

Donetsk National Technical University INSTITUTE OF INTERNATIONAL COOPERATION

Newsletter

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DonNTU Signs a New International Agreement



DonNTU Rector Prof. A.Y. Anoprienko signed a cooperation agreement with Kuzbass State University named after T.F. Gorbachev (Russia) on January 12th 2020.

The prospects of the bilateral cooperation and joint implementation of the goals were discussed at the meeting.

DonNTU Academic Ranks First in the List of Winners of the Russian FEA

In 2018 the Free Economic Association (FEA) of Russia established a public award "Economics Book of the Year" to find the best publications in economics and encourage their authors. The team of authors of the text book "Classical Political

Economics" (Prof. A. Buzgalin, Prof. A. Kolganova, and the researcher O. Barashkova from Moscow State University) was one of the prize-winners. They decided to spend the prize money to give grants to university academics.

Преподаватель ДонНТУ возглавила список победителей на получение гранта от ВЭО России

In May 2019 the contest to develop a

lecture course on political economics and deliver it was announced. The FEA's Vice-President Prof. Y. Yakutin and the publishing house "Economic Newspaper" supported the idea and made their contribution in the program.

Their decision to award an educational grant (25, 000 rubles for each winner) was received by the nominees in late December 2019. Dr. I. Kandaurova from DonNTU ranked first in the list of four researchers who were the first round winners. She had presented an original author program "Human Concept in Marxism and Neo-Marxism" which aroused interest. The course is to be tested in the autumn term of 2020-2021 and included in the curriculum.

Besides, the contest winners were offered to publish the course programs in the journal "Political Economics Issues".

DonNTU Road Institute's Representatives Participate in an Event at Moscow State Road Technical University

Academics of Road Institute of DonNTU have visited Moscow State Road Technical University (MSRTU). The University hosted the 78th International Scientific and Methodological Conference on January 27-31st. It was timed to the 90th anniversary of MSRTU and summed up the results of university's methodological activity and research in its labs. There were 20 breakup groups and 46 sub-breakup groups at the Conference. There were more than 2500 participants who made 1300 presentations there. DonNTU's academics V. Bykov, I. Shilin, and A. Khimchenko met their colleagues and outlined further cooperation plans.



The VI International Scientific and Practical Conference "Innovation Technologies: Ways to Raise Road Service Period" was organized in the frameworks of the event. Representatives of the largest branch institutions such as the RF Ministry of Transport, "Avtodor", "Soyusdorstroy",

"RosdorNII", and foreign speakers (GOMAC, STRABAG) took part in it.

DonNTU Student Wins the World Contest of the Company MathWorks (the USA)

Victories of DonNTU students in the world contests are traditional. A. Labeev, a master's student of the Department of Electric Drive and Industrial Plant Automation of the Electrical Engineering Faculty won in the annual contest Simulink Student Challenge 2019 in which students and postgraduates from universities all over the world take part. He ranked second with his project "Robotic Arm on

Caterpillar Tracks". The contest results were announced on January 22nd 2020. The Company MathWorks and Moscow Centre for Engineering Technologies and Simulation "Exponenta" always pay 1000 \$ to the second place winners.

The contestants from all over the world (Canada, Columbia, Australia,



India, Italy, Germany, Indonesia, Moscow and Tyumen (Russia) and the DPR sent their applications in December 2019. Moscow was represented by DonNTU's bachelor student. Students from Germany ranked first, from Australia – third.

In annotation to A. Labeev's project the organizers said he used Simulink to develop a mobile robot on a movable tracked platform with a three-link manipulator located on it. The robot uses the built-in microcontroller receiving commands from

the smartphone via Bluetooth, and implements them using actuators. To calculate the torques in the project CAD-models of the robot components were imported into the Simscape Multibody application. These calculations are used to select DC motors, gearboxes, and incremental encoders. Power is supplied by a built-in lithium phosphate battery. The project then uses Simulink to develop closed-loop control of the robot's movement and positioning of its manipulator. The video demonstrates how Simulink and Simscape Multibody can be used to select actuators for the robot from its 3D model and then develop controls.

The victory of Alexei Labeev became the third in the list of achievements of DonNTU students at competitions held by the American company MathWorks.

The first winner in the Mobile Devices Challenge 2017 competition was undergraduate Alexander Mymrikov with the project Management of Arm Robot via Android.

The second winner of the Simulink Student Challenge 2018 competition is Ilya Azin, bachelor of the EAPU department with the Humanoid Robot project.

