Ministry of Science and Higher Education of the Republic of Kazakhstan Non-Profit Joint Stock Company "Korkyt Ata Kyzylorda University"

DEVELOPMENT PLAN FOR THE JOINT EDUCATIONAL PROGRAM (JEP) SEOULTECH 6B06101 – Information Systems (AI)

6B06101 – Information Systems (A1) for 2024–2028

1. BASIC INFORMATION

- 1. Responsible University: Korkyt Ata Kyzylorda University
- 2. Partner University: Seoul National University of Science and Technology (SeoulTech), South Korea
- Implementation period: 2025–2029
 Target Audience: High school graduates, college graduates, undergraduate students
 Format: Full-time, blended (online and offline)
- 6. Languages of Instruction: English, Russian, Kazakh
- 7. Fields of Study: Artificial Intelligence, Programming, Cybersecurity, Machine Learning

APPROVED

at the meeting of the Academic Quality Committee of the Institute Artificial Intelligence protocol no. 9 - 06 9 - 06 2024 r.

Chairman_ (signature)

Kulmurzaev N.S.

1. Educational program developers

| Members of the Employers' Council for the | Karayev Kanat – Director, KSU "Center for Information |
|---|---|
| Information Systems Program: | Technologies of the Akimat of Kyzylorda Region" |
| Key Employers: | JSC "Kazakhtelecom", JSC "Trantelecom" |
| Members of the Academic Council among | - |
| Employers: | |
| Members of the Academic Council among | KSU "Center for Information Technologies" of the |
| Employers: | Department of Digital Technologies of Kyzylorda Region |
| | IT Department of the Kyzylorda production branch of JSC |
| | "KazTransGas-Aimak" JSC "Kazakhtelecom", JSC |
| | "Trantelecom" "SeoulTech" |
| | |
| Department Branches: | KSU "Center for Information Technologies" of the |
| | Department of Digital Technologies of Kyzylorda Region |
| | Programming School "Grand Master" |

1. MAIN OBJECTIVES OF THE EDUCATIONAL PROGRAM DEVELOPMENT Strategic Direction 1. Expanding Access to University Educational Services

| № | Performance indicators (percentage, | Unit of | 2025 | 2026 | 2027 | 2028 | 2029 |
|----|--|---------|------|------|------|------|------|
| | percentage, quantity) | measur | | | | | |
| | | ement | | | | | |
| 1. | Number of students | people | 100 | 100 | 100 | 100 | 100 |
| 2. | Number of students after secondary | people | | | | | |
| | technical or middle education | | | | | | |
| | (accelerated training) | | | | | | |
| 3. | Number of students after higher | people | | | | | |
| | education | | | | | | |
| 4. | Enrollment in full-time study, 4 years | people | 100 | 100 | 100 | 100 | 100 |
| 5. | Enrollment in accelerated form of study (3 years, 4 years) | people | | | | | |
| 6 | Graduation | people | | | 100 | 100 | 100 |

Strategic Direction 2: Innovative Support for Educational Activities

| № | Performance indicators (percentage, percentage, quantity) | Unit of measure ment | 2025 | 2026 | 2027 | 2028 | 2029 |
|-----|---|----------------------|------|------|------|------|------|
| 1. | Program Ranking in the NCE "Atameken" | position | 3 | 2 | 2 | 2 | 2 |
| 2. | Program Accreditation | fact | | | + | | |
| 3. | Development of educational programs with the involvement of large companies, national companies, government agencies, associations, and employers | fact | 1 | 1 | 1 | 1 | 1 |
| 4. | Program updates according to labor market requirements | fact | + | + | + | + | + |
| 5. | Number of industry specialists involved in the educational process | people | 1 | 3 | 4 | 4 | 4 |
| 6. | Percentage of teaching staff with academic degrees | % | 60 | 60 | 80 | 80 | 80 |
| 7. | Number of teaching staff who completed professional development courses in the subject area | people | 10 | 10 | 15 | 15 | 20 |
| 8. | Percentage of graduates employed within the first year after graduation | % | | | 90 | 95 | 95 |
| 9. | Percentage of university graduates participating in the assessment of the quality of educational services (full-time study) | % | | | 100 | 100 | 100 |
| 10. | Number of employers involved in assessing the quality of specialist training | people | 5 | 6 | 7 | 7 | 7 |

| 11. | Percentage of students involved in the assessment of teaching staff (full-time study) | % | 100 | 100 | 100 | 100 | 100 |
|-----|--|-------|-----|-----|-----|-----|-----|
| 12. | Percentage of graduates who passed the minimum score on the National Knowledge Test (only for pedagogical specialties) | % | - | - | - | - | - |
| 13. | Number of MOOCs developed by program teaching staff | units | 2 | 3 | 6 | 8 | 10 |
| 14. | Percentage of entrants to universities with "Altyn Belgi" (Golden Mark) awards, international Olympiad winners, and winners of presidential, republican Olympiads, and scientific project competitions (awarded with diplomas of the first, second, and third degrees) | | 20 | 30 | 30 | 40 | 40 |

