**INFORMATION ABOUT THE PROJECT PERFORMED IN ERASMUS + 586292-EPP-1-2017-1-PL-EPPKA2-CBHE-J–INTELLIGENT TRANSPORT SYSTEMS: NEW ICT-BASED MASTER'S CURRICULA IN UZBEKISTAN (INTRAS) IMPLEMENTED IN JIZZAKH POLYTECHNIC INSTITUTE**

A new modern curriculum for master's programs in the specialty "Intelligent Transport Systems" was analyzed and developed by the Jizzakh Polytechnic Institute, and approved by the Ministry of Higher and Secondary Special Education of the Republic of Uzbekistan in 2019. This curriculum is based on the tasks solved in cooperation with foreign partner institutions, and modern curricula have been developed for the following special disciplines and laboratory curricula. In the selection of these specialties, the scientific and methodological competence of professors and teachers of foreign universities as well as educational materials were widely used. The names of these disciplines are given below.

1. Intelligent Vehicle Technologies & Smart Mobility

2. Transportation Economics and Demand analysis

3. Road Traffic Engineering and Optimization

4. In-Vehicle Information Systems

5. Robotics, Autonomous Vehicles, and Smart Logistics

6. Mobility Service Design-and-Management and Economics of Mobility

7. Communications and Information Systems in Smart Transportation

During the study of the new modern master's degree in "Intellectual Transport Systems" students will perform and learn the following tasks:

* study of new scientific results, scientific literature or research projects relevant to the specialty;
* apply new technologies and software packages (with the help of PTV VISSUM and PTV VISSIM) to solve scientific problems in the application of intelligent transport systems in practice;
* research and development of models, algorithms, methods, program solutions, tools on the topic of ongoing research projects;
* conducting experimental researches on standard methods and others and processing of their results;
* development of scientific and technical reports and explanatory notes;
* publishes scientific articles (high-index journals, Scopus, etc.) on the topic of research, learns to compose abstracts and bibliographies;
* Obtain results by applying the dissertation topics in the field.

**WORK DONE**

1. The newspaper "Bunyodkor Yoshlar" of Jizzakh Polytechnic Institute published an article on "The role of the INTRAS project in increasing the efficiency of intellectual of transport systems in Uzbekistan." The article was presented in a new format for more than 6,000 students of the institute, and was further enriched with questions and comments. Also, at the Republican Conference held at the Jizzakh Polytechnic Institute in April 2019, an expanded article on "The role of the INTRAS project in increasing the efficiency of the intellectual of transport systems in Uzbekistan" was published.

2. In 2019, The Ministry of Higher and Secondary Specialized Education and the Jizzakh Polytechnic Institute presented information about the INTRAS project at the republican conference “Actual Issues and Trends in Modern Research, Innovation, Engineering and Technology” and published the article “Experience of the Gdansk Polytechnic University in modernization education and science”. An example from the conference collection was submitted.

3. The Institute Council provided information about the scientific laboratory, which is planned to be opened at the Department of Logistics and Service through the 586292-EPP-1-2017-1-PL-EPPKA2-CBHE-J – Intelligent Transport Systems: New Ict-Based Master's Curricula in Uzbekistan (INTRAS) project. Information about the laboratory was provided in a decision of the Institute Council dated February 27, 2018 No. 8.

4. INTRAS project team of the Jizzakh Polytechnic Institute had the advanced English language course. Eight members of the team have been studed at the Global Knowledge Learning Centre for 8 months. The information of the team members is confirmed by the seal of the centre.

5. Samples of special certificates provided at consortium meetings held on April 1-5, 2019 at special training seminars at the University of Zilina, Slovakia, also at Klagenfurt University Alpen-Adra, Austria

6. An article about "Cooperation with foreign universities (impressions of the visit to Austria)" was published in the newspaper "Bunyodkor Yoshlar" of Jizzakh Polytechnic Institute in 2019 №4 (202). The article provides detailed information about the University of Alpen-Adra in Klagenfurt, Austria. In accordance with the purpose of the project, information was provided on the most modern teaching formats, special courses, subjects.

7.8 The INTRAS team of the Jizzakh Polytechnic Institute prepared Booklets, leaflets, stickers reflecting the purpose and content of the project. ” This information is available on the institute’s website and on the project’s website.

9. In 2019, a scientific article entitled “Modeling of Vehicles Movements for the Design of Parking Spaces” was published in the “Computational Collective Intelligence” journal which indexed in the international scientific and technical database Scopus.

10. In 2019, a scientific article entitled "Modeling the Movement of Designed Vehicles on Parking Space for Designing Parking" was prepared and published in the "Development of Transport by Telematics" journal which indexed in the international scientific and technical database Scopus.

