



«АККРЕДИТТЕУ ЖӘНЕ РЕЙТИНГТІҢ
ТӘУЕЛСІЗ АГЕНТТІГІ» КЕМ

НУ «НЕЗАВИСИМОЕ АГЕНТСТВО
АККРЕДИТАЦИИ И РЕЙТИНГА»

INDEPENDENT AGENCY FOR
ACCREDITATION AND RATING

Report

on the results of the work of the external expert commission on
the assessment of compliance with the requirements of the
standards of specialized accreditation

of educational programs

6B04102 "IT Entrepreneurship" (ex-ante),

6B06202 "Smart Technologies" (ex-ante),

7M04102 "Project Management" (ex-ante),

7M06104 "Computing Sciences" (ex-ante),

7M06103 "Applied Data Analytics" (ex-ante)

Astana IT University LLP

in the period from May 30 to June 01, 2022

INDEPENDENT AGENCY FOR ACCREDITATION AND RATING
The External expert commission

***Addressed to
Accreditation
Council of IAAR***



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Nur-Sultan, 2022

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(II) INTRODUCTION

In accordance with Order No. 70-22-OD dated 03/24/2022 of the Director General of the Independent Agency for Accreditation and Rating, from May 30 to June 01, 2022, an external expert commission assessed the compliance of educational programs 6B04102 "IT Entrepreneurship", 6B06202 "Smart Technologies", 7M04102 "Project Management", 7M06104 "Computing Sciences", 7M06103 "Applied Data Analytics" in "Astana IT University" LLP (Nur-Sultan) to the Standards of primary specialized accreditation of the educational program of the organization of higher and postgraduate education of the IAAR (No. 68-18/1-OD dated May 25, 2018, first edition).

The Report of the external expert commission (ECC) contains an assessment of the submitted educational programs by the criteria of the IAAR standards, recommendations of the ECC on further improvement of educational programs and parameters of the profile of educational programs.

The composition of the ECC:

Chairman - Belykh Yuri Eduardovich, Candidate of Physical and Mathematical Sciences, Associate Professor, Vice-Rector for Academic Affairs of the Yanka Kupala Grodno State University (Grodno, Republic of Belarus).

The foreign expert of IAAR is Tatyana Guzeva, Candidate of Technical Sciences, Associate Professor, Head of the Department of Educational Standards and Programs of the Bauman Moscow State Technical University (Moscow, Russian Federation).

IAAR expert – Aldungarova Aliya Kairatovna, PhD, Associate Professor, East Kazakhstan Technical University. Serikbayeva (Ust-Kamenogorsk, Republic of Kazakhstan).

IAAR expert – Alpysbayev Kaisar Serikovich, Candidate of Economic Sciences, International University of Information Technologies (Almaty, Republic of Kazakhstan).

The employer is Berdenkulov Yersin Konyrtaevich, Senior Information security Expert, National Investment Corporation of the National Bank of Kazakhstan (Nur-Sultan, Republic of Kazakhstan).

Student of IAAR – Erkaev Navruz, 2nd year Master's student of International Relations and Economics, member of the Alliance of Students of Kazakhstan, Almaty Management University (Almaty, Republic of Kazakhstan).

IAAR Coordinator – Gulfiya Rivkatovna Nazzyrova, Ph.D. in Economics, Project manager for the formation of external expert commissions of the Independent Agency for Accreditation and Rating (Nur-Sultan, Republic of Kazakhstan).

(III) REPRESENTATION OF THE EDUCATIONAL ORGANIZATION

Astana IT University was opened in 2019 as part of the implementation of the state program "Digital Kazakhstan" for the development of human capital in the field of higher and postgraduate education.

Educational activities are carried out on the basis of general license No. KZ26LAA00015835 dated 12.04.2019, issued by the Committee for Control in the Field of Education and Science of the Ministry of Education and Science of the Republic of Kazakhstan (<http://astanait.edu.kz>).

The University provides educational services of higher and postgraduate education in accordance with the Classifier of areas of training with higher and postgraduate education, approved by the Order of the Minister of Education and Science of the Republic of Kazakhstan dated October 13, 2018 No. 569 and the state mandatory standards of higher and postgraduate education of the Republic of Kazakhstan, approved by the order of the Minister of Education and Science of the Republic of Kazakhstan dated October 31, 2018. No. 604.