Strategic Direction 3: International Cooperation and Internationalization

| № | Performance indicators (percentage, percentage, quantity) | Unit of measur ement | 2025 | 2026 | 2027 | 2028 | 2029 |
|-----|---|----------------------|------|------|------|------|------|
| 1. | Inter-university partnerships within the program: Joint degree programs | units | 1 | 1 | 1 | 1 | 1 |
| | with a foreign university | units | 1 | 1 | 1 | 1 | 1 |
| | with a Kazakhstani university | units | - | - | - | - | - |
| 2. | Number of disciplines in the program taught in English | units | 8 | 10 | 15 | 20 | 20 |
| 3. | Number of program students participating in the outgoing academic mobility program | people | | | 20 | 20 | 20 |
| 4. | Number of program students participating in the internal outgoing academic mobility program | people | | 5 | 5 | 10 | 10 |
| 5. | Number of program students participating in the internal incoming academic mobility program | people | | 5 | 5 | 10 | 10 |
| 6 | Number of teaching staff participating in the internal outgoing academic mobility program | people | | 1 | 1 | 1 | 2 |
| 7. | Number of teaching staff participating in the internal incoming academic mobility program | people | 1 | 1 | 1 | 2 | 2 |
| 8. | Number of foreign scientists involved | people | 2 | 2 | 4 | 4 | 4 |
| 9. | Number of teaching staff participating in the external outgoing academic mobility program | people | | 2 | 2 | 2 | 2 |
| 10. | Number of teaching staff teaching in English | people | 5 | 6 | 6 | 6 | 6 |

Strategic Direction 4: Development of the Innovative Ecosystem

| Nº | Performance indicators (percentage, percentage, quantity) | Unit of measur ement | 2025 | 2026 | 2027 | 2028 | 2029 |
|-----|--|----------------------|------|------|------|------|------|
| 1. | Number of teaching staff involved in educational and research projects | people | 6 | 15 | 20 | 20 | 25 |
| 2. | Number of teaching staff involved in fundamental and applied research | people | 3 | 5 | 5 | 8 | 10 |
| 3. | Number of publications in journals in the first, second, and third quartiles according to Clarivate Analytics' Journal Citation Reports or indexed in Scopus | units | 2 | 3 | 6 | 8 | 10 |
| 4. | Number of publications by doctoral students in journals with non-zero impact factor indexed in ThomsonReuters/Scopus | units | | | 2 | 2 | 3 |
| 5. | Number of research projects under international cooperation | units | - | - | 1 | 1 | 1 |
| 6. | Number of publications in journals recommended by KKSON | units | 2 | 4 | 5 | 7 | 10 |
| 7. | Number of student publications | units | 2 | 2 | 4 | 6 | 15 |
| 8. | Number of students involved in scientific research | people | 2 | 2 | 2 | 3 | 3 |
| 9. | Number of students participating in scientific competitions | people | 12 | 15 | 17 | 19 | 20 |
| 10. | Number of students participating in republican Olympiads | people | 2 | 4 | 8 | 10 | 20 |

Strategic Direction 5: Infrastructure Modernization

| Nο | Performance indicators (percentage, percentage, quantity) | Unit of measur ement | 2023 | 2024 | 2025 | 2026 | 2027 |
|----|---|----------------------------|------|------|------|------|------|
| 1 | Development of the computer park | units | 8 | 9 | 12 | 15 | 17 |
| 2 | Purchase of software | units | 2 | 3 | 4 | 5 | 6 |
| 3 | Purchase of laboratory equipment, etc. | units | 1 | 1 | 1 | 1 | 1 |
| 4 | Expansion of library resources | units | 70 | 100 | 200 | 210 | 215 |
| 5 | Purchase of furniture | units | 5 | 8 | 8 | 10 | 12 |

8. RISK MANAGEMENT The program may encounter several risks that hinder the achievement of goals and targets.

| Risk Name | Risk Management Activities | | | | |
|--|---|--|--|--|--|
| Failure to meet enrollment targets due to student outflow to other regions or countries | t - Expand and activate career guidance work in urbar and regional schools and colleges; - Open representative offices in neighboring and foreign countries | | | | |
| Increased competition in the educational services market | - Enhance career guidance work among school and college students, reaching other regions of Kazakhstan and neighboring countries | | | | |
| Lack of specialized literature in English for multilingual student groups | - Activate the publication of textbooks by the teaching staff of the department | | | | |
| Decrease in the relevance of the knowledge being transmitted | - Organize continuous feedback with students during and outside class time: - Invite industry specialists and foreign teachers to lecture, hold workshops, and engage with students - Organize dual education classes - Develop additional minor educational programs for students within the main educational programs | | | | |
| Publication of scientific articles in "predatory" journals | Organize training seminars; Inform teachers about scientific journals and their status | | | | |
| Risk of reduced student participation in extracurricular activities | - Develop initiatives to increase student motivation for extracurricular activities | | | | |

Head of Educational Programs /

Kulmurzaev N.S.