
Peter the Great St. Petersburg Polytechnic University

The Institute of Humanities
Graduate school of engineering pedagogy, psychology
and applied linguistics
in cooperation with scientific advisory center Kairos (Tomsk)

Dear colleagues!

The institute of Humanities of Peter the Great St. Petersburg Polytechnic University invites you to take part in the joint international forum "**International and interregional integration in the field of engineering education**", which includes a scientific conference "*Integration of engineering education and the humanities: global intercultural perspectives*" and a panel discussion on "*The role of integrated learning in the educational ecosystem of a technical university in the conditions of changes due to the Fourth Industrial Revolution*".

The Forum will be held on April 20-22, 2022 at the Federal State Autonomous Educational Institution of Higher Professional Education "St. Petersburg Polytechnic University of Peter the Great" at 29, Politechnicheskaya str. St. Petersburg.

The **purpose** of the forum is to discuss and develop new scientific directions and concepts for the integration of humanitarian and engineering education, cultural and linguistic development of students in the context of global changes in geopolitics, the increasing impact of the information and technological revolution of the late XX and early XXI centuries on the environment and human life, designed to make a significant contribution to the implementation of the national project "Education" (2019-2024), focused on ensuring the global competitiveness of Russian education.

Forum tasks:

- To present the results of national and international research from the perspective of scientific schools within the context of six areas. Each of the areas – linguistic, sociological, psychological and pedagogical, cultural, information and communication, technical and technological - considers the models of integration between engineering education and humanities;
- To combine the efforts of scientists and teachers working in Russian and foreign universities to systematize the identified trends in the integration of engineering education and humanities; to supplement and update the variability of scientific research on renovating and enhancing the role of the humanities in the course of training a new type of engineer. The new-style divergent engineer will possess a set of

meta-skills that make it possible to understand the humanitarian component of any technological process, inter alia in the conditions of industry 4.0 and 4.1;

- To give an impetus to new projects aimed at training the Engineer of the future, the development of his / her professional and socio-cultural meta-skills in the course of implementing the state policy of the Russian Federation in the field of creating a comfortable environment for life and economic growth;

- To pave the way for the development of international and interregional integration in the field of engineering education and scientific cooperation; to direct the joint efforts of the scientific pedagogical community at facilitating the integration of engineering education and humanities in order to provide the scientific basis for the development of the humanitarian meta-skills vital for the engineer of the future;

- To disseminate new academic achievements and educational technologies in order to contribute to the humanitarian and engineering development of society.

The conference will cover six areas of scientific discussions:

1. The linguistic direction of integration between engineering education and humanities: concepts of integrated teaching of foreign languages and professionally-oriented subjects at universities in Russia, Europe and America.

2. The technical and technological direction of integration between engineering education and humanities: technical, technological and humanitarian foundations for the development and application of new educational platforms based on the interrelated concepts of the artificial intelligence theory and adaptive learning, in the context of the changes caused by the Fourth Industrial Revolution (technologies of industry 4.0 and 4.1).

3. The sociological direction of the integration between engineering education and humanities: the development of engineering students' social (flexible) skills as a means of individual and personal development of future engineers.

4. The psychological and pedagogical direction of integration between engineering education and humanities: technologies and methods of active learning in the professional training of future engineers.

5. The cultural direction of the integration between engineering education and humanities: the worldview of humanitarian and engineering specialists - cross-cultural analysis.

6. Information and communication direction of integration between engineering education and humanities: digital technologies in higher education.

We kindly request the authors of publications to indicate their number of the scientific direction!

The working languages of the forum are Russian and English. The forms of participation in the forum are intramural and extramural.

Following the results of the forum, the accepted papers will be published in English in the book series "Lecture Notes in Networks and Systems" (Springer Nature) indexed by Scopus, INSPEC, WTI Frankfurt eG zbMATH SCImago in accordance with the agreement with scientific advisory center Kairos. The requirements for the design of scholarly papers are available at the link:

<https://www.springer.com/us/authors-editors/conference-proceedings/conference-proceedings-guidelines>

Applications are accepted until **October 30, 2021** through the website of the international scientific forum "International and interregional integration in the field of engineering education" at <http://humconf.spbstu.ru>. For registration you need to: 1) fill in the Forum participant form and submit / download an abstract for preliminary review. The address to which the abstracts should be sent will be given in the registration reply. (The registration link can be found on the main page of the website.) 2) After receiving a positive review of your abstract, you can register on a specialized platform and upload your paper. The link to the platform will start working on October 30th (see Important dates). To find the Guidelines and technical instructions for paper preparation and formatting follow the link below. 3) After receiving the confirmation of paper acceptance, the registration fee must be paid and the conference organizing committee informed.

The authors whose abstracts will be selected for publication will receive further instructions on working with the Springer Nature Online Conference Service platform and preparing a package of necessary documents. The deadline for submitting the papers is **January 9, 2022**.

A classified **registration fee of up to 50 euros** is to be paid for participation in the conference **without the publication** of a scholarly paper. The final amount will be determined in accordance with the category of participants (SPbPU employees, third-party participants (in person), third-party participants (remotely)) after receiving applications for participation in the conference, indicating the number of co-authors per article. A **registration fee of 300 euros** is to be paid for participation in the conference **with the publication** of a scholarly paper in the foreign publishing house Springer Nature with subsequent indexing in **Scopus**. The number of co-authors should not exceed five people per article.

The Organizing Committee of the forum reserves the right to reject the applications that do not correspond to the issues covered by the forum, as well as to make editorial changes in the text of scholarly papers in accordance with the code of academic ethics. In addition, all the authors must provide the Organizing Committee with the results of verification of their article by the Anti-Plagiarism system.

Thank you for your interest in the Forum.

The chairperson of the Organizing Committee:

The Director of the Institute of Humanities of Peter the Great St. Petersburg Polytechnic University N.I. Almazova

Co-Chairs:

The Director of Graduate school of engineering pedagogy, psychology and applied linguistics T.A. Baranova

The professor of Graduate school of engineering pedagogy, psychology and applied linguistics L.P. Khalyapina

The head of scientific advisory center Kairos Zh.S. Anikina