Personnel training is carried out according to the three-level model "bachelor-master-doctor PhD" in accordance with the Law of the Republic of Kazakhstan "On Education", the Bologna Declaration and other international documents in the field of education.

In the Register of educational programs of higher and postgraduate education, 17 EP are registered, including 11 bachelor's, 4 master's, 2 doctoral EP.

The form of organization of the academic period (theoretical training) is a trimester lasting 10 weeks (three trimesters are planned for each academic year, the total duration of undergraduate studies is 3 years). Over the entire period of study, students master 240 academic credits. The language of instruction is English.

The development of the university is determined by the Development Strategy of Astana IT University LLP for 2020-2025.

The mission of the University - Astana IT University provides digital transformation through training, research and successful innovation.

Vision of the University - Astana IT University is the leading center of competencies for digital transformation in Central Asia.

Strategic objectives:

- Building an effective training system in the field of IT technologies and related fields of knowledge that meets the needs of the state;
- Integration of scientific research and educational process in the field of ICT and related fields;
- Development of the personality of a future specialist with high social and civic responsibility;
- Development of corporate governance with high responsibility and competitiveness of all university employees;
- Formation of a Smart Campus and expansion of the university infrastructure.

University rating, accreditation. In 2020, the university passed institutional and specialized (program) accreditation in the National Agency for Accreditation and Rating (IAAR) for a period of 5 years.

The University carries out research activities on the basis of the certificate of accreditation as a subject of scientific and (or) scientific and technical activity No. 005956 dated December 11, 2019.

Astana IT University has developed an internal quality assurance system approved by the decision of the Academic Council of December 26, 2019 and approved by the founder on December 30, 2019.

Membership in associations, partnership. The University is a member of the following associations and consortia: The "University Alliance of Science and Technology" Alliance between Astana IT University, the University of International Business, the Gumarbek Daukeev Almaty University of Energy and Communications, the Kazakh-British Technical University, the International University of Information Technology.

The University has signed Memoranda of Understanding and cooperation with international IT vendors and companies: HP, ASBIS, 1C, Kaspersky Lab, Huawei, Lenovo, KPMG, EnterpriseDB Corporation, Cisco, EPAM and Seedstars.

Students of the university. The total number of students studying at the university is 3,081 undergraduate students, including 2,832 with an educational grant and local executive body grant - 10, 239 on a fee basis; master's: 41 people. 17 foreign students study at the university: Afghanistan – 4, China - 5, Uzbekistan - 3, Russia - 3, Mongolia – 1, Armenia – 1.

Material and technical base of the university. The infrastructure of the university includes buildings and structures for various purposes: 3 academic buildings (total area - 37.6 thousand m²; useful – 21.2 thousand m², including educational – 18 thousand m²); 3 student living quarters for 450 seats; 3 houses for teaching staff and employees; 5 modern educational and scientific laboratories FabLab, Cisco, Huawei, Kaspersky, IPMA; 6 lecture halls, 63 classrooms (all classrooms are equipped with interactive projectors, computer equipment and audio-video systems); 20 innovative computer laboratories; 10 offices for startups; an assembly hall with 450 seats; electronic reading room with 50 seats; sports and gyms, media center with television and radio broadcasting studios; health center equipped with modern equipment and staffed by leading medical specialists; student canteen with 250 seats; corporate computer network; 250 Wi-Fi points with free Internet access; 1215 units of computers; IP telephony with a virtual PBX (120 IP telephones).

In the information space for a wide range of users, the university is represented through the official information site with the address <https://astanait.edu.kz>

The university uses scientific databases: Web of Science, Scopus, Springer, Science Direct, various educational platforms: Udemy, Udacity, Coursera, edx.

AITU publishes the Scientific Journal of Astana IT University (in the Committee for Quality Assurance in the Field of education and Science of the Ministry of Education and Science of the Republic of Kazakhstan registry since 2022) in the following areas: information security; IT in education and training; information and communication technologies (ICT); IT in management, management, finance and economics; project management.

Research and Innovation Centers have been opened at the University: RIC "Smart City", RIC "Industry 4.0", RIC "Big Data and Blockchain Technologies", RIC "Agrotech", RIC "EdTech", a training laboratory with a hardware and software solution for distance learning Cisco Webex, Huawei ICT Academy, an authorized training center (in cooperation with Kaspersky Lab), business incubator-coworking "ATAMEKEN SPACE" (together with "Atameken").

