

Educational Program	6B06105 - Artificial Intelligence Engineering
Objective of the Educational Program	To train bachelor's degree specialists in the field of information and communication technologies, equipped with up-to-date knowledge and practical skills in the development, implementation, and maintenance of artificial intelligence systems, including machine learning, data analysis, computer vision, and natural language processing — for effective application in various sectors of the economy and digital technologies
Type OP	new
Level according to the NSC	6
Level according to the ORC	6
Degree awarded	Bachelor's degree in Information and Communication Technology in the educational program 6B06105 - Artificial Intelligence Engineering
Typical term of study	4
Total credits	240
Language of instruction	Kazakh, Russian, English
Date of approval of the EP at the meeting of the management board	15.04.2025 (Protocol № 9)
Professional standards	Professional standard “Software development”; Professional standard “Development of artificial intelligence applications”; Professional standard “Development of IoT systems”.

№	Learning Outcomes
1	Demonstrate the ability to evaluate and apply innovative approaches to understanding socially significant phenomena and processes in legal, entrepreneurial, industrial, and environmental contexts.
2	Analyze system requirements, design, implement, and integrate software and hardware solutions based on the integration of artificial intelligence systems into information systems.
3	Apply mathematical methods and computer technologies to model and analyze physical and information processes.
4	Analyze software requirements, synthesize various software development principles and methodologies, implement and deploy software solutions, integrate software modules and components, and possess both fundamental knowledge and practical skills in software development.
5	Create graphical solutions using modern digital technologies and artificial intelligence tools.
6	Use computer technologies in the design, development, diagnostics, and maintenance of intelligent and robotic systems for industrial and scientific applications.
7	Evaluate requirements necessary for modeling and developing artificial neural networks using machine learning and data analysis methods.
8	Synthesize concepts and methodologies for designing intelligent cloud services and IoT devices, ensure their functionality at physical and network levels, and implement, install, and maintain them using modern AI-based tools.
9	Possess foreign language proficiency for social and professional communication, including the use of specialized vocabulary and professional terminology.
10	Analyze and implement tasks that require natural language processing (NLP) and computer vision (CV) technologies for integration into intelligent software and hardware solutions.
11	Design and develop mobile solutions using modern artificial intelligence tools.