The American company MathWorks, the developer of the mathematical package for engineering and scientific calculations MATLAB, is the de facto standard in engineering education around the world. Therefore, the regular victories of Donetsk polytechnics in prestigious world-class competitions allow us to once again recall the high level of engineering education at Donetsk National Technical University.

The plot about this development of Alexey Labeev, which was presented at a power electronics contest held in Moscow, was filmed.

DonNTU Students are Prize-Winners of the International Competition of Scientific Works in International Economics

Students of Donetsk National Technical University took part in the International Student Research Competition in International Economics.



Ksenia Podustova, a student of the Engineering and Economics Department of the VEDm-19 group, took the third place in it (the topic of the scientific work is "Improving the Drug Safety of the Russian Federation in the Context of the BRICS

Countries"). Her supervisor is the head of the Department of International Economics, Ph.D. Econ. Sciences, Associate Professor L.V. Shabalina. She also was awarded a diploma.

The participant's diploma was also received by Elizaveta Bezjon, a student of the FEA-16 group (the topic of the scientific work was "The Impact of Transnational Corporations on the Economy of the Russian Federation").

The award ceremony was held by the Rector of Donetsk National University, Professor S. V. Bespalova.

DonNTU Is Written About

On February 5, the first interactive lecture was held at the Donetsk National Technical University using the Russian Network Interactive Laboratory NBICS.NET.



It was a part of the ongoing lecture

course "Luminaries of Culture: Names, Images, Legends".

Doctor of Philosophy and Economics, Professor, Chairman of the Philosophical Council of the Russian Space Society Alexander Subetto delivered his lecture "The Law of Advancing Human Progress by Scientific and Technical Progress."

Students from more than 100 countries of the world receive knowledge at a polytechnic university of the DPR remotely based on Udemy

Almost two thousand students from 112 countries of the world are studying remotely at Donetsk National Technical University on the basis of the international platform Udemy. This was told by the head of the international department of DonNTU, Associate Professor, Candidate of Technical Sciences, and Secretary of the Donbass



Branch of the Russian Space Society Sergey Dzhura. "The Department of Power Supply of Industrial Cities, Faculty of Electrical Engineering of Donetsk National Technical University is one of the initiators of the usage of software from leading world leaders in the educational process. The university widely uses the method of distance education. We

analyzed: in recent years, our teachers are more likely to use the techniques of the company Udemy. In our Department 1882 students from 112 countries of the world "undergo distant training", Sergei Dzhura quoted the figures.

He specified that among the "listeners" there are students from all over the world: India, the USA, Russia, Great Britain, Egypt, Taiwan, Brazil, Morocco, Germany, Turkey, and Ukraine. This, firstly, indicates a high level of teaching in the Donetsk People's Republic. And secondly, it is an indisputable fact of the Russian

World breaking through the information blockade on the educational and engineering front, which they are trying to apply to the Republics of Donbass from outside, "the head of the International Department of the University believes.

In this issue, distance education occupies an important educational niche in raising the level of qualification, including engineering personnel of industrial enterprises of the DPR.

Sergei Dzhura drew attention to the fact that the President of the Russian Federation Vladimir Putin, in a recent annual address to the Federal Assembly of the Russian Federation, outlined the main directions of the country's development for the coming years. In the field of higher education, science and technology, the head of the Russian state noted the need for digitalization of educational processes and the training of modern personnel to solve major scientific and technological problems, development of high-tech industries and implementation of ambitious scientific and technological programs.

"The need for continuing education for a modern professional, an engineer in the industrial sector of the economy, is also due to the progress of science and technology, and the widespread use of innovative technologies. In other words, our experience is the promotion, maintenance in the world of the authority of our educational organization, and, at the same time, a review of our capabilities. Indeed, if a university is openly sharing knowledge-intensive materials, it means that it still has something to offer. And this is indeed so," concluded Sergey Dzhura.

In addition, Udemy is an online learning platform focused on those who want to master or improve their skills. It unites more than 30 million students and 50 thousand teachers teaching in more than 60 languages. Students and instructors from 190 countries have more than 4,000 corporate clients who take courses mainly to improve professional skills, including in engineering specialties. Individual courses can be counted towards technical certification. According to 2019, more than 130,000 courses have worked on the site.

Donetsk National Technical University is the oldest technical university in Donbass, the world-recognized higher educational institution of the Donetsk People's Republic, which actively conducts international scientific and technical cooperation with 78 well-known universities from 25 countries and 32 foreign firms, is a member of 24 leading international educational associations.

Newsletter is prepared by the International Office of DonNTU.

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