A brief description of the accredited EP of 1 cluster.

Educational activities on 6B04102 "IT Entrepreneurship", 6B06202 "Smart Technologies", 7M04102 "Project Management", 7M06104 "Computational Sciences", 7M06103 "Applied Data Analytics" are carried out on the basis of the appendix to license no. KZ67LAA00019559 dated January 18, 2021, issued by the Committee for Quality Assurance in Education and Science of the Ministry of Education and sciences of the Republic of Kazakhstan.

The implementation of accredited EP is supervised by the Departments:

- 6B04102 "IT Entrepreneurship", 7M04102 "Project Management" - Department of Social Sciences;
- 6B06202 "Smart Technologies" - Department of Intelligent Systems and Cybersecurity;
- 7M06104 "Computational Sciences", 7M06103 "Applied Data Analytics" - Department of Computing and Data Science.

Objectives of the EP:

6B04102 "IT entrepreneurship" - the field of education 6B04 "Business, management and law", training area of 6B041 "Business and Management", Group of educational programs B044 "Management and governance". In the register of EP from 13.10.2021, the training period is 3 years.

The purpose of the EP is to train highly qualified specialists and product managers with entrepreneurial skills who are able to effectively solve applied economic problems and develop IT business infrastructure.

6B06202 "Smart Technologies" - field of education 6B06 Information and communication technologies, training area of 6B062 Telecommunications, Group of educational programs B059 Communications and communication technologies. In the register of EP from 25.01.2022, the training period is 3 years.

The purpose of the EP is to train highly qualified specialists for innovative and knowledge-intensive sectors of the economy in the field of telecommunications, who have theoretical and practical knowledge, skills and abilities necessary for their implementation in professional activities that meet the needs of domestic and global intellectual labor markets.

7M04102 "Project Management" (innovative EP) - field of education 7M04 Business, Management and Law, training area of 7M041 Business and Management, Group of educational programs M072 Management and governance. In the register of EP from 06.01.2021, the training period is 2 years.

The purpose of the EP is to train highly qualified personnel in the field of project management and innovation, capable of implementing their professional knowledge, skills and abilities in international and domestic companies, public and research organizations.

7M06104 "Computational Sciences" (innovative EP) - field of education 7M06 Information and communication technologies, training area of 7M061 Information and communication technologies, Group of educational programs M094 Information technologies. In the register of EP since 31.08.2021, the training period is 2 years.

The purpose of the EP is to provide training of highly qualified scientific and applied specialists and software engineers in the field of modeling, algorithms and analysis of large-volume data, as well as managers and managers of software and information systems for the information technology industry and interdisciplinary industries related to data protection and processing in various sectors of the economy of the Republic of Kazakhstan.

7M06103 "Applied Data Analytics" (innovative EP) - field of education 7M06 Information and communication technologies, training area of 7M061 Information and communication technologies, Group of educational programs M094 Information technologies. In the register of EP from 29.05.2020, the training period is 2 years.

The purpose of the EP is to provide training of highly qualified scientific and applied specialists and software engineers in the field of large-volume data analysis, as well as managers and managers of software and information systems for the information technology industry and interdisciplinary industries related to data processing in various sectors of the economy of the Republic of Kazakhstan.

(IV) DESCRIPTION OF THE PREVIOUS ACCREDITATION PROCEDURE

Educational programs of 6B04102 "IT Entrepreneurship", 6B06202 "Smart Technologies", 7M04102 "Project Management", 7M06104 "Computational Sciences", 7M06103 "Applied Data Analytics" are accredited in the IAAR for the first time.

(V) DESCRIPTION OF THE VISIT OF EXTERNAL EXPERT COMMISSION

The work of the EEC was carried out on the basis of the approved Program of the visit of the expert commission on specialized accreditation of educational programs to Astana IT University LLP in the period from May 30 to June 01, 2022.

In order to coordinate the work of the EEC, an introductory meeting was held on 20.05.2022, during which powers were distributed among the members of the commission, the schedule of the visit was clarified, and an agreement was reached on the choice of examination methods.

