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| Educational program | 6B06101 Informatics |
| EP purpose | Training of highly qualified specialists in the field of computer science, computer and IT technologies, capable of responding quickly in changing social and economic conditions and training graduates who are competitive and highly-demanded in the labour market |
| EP type | Acting |
| Level on NQF | 6 |
| Level on SQF | 6 |
| The awarded academic degree | Bachelor |
| Period of study | 4 |
| Volume of the credits | 240 |
| Language of education | Kazakh, Russian |
| Date of approval of the OP at the Board meeting | 10.04.2024 |
| Professional standard | System analysis in information and communication technologies, Software testing 05.12.2022 |

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| № | Learning outcomes: |

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| 1 | Apply information and communication technologies and manage data using digital technologies in professional activities. |
| 2 | He is able to show an active civic position based on a deep understanding and scientific analysis of the main stages of the development of society and philosophical concepts, is able to analyze the features of socio-political, cultural, psychological institutions in the context of their role in the modernization of Kazakh society. |
| 3 | To speak Kazakh, Russian, foreign languages, using a variety of means of oral and written communication to solve professional problems. |
| 4 | Make simple and complex algorithms, program using modern tools, showing skills that include modeling, designing, writing program code, testing, debugging and further administration of the software product. |
| 5 | Apply the skills of using modern system software: operating systems, operating and network shells, service programs; choosing the architecture of modern computing systems, complexes and networks of system administration; |
| 6 | To use mathematical methods of processing, analysis and synthesis of professional research results; to apply modern physical principles in those areas of technology in which students specialize. |
| 7 | Analyze the main models, methods and means of information technology for solving problems in the domain of web programming; use the main methods and means of designing software for Internet sites. |
| 8 | Develop information models, use modern DBMS for building, managing and applying databases; design and implement expert systems; design robots and program their actions. |
| 9 | Work with modern software for designing and working with various types of information (graphics, text, sound, video) organized in a single information environment; |
| 10 | Have the ability to evaluate and apply research methods and innovative approaches to understanding socially significant social phenomena and processes in legal, economic, entrepreneurial, industrial, environmental, cultural environments and anti-corruption policy. |
| 11 | Design, develop various databases; knowledge of modern models, methods and technologies and skills in designing information systems. |
| 12 | Use modern computer networks, software products and Internet resources to solve the tasks of professional activity; apply methods of information protection with modern software and hardware; |