11. In 2019, a scientific article entitled "Testing trajectory of road trains with program complexes" was published in the scientific journal "Archives of Automotive Engineering - Archiwum Motoryzacji" in the Republic of Poland on the implementation of laboratory work and projects INTRAS.

12. The project coordinator SA Usmanov collected data on the analysis of educational systems in the European Union and published a scientific article entitled "Features Implementing European Credit and Modular System at Higher Education Institutions of Uzbekistan" in the European Eastern European Scientific Journal in 2019.

13. The report about the INTRAS project was presented at No 3 meeting of the Jizzakh Polytechnic Institute’s council on November 4, 2019. All information about the project was heard by the institute’s council. During the discussion, plans were made for further work on the 586292-EPP-1-2017-1-PL-EPPKA2-CBHE-J–Intelligent Transport Systems: New Ict-Based Master's Curricula in Uzbekistan (INTRAS) project. Responsibilities were assigned to officials. Presentations and reports about the INTRAS project and its implementation were presented at three meetings of the Council of the Jizzakh Polytechnic Institute.

14. On November 7, 2019 at the **№**11 meeting of the Council of the Jizzakh Polytechnic Institute, the project coordinator of the 586292-EPP-1-2017-1-PL-EPPKA2-CBHE-J–Intelligent Transport Systems: New Ict-Based Master's Curricula in Uzbekistan (INTRAS) project S.A. Usmanov presented a report on "Report of the meeting of the University of Klagenfurt". The Council of the Institute provided information about all the tasks performed by the Board, as well as the University of Alpen Adra, Austria, and the tasks set at the meeting of the project coordination consortium.

15. Based on the 586292-EPP-1-2017-1-PL-EPPKA2-CBHE-J–Intelligent Transport Systems: New Ict-Based Master's Curricula in Uzbekistan (INTRAS) project, in May 2018, in the newspaper of Jizzakh Polytechnic Institute "Bunyodkor Yoshlar" №5 (185) was published an article entitled “INTRAS trains qualified specialists or is another bold step towards improving engineering education” by the project coordinator S.Usmanov.

16. On April 10, 2019, an agreement No. T-031/19 was signed between Titan Group and the Institute. According to the contract, the equipment will be delivered to the address of the UZBureauKES. According to clause 9.3 of the contract, on 23.07.2019 70% of the payment was made in advance, and on November 29, 2019, the equipment listed in Annex 1 of the contract was fully accepted on the balance of the institute. The remaining 30% was paid under this agreement. The equipment was accepted by the "Logistics and Service" department for the opening of the scientific laboratory. There are information about contains and the number of purchased equipment and its technical parameters in the document entitled “The list of equipment for Jizzakh Polytechnic Institute”

17. The member of INTRAS team Jamshid Abdunazarov participated with article entitled “Application of GIS in automobile-road sector Using the ArcGIS example” in the 8 International Scientific Conference CMDTUR 2018 in Žilina, Slovakia organized by Faculty of Operation and Economics of Transport and Communications Department of Road and Urban Transport, UNIVERSITY OF ŽILINA

18. Project coordinator S.Usmanov and member S.Djiyanbaev took part in the reporting meeting held on March 13-14, 2020 at Termez State University, where the INTRAS project is scheduled. According to the Agenda of the Meeting TerDU, S. Djiyanbaev provided information on the work packages performed by JIZPI

19. To date, the institute has received a total of 44,729 Euros (1st tranche: 23,520 Euros; 2nd tranche: 21,209 Euros). Of this, 13,200 Euros were spent on the purchase of laboratory equipment, 21,160 Euros on business trips, 5,079 Euros on salaries, 89 Euros on bank commissions and 2,000 Euros on subcontracting. Details are provided in the Report of the Financial of the INTRAS project for JizPI..

20. S. Usmanov and S. Djiyanbaev are working on the development of a textbook "Intelligent Transport Systems" at the expense of the INTRAS project to publish a new book for students majoring in "Modern Intelligent Transport Systems". Information on modern textbooks, scientific conclusions, theoretical analysis is being collected.

21. According to the Decree of the President of the Republic of Uzbekistan, the draft resolution No. 15970 on state parameters of admission to higher educational institutions of the Republic of Uzbekistan in the 2020/2021 academic year has been developed. According to this decision, in the 2020/2021 academic year, Jizzakh Polytechnic Institute has allocated 6 budgets and 2 contract quotas for the master's degree in "Intelligent Transport Systems". The draft decision and all information are available at <https://regulation.gov.uz/uz/document/15970>.

**Project website**

According to the project, the team of Jizzakh Polytechnic Institute has created a project website in Uzbek, Russian and English on the website of the institute. This website can be accessed via the link: <https://www.jizpi.uz/en/faoliyat/xalqaro-faoliyat/grantlar/>