In order to obtain objective information about the quality of educational programs and the entire infrastructure of the university, to clarify the content of self-assessment reports, online meetings were held with the Rector, vice-rectors in areas of activity, heads of structural divisions, dean, heads of EP, teachers, students. A total of 71 representatives took part in the meetings (table 1).

Table 1 - Information about employees and students who took part in meetings with EEK of IAAR::

Category of participants	Number
Rector	1
Vice-rectors	3
Heads of structural divisions	18
Dean, heads of EP (directors of departments)	4
Teachers	17
Students	28
Total number	71

During the tour, the members of the EEC got acquainted with the state of the material and technical base of the university, they viewed the military department, canteen, gym, gym, CISCO laboratory, HUAWEI, Smart city laboratory, media studio, assembly hall, library, medical center, Apple computer lab, KUKA laboratories, Robotics, Open space, Dormitory.

At the meeting of the EEK with the target groups of the university, the mechanisms for implementing the university's policy were clarified and the specification of individual data presented in the university self-assessment report was carried out.

During the accreditation period, the EEC experts attended the exams held by students of 6B06202 "Smart Technologies" (discipline "Coding Lab"), 6B04102 "IT entrepreneurship" (discipline "WEB technologies 1 (Front End)". Exam admission format: project protection. Projects are developed in groups or individually, the subjects of the projects are randomly selected by students 10 weeks before the session period. The defense of the projects took place in the form of presentations in English (orally, pitching).

In accordance with the accreditation procedure, an online survey of 17 teachers and 28 students was conducted.

In order to confirm the information provided in the Self-assessment Report, external experts requested and analyzed the working documentation of the university. Along with this, the experts studied the Internet positioning of the university through the official website of the university (<https://astanait.edu.kz/>).

As part of the planned program, recommendations for improving accredited educational programs of Astana IT University LLP, developed by the EEC based on the results of the examination, were presented at a meeting with the management on 06/01/2022.

(VI) COMPLIANCE WITH THE STANDARDS OF SPECIALIZED ACCREDITATION

6.1. "Educational Program Management" Standard

The evidentiary part

The University's development strategy for the 2020-2025 academic year was approved by the decision of the General Meeting of the Founders of Astana IT University LLP (Protocol No. 3 of May 15, 2020). Among the participants of the meeting were invited: Vice-Minister of Education and Science of the Republic of Kazakhstan Bigari R.A., First Deputy Director of the NGO "Nursultan Nazarbayev Education Fund" Murzabekova S.V., Deputy Chairman of the Board of JSC "National Infocommunication Holding "Zerde"" Uapov B.B.

Stakeholders are involved in the revision of the University's Development Strategy (a proposal to include in the strategy activities and tasks for cooperation with subsoil users on research and development work within the framework of mandatory financing of R&D by subsoil users in the amount of at least 1% of the total income of enterprises, a meeting of the Supervisory Board of the university, protocol No. 2 of 12/28/2021 Amendments and additions to the Development Strategy with the involvement of students can be traced through the orders on the creation of working groups, Order No. 172P of 10.02.2021).

The composition of the Supervisory Board of the university, consisting of external stakeholders, is confirmed by the submitted minutes of the general meeting of participants of the university (extract from Protocol No. 5 of 08.10.2020, extract from Protocol No. 7 of 29.01.2021, extract from Protocol No. 8 of 19.03.2021), in which questions about the composition of the members of the Supervisory Board were considered.

AITU mission is to enable digital transformation through learning, research and successful innovation. It was approved as one of the subsections of the University's Development Strategy (item 4 "Strategic guidelines", item 4.1).

The mission and development strategy are published on the main page of the university's website, in the "About Us" tab <https://astanait.edu.kz/about/>.

The quality assurance culture is supported by a certified quality management system, documentation of the implementation of the main processes and procedures, and accreditation in international rating agencies. The university has a management system based on the recommendations of ENQA, criteria for external evaluation of universities in the National Education Quality Assessment System, ESG Standards and Directives, and its own standards. The application of the quality management system is a strategic decision of the University and provides the basis for its sustainable development.

