STATE UNIVERSITY
OF TRADE AND ECONOMICS

FACULTY OF INFORMATION TECHNOLOGY
Department of Digital Economy and System Analysis
F4 «Systems Analysis and Data Science»

BACHELOR'S DEGREE

Educational Program
«TECHNOLOGIES FOR BIG DATA ANALYTICS»

PURPOSE OF THE EDUCATIONAL PROGRAM

Training of bachelor's degree students capable of performing comprehensive big data analysis, forecasting, optimization, and decision-making in complex systems based on a systems approach to data science, artificial intelligence, machine learning, other mathematical methods, and software tools using modern information technologies.

EMPLOYMENT OPPORTUNITIES (POSITIONS)

- Data Administrator
- Database Analyst
- Consolidated Information Analyst
- Business Analyst
- Data Engineer
- Systems Analyst
- Commercial analyst (SQL).
- Data Scientist.

EMPLOYERS - PARTNERS OF THE EDUCATIONAL PROGRAM INVOLVED IN THE FORMATION OF THE STUDY CONTENT AND PRACTICAL TRAINING

International Academic Partners: Bratislava University of Economics and Management, Comenius University Bratislava, Florida State University, Slovak University of Technology.
Business Partners: LLC "BGS Solution", LLC "Intelekt-Service", company "IT Specialist", Ukrainian Odoo Association, LLC "MMD Smart Ukraine", company "Global Message Service".

MAIN EDUCATIONAL DISCIPLINES (COURSE) OF THE EDUCATIONAL PROGRAM

Algorithms and Programming, English for Information Technology, Generative Artificial Intelligence Technologies, Big Data Engineering, Big Data Analytics Tools, Mathematical Foundations of Machine Learning, Business Process Modelling, Decision-making systems, Systems Theory and System Analysis, Data Analytics Technologies.

COMPETITIVE ADVANTAGES

- The educational program is focused on training specialists capable of performing comprehensive analysis of large volumes of data, as well as forecasting and optimising complex systems. The course is based on a systems data science methodology using artificial intelligence and machine learning. The program covers the study of big data engineering, generative artificial intelligence technologies and modern analytical tools, enabling graduates to design and implement models for solving applied problems in various fields of activity.
- The program's main advantage is its alignment with the dynamic trends of the global labour market. According to a report by the World Economic Forum, the number of vacancies for Big Data specialists is growing at a record annual rate of 115%. The uniqueness of the program is enhanced by the availability of an English-taught curriculum, which enables students to study in an English-medium group, providing high-quality preparation for work in international corporations. In addition to a wide network of European partners, Florida State University collaborates with our university according to this program, and graduates have a clear career progression path with the opportunity to continue their studies at master's level on the 'Big Data Management and Cognitive Technologies' program.
- The program's career-oriented approach focuses on training specialists for whom market demand significantly exceeds supply. Students acquire the competencies required to work as data scientists, data engineers, systems and business analysts, and database administrators. The training helps graduates to successfully establish themselves in the IT sector, banking, consulting and large analytics centers, where the ability to work with big data is a key factor in a company's competitiveness in the market.
- The program's practical focus is ensured through the intensive use of specialised software and analytical platforms in dedicated computer laboratories. Students learn through practical training and business simulations, which enable them to practice real-world scenarios of consolidated data analysis. The curriculum and practical training are developed in collaboration with partners such as IT Specialist, Global Message Service and business analysts from leading companies, ensuring that students' skills meet the current requirements of big data analytics.

Website of the University

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