advanced training consists of *6 credits ECTS (180 hours)* and distributes 6 hours each day for 6 business weeks.

### Members of the Organizing Committee:

- Stryzhak Oleksandr Yevheniiovych Doctor of Engineering, Professor, Honored Worker of Science and Technology of Ukraine, Deputy Director for Research, National Center "Junior Academy of Sciences of Ukraine", Kyiv;
- Kuzmenko Olha Stepanivna Doctor of Pedagogy, Professor, Academic Secretary of Donetsk State University of Internal Affairs, Kropyvnytskyi, Leading Research Associate at the Department of Information and Didactic Modelling of the National Center "Junior Academy of Sciences of Ukraine", Kyiv;
- Savchenko Iryna Mykolaivna PhD in Pedagogy, Senior Research Associate, Academic Secretary, National Center "Junior Academy of Sciences of Ukraine", Kyiv;
- **Dembitska Sofiia Vitaliivna** Doctor of Pedagogy, Professor, Professor at the Department of Life Safety and Safety Pedagogy, Vinnytsia National Technical University, Vinnytsia.

### The event includes three **ZOOM** lectures:



- November 17, 15:00 lecture "Systemic approaches to STEAM organization: forming research competencies in US national parks (Junior Ranger program) and experience in developing and promoting science education: "The Night of Scientists": the experience of the Czech Republic". Speaker Savchenko Iryna Mykolaivna.
- November 21, 15:00 lecture "STEM education in projecting, innovative activities, and a gender-sensitive environment". Speaker Kuzmenko Olha Stepanivna.



• December 04, 15:00 – lecture "Educational paradigms of artificial intelligence". Speaker – Stryzhak Oleksandr Yevheniiovych.

A link to the online lecture will be sent to all participants after paying participation fees. Online lectures will be saved.

### **Registration Procedure:**

### Participation form: remote.

Persons who are interested in participation should before October 28, 2025 (inclusively):

- 1) fill an application form;
- 2) send a copy of payment confirmation to Organizing advanced training@cuesc.org.ua (the coordinator provides you with payment details when you fill in an application).

#### NB!

From *November 3* to *December 14, 2025* (inclusively), during the advanced training, participants should send **research-methodological abstracts** to <u>advanced training@cuesc.org.ua</u>.

## RE: Advanced training on STEM and STEAM education.

Participation in the scientific and pedagogical advanced training without research and methodological report is impossible.

After January 30, 2026, every participant will receive a collection of abstracts and a certificate via e-mail indicated in the participation form.

### Requirements for Abstracts:

Volume – from 2 to 5 pages, A-4, Microsoft Word.

Font – Times New Roman, size – 14; line spacing – 1,5; the first line indention – 1,25 cm; margins – 2 cm.

Sequence of materials in abstracts: title (semi-bold capitals); the author's surname and initials (semi-bold); academic degree, rank (if any), post, place of employment (study); text.

A file should be titled in accordance with the participant's surname and initials (for example: Shevchenko T.H.\_abstracts).

References (without repetitions) are at the bottom of the text taking into account the National Standard of Ukraine <u>DSTU 8302: 2015 "Information and documentation</u>. Bibliographic reference. General principles and rules of <u>composition"</u>. Citations in the text should be marked with numerical order of a source according to the list and page (pages) number, for example [5, p. 26].

Languages: Ukrainian, English.

### Academic integrity:

The Organizing Committee of the All-Ukrainian Advanced training guarantees high-quality anonymous peer-review of each contribution. All papers are subject to check for plagiarism using <u>StrikePlagiarism.com</u> by the Polish company <u>Plagiat.pl</u>.

# Prohibition on using the aggressor state's scholarly papers:

Languages: Ukrainian and English. It is prohibited citing and including in the reference list Russian-language publications published in any country, including papers written in other languages but published in russia and belarus.

### **Contacts:**

Center for Ukrainian and European Scientific Cooperation

Contact person: **Liashchova Anastasiia Oleksandrivna**, Coordinator of the All-Ukrainian scientific and pedagogical advanced training.

Contact number: + 38 (095) 653 40 42 Email: advanced training@cuesc.org.ua

Web-site: cuesc.org.ua

Facebook: <u>facebook.com/cuescinfo</u>

YouTube: <a href="mailto:voutube.com/channel/cuescinfo">voutube.com/channel/cuescinfo</a>





### Sample of Abstracts:

## Підходи до підготовки майбутніх педагогів до впровадження STEM-освіти

### Барна О. В.

кандидатка педагогічних наук, доцентка, доцентка кафедри інформатики та методики її викладання Тернопільський національний педагогічний університет імені Володимира Гнатюка

#### Балик Н. Р.

кандидатка педагогічних наук, доцентка, завідувачка кафедри інформатики та методики її викладання Тернопільський національний педагогічний університет імені Володимира Гнатюка

### Шмигер Г. П.

кандидатка біологічних наук, доцентка, доцентка кафедри інформатики та методики її викладання Тернопільський національний педагогічний університет імені Володимира Гнатюка м. Тернопіль, Україна

В умовах реформування освіти та її переорієнтації на формування компетентностей випускника... [1].

<...>

### Література:

1. Elaine J. Hom. What is STEM Education. URL: https://www.livescience.com/43296-what-is-stem-education.html (дата звернення: 25.08.2025).