An example of documenting quality assurance procedures are the main regulatory documents defining the Policy in the field of quality culture: University Charter, Academic Policy, Student Honor Code, Student Spiritual and Moral Education Policy, Personnel policy, Institutional Code of Ethics of the university, Corporate Governance Code, Risk management policy, Internal quality assurance system, University internationalization strategy, Regulations, Procedures, Internal regulatory documentation, etc. documents that establish uniform requirements for the quality of professional duties performed by teachers and university staff (<https://drive.google.com/drive/folders/1JnCVM1ktriUrk3ZdfoEcc-7YXIaUeFGI>).

Commitment to the ideas of quality, support for the culture of quality at the university is confirmed by representatives of teaching staff, students and other stakeholders.

To involve various groups of stakeholders in the development, continuous implementation and management of the EP, the EP management uses various means of receiving feedback, including satisfaction surveys, personal meetings and contacts.

The internal quality assurance system is supported at the institutional level by the activities of a number of specialized structural units. Relevant local regulations are in force at the

departmental level, and organizational measures are being carried out. Specialized seminars and meetings of collegial bodies are practiced. The results of mutual attendance of training sessions are discussed at meetings of collegial management bodies, measures are developed and implemented to improve the process and learning outcomes.

To monitor the main processes of the University's activities, a monitoring system has been developed that systematizes data in the following areas: drawing up a profile of the University; data collection, registration of information cards on the rating of specialties for participation in the competition for obtaining a state order; analysis of the results of examination sessions in the context of EP, annual and semi-annual reports on the University, etc.; development of methodological support of credit technology and analysis of the availability of intra-university documentation, syllabuses; survey of various categories of students, employers on the quality of educational services provided and preparation of proposals; analysis of the level of informatization of the educational process, the introduction of new educational technologies; evaluation and analysis of the results of research work of teaching staff and students. The University has an extensive management structure, presented on the university's website.

Within the framework of accredited educational programs, responsibility for the implementation of business processes is distributed among the directors of departments, the general management of all EP is assigned to the dean. All documents regulating the implementation of the EP and the main decisions are discussed at meetings of departments and collegial management bodies. The procedure for the work of collegial bodies is defined and documented. Evaluation of activities is a continuous process and is analyzed at meetings of collegial bodies: the Academic Council, the Scientific Council, the Scientific and Technical Council, etc., is issued in the form of minutes.

Educational activities within the framework of the EP are implemented on the basis of plans for the development of educational programs. The development plans of accredited "6B04102 IT Entrepreneurship" (approved on 25.08.2021), "6B06202 Smart Technologies" (approved on 25.08.2021), "7M04102 Project Management" (approved on 25.08.2021), "7M06104 Computing Sciences", "7M06103 Applied Data Analytics" (approved on 25.08.2021) are developed based on the analysis of the functioning and real positioning of AITU, as a specialized university, taking into account the personnel and scientific potential of teaching staff and the demand for IT specialists in the region. (corrections and additions have been made - Protocol of Scientific Council No. 6 of 12/30/2021; No. 9 of 02/28/2022 No. 10 of 31/03/2022, the development plans of the EP are publicly available on the university's website):

- "6B04102 IT entrepreneurship" <https://astanait.edu.kz/it-entrepreneurship/>;
- "6B06202 Smart Technologies" <https://astanait.edu.kz/smart-technologies/>;
- "7M04102 Project Management" <https://astanait.edu.kz/magistratura-upravlenie-proektami/>;
- "7M06104 Computational Sciences" <https://astanait.edu.kz/magistratura-vychislitelnye-nauki/>;
- "7M06103 Applied Data Analytics" <https://astanait.edu.kz/magistratura-prikladnaya-analitika/>.

The Departments of Educational Programs conduct external examinations of the EP (presented to experts) for their compliance with the requirements of the labor market, the goals of the EP and the results of training. Experts from both the academic community and the business community are involved in conducting an external examination (expert opinions: on "6B04102 IT entrepreneurship" from the director of "Advanced Payment Solutions Ltd" FinTech startup based on the AIFC Fintech Hub M. Koshtaev and from the director of the LLP "Ditum Group" PMP M. Pattev, on "6B06202 Smart Technologies" from the Dean of the Faculty of Physics and Technology of the Karaganda University, PhD, assoc. prof. Zeinidenov A.K., on "7M04102 Project Management" from the Director of ITSM Software Marval Eurasia A.Kasymbekov, on "7M06104 Computational Sciences" and "7M06103 Applied Data Analytics" from PhD,

Associate Professor, Head of the Department of the Faculty of Mechanics and Mathematics of al. Farabi Kazakh National university Temirbekov A.N.).

The positioning of the EP at the national level in the rating of the National Chamber of Entrepreneurs of the Republic of Kazakhstan "Atameken" was not carried out, due to the incompleteness of the full life cycle of the students of the accredited cluster. The needs of the state for graduates are defined in the state program "Digital Kazakhstan", "Quality education "Educated Nation", "Technological breakthrough due to digitalization, science and innovation", where the areas of demand for personnel are indicated.

As part of the collegial management bodies of the educational program, representatives of teaching staff and students (masters) are represented, who on this basis take part in the discussion of the design and implementation of the EP, make proposals and make decisions in accordance with their competence. For example, in the direction of "Business and management" - employers Dosmukhamedov Murat (Managing Director of the branch of Alfa Bank JSC), Hamitov Sairan (Director of the AIFCA project portfolio Management Department), in the direction of "Information and Communication Technologies" - employer representative: Malaev Dauren (director of products of the company "Chocotravel"), Kaliazdarov Danabek (chief expert of BI Innovation), Ekaterina Burkeeva (team leader and backend developer at Kaz Dream Technologies and student Sultan Islam (student of BDA group-1902).

Academic committees are involved in the development of the EP, the main purpose of which is the development and improvement of the EP, the analysis of compliance of the content of disciplines with their goals, objectives and learning outcomes. The composition is formed from the teaching staff, dean's office staff, representatives of business communities, representatives of employers. The discussion is held within the framework of meetings of Academic Committees, for example, in the 2021-2022 academic year, a discussion was held of accredited EP for their compliance with the requirements of the labor market, compliance of goals with learning outcomes, prospects for the content of goals, their measurability. Employers and students who are members of the Academic Committee have the right to vote when approving EP during a meeting of departments.

EP managers demonstrate and maintain their openness to communicate with various groups of stakeholders. At the rector's level, there are not only opportunities for written communication, including with the use of modern technologies (rector's blog), but also openness through social networks, including, which was confirmed by teaching staff and students in interviews with the EEC.

The experts of the EEC were provided with confirmation of the training of the management of accredited EP in management programs in education.

According to the results of the survey of teaching staff and students, the following answers to the questions were received:

- involvement of the teaching staff in the process of making managerial and strategic decisions - satisfactory answers of 94.1 % of the interviewed teaching staff;
- to what extent teachers can use their own educational innovations in the learning process - satisfactory answers of 100 % of the surveyed teaching staff;
- assessment of the accessibility of the manual for students and teaching staff - satisfactory answers of 100 % of respondents;
- encouragement of innovative activity of teaching staff - satisfactory answers of 100% of respondents;
- the level of feedback of the teaching staff with the management – satisfactory answers of 100 % of respondents;
- participation of teaching staff in management decision-making - satisfactory answers of 94.1% of respondents.

Analytical part

AITU's Quality Assurance Policy is published on the university's website (<https://astanait.edu.kz/wp-content/uploads/2020/05/sistema-vnutrennego-obespecheniya-kachestva.pdf>) as one of the chapters of the documented procedure of the university DP-AITU-12 - "Astana IT University Internal Quality Assurance System" (Chapter 4, Standard 1 "Quality Assurance Policy", approved by the decision of the Scientific Council on 26.12.2019, Protocol No. 5). The policy has 5 goals:

- 1) *determine the overall structure of the internal quality assurance system of education;*
- 2) *forms a culture of quality among the entire university community;*
- 3 *contributes to ensuring and improving the quality of education;*
- 4) *supports mutual trust and promotes the recognition of learning outcomes, as well as the development of academic mobility of students;*
- 5) *provides information on quality assurance.*

EEC experts note the need to develop and place a Quality Policy in the form of a separate document on the page of Strategic Documents for the development of the university ("About us" - "Internal Quality Assurance Policy" - <https://astanait.edu.kz/about/>) in open access for all interested parties.

The documented procedure of DP-AITU-31 "Risk Management Policy of Astana IT University LLP" was approved by the decision of the University Board on 9.11.2020 (Protocol No. 1). The Regulation regulates the processes for identifying, preventing and minimizing risks, as well as the organization of risk management. Based on the analysis of the state of the university in the context of the external environment and a prospective analysis of the development of the educational services market and the demand of the labor market in the Republic of Kazakhstan, risks were identified and mechanisms for prevention and minimization were developed. A risk Register has been compiled, the areas of assessment and the degree of risk have been determined. Amendments and additions were made to the Risk Register (Minutes of the Management Board No. 4 dated 21.04.2022), a working group was established to ensure annual monitoring of the strategy implementation and risk identification.

According to the compliance policy reflected in the AITU development strategy, the compliance officer is working to identify risks within the approved schedule, including collecting information on the implementation by structural units of decisions made by collegial bodies. The risk register is published by the University on an open access web resource (Risk Register-Astana-IT-University.pdf (astanait.edu.kz)).

The risks described and their possible consequences in the published register reflect the policy of forecasting and preventing risks of the university's internal processes, including in the implementation of educational programs.

Consideration of risks in the field of implementation of specific EP is presented in the form of an example reflected in the protocol of the educational and methodological Council (Protocol No. 2 of 10/27/2021), which considered the forecast of risks in the implementation of EP (a sharp increase in the contingent, which entails problems of shortage of teaching staff, EP managers, the need for the development of MTB, providing opportunities for the implementation of professional a practitioner for all incoming applicants). The management of the university at the meeting of the academic and methodical council proposed ways to prevent risks.

Unfortunately, the university management did not provide examples of a fully documented procedure for analyzing internal risks during the implementation of the EP, drawing up a plan of corrective/preventive measures, monitoring implementation, reporting, according to DP-AITU-31 "Risk Management Policy of Astana IT University LLP" (paragraphs 6-11), respectively, to assess the actual conduct of the procedure from the beginning it was not possible before the preparation of the reports. It should be noted that there are no sections in the development plans of the EP that contain an analysis of possible risks in the implementation of the EP, a description of measures to prevent and overcome them.

Representatives from teaching staff are involved in the creation of Development plans, which was confirmed in interviews with target groups. To confirm the involvement of potential employers in the formation of plans for the development of the EP, expert examinations and certificates for educational programs are presented, which are evidence of participation in the development of plans for the development of the EP. *The experts of the EEC note* the expediency of constantly involving representatives from students of these programs in monitoring and adjusting (if necessary) the development plans of accredited EP.

Strengths/best practices:

not observed.

EEC recommendations for 6B04102 "IT Entrepreneurship", 6B06202 "Smart Technologies", 7M04102 "Project Management", 7M06104 "Computational Sciences", 7M06103 "Applied Data Analytics":

1. The University management, by the beginning of the 2022-2023 academic year, to approve and publish a Quality Assurance Policy in the form of a separate document that will reflect the relationship between scientific research, teaching and learning.
2. The management of 6B04102 "IT Entrepreneurship", 6B06202 "Smart Technologies", 7M04102 "Project Management", 7M06104 "Computing Sciences", 7M06103 "Applied Data Analytics", by the beginning of the 2022-2023 academic year, annually, by the beginning of the academic year, to ensure the involvement of if necessary, interested parties (external and internal stakeholders, including representatives from students accredited EP) to the analysis of implementation of development plans.
3. The management of accredited 6B04102 "IT Entrepreneurship", 6B06202 "Smart Technologies", 7M04102 "Project Management", 7M06104 "Computing Sciences", 7M06103 "Applied Data Analytics", when developing and adjusting plans for the development of educational programs, include a section describing possible risks, indicating their names, possible consequences in case of non-acceptance and (or) timely response measures, as well as a description of risk management mechanisms and measures.
4. The management of the university on an ongoing basis to ensure control over the implementation of all points of the documented procedure DP-AITU-31 "Risk Management Policy of Astana IT University LLP".

Conclusions of the EEC:

According to the standard "Educational Program Management", 15 criteria are disclosed, of which: 14 criteria have a satisfactory position, 1 position requires improvement.

6.2. «Information Management and Reporting» Standard

The evidentiary part

Astana IT University has implemented information management processes, including its collection and analysis. The university has an automated information system for managing the educational process "Platonus" <https://platonus.astanait.edu.kz>, "Moodle" <http://moodle.astanait.edu.kz>, "Microsoft Teams", "Digital University" <https://du.astanait.edu.kz> /. Within the framework of the university's AIS systems, learning management is implemented through the platforms Moodle, Platonus, Abitur and Digital University as a tool for collecting and analyzing information.

During the creation of its own information system "Digital University" in the 2021-2022 academic year, work is carried out in parallel in two systems "Platonus" and "Digital University". Data integration by means of "Platonus", "Moodle" and "Abitur" provides information intended for operational and strategic management of the university. In "Platonus", "Moodle" and "Abitur" there is a complete database of students at all levels of training and forms of training, teaching staff and other employees, united in groups of users with individual rights, with access to information resources. "Platonus" includes subsystems of student administration, educational process support and distance learning, united by an electronic document management system. The Platonus information system enables the university to track all educational processes, such as the creation of academic calendars, the distribution of academic disciplines by teachers, the calculation of hours by departments. Students are enrolled in elective disciplines, the creation of cost-effective academic streams is carried out through the Digital University information system. Each student has the opportunity to use his personal virtual office: to familiarize himself with syllabuses of disciplines and the curriculum; to register for elective disciplines and form his individual curriculum; to view the transcript and schedule of training sessions; to access the virtual classroom. Moodle (modular object-oriented dynamic learning environment) is a learning management system focused primarily on organizing interaction between teachers and students, although it is also suitable for organizing traditional distance courses, as well as supporting full—time learning. Using Moodle, the teacher can create courses, filling them with content in the form of texts, auxiliary files, presentations, questionnaires, etc. According to the results of the students' assignments, the teacher can give grades and comments. Thus, Moodle is also a center for creating educational material and providing interactive interaction between participants in the educational process.

The University uses the listed information systems, through which the management team is given the opportunity to track indicators characterizing the educational, scientific, educational activities of the university, necessary for operational, tactical and strategic management of the university.

Employees' access to information is delimited by specialized roles. Each role has its own specific access level. Thus, students and employees do not have access to the sections and data of other students or employees.

The collection and analysis of information on the state of processes is a key tool for internal quality assurance in the implementation of EP (<https://astanait.edu.kz/wp-content/uploads/2020/05/sistema-vnutrennego-obespecheniya-kachestva.pdf>), which is used on an ongoing basis as part of the internal audit. A systematic approach to the collection and analysis of information during the implementation of EP ensures that business processes comply with the requirements of regulatory documents and relevant standards of internal quality assurance to planned activities.

In the process of EP management, information is analyzed in various areas of activity (by the contingent of students, available resources, personnel, scientific and international activities). According to the results of the academic trimesters of the teaching staff, reports on educational, methodological, scientific and educational activities (individual reports of teachers), reports on all types of practices, etc. are compiled. Statistical indicators of the university's information

systems are actively used in the preparation of reports, which makes it possible to increase the objectivity of the assessment of ongoing changes in the university.

One of the effective mechanisms for internal assessment of the quality of accredited educational programs and feedback for their improvement is a questionnaire, where students act as respondents, in order to identify their opinions about the quality, content of educational programs and their compliance with the practical demands of the labor market. The introduction of a sociological survey among students is an important aspect of the educational process, covering the field of activity of teaching staff departments to improve the content of work programs. EP are being finalized and supplemented taking into account modern conditions and needs.

The survey of teaching staff and employees includes a study of the level of satisfaction of teaching staff and employees with working conditions, prospects for professional development and the administrative management of AITU (<https://docs.google.com/forms/d/e/1FAIpQLScJiSS463e-NuNdPBTIMhXJgO8X758BGQKIR7eEeTH5xBMrTg/viewform>).

The professional activity of teaching staff of accredited departments is reflected in semi-annual and annual reports, which analyze the individual work of each teacher on educational, educational work, as well as on international cooperation, academic mobility, the implementation of the publication plan and research.

At the University, the procedures of monitoring, periodic evaluation and revision of educational programs guarantee the achievement of the goal of EP and meet the needs of students and society. The University ensures the participation of students, employers and other stakeholders in the evaluation and revision of accredited programs. (*Protocol No. 1 of 12.11.2021, Protocol No. 2 of 05.02.2022 of the Academic Committee*). The University provides publication of all changes in the context of each EP of the University.

The University provides analysis of information on specific risks and plans to implement analytics of possible risks in the field of efficiency and effectiveness ("Risk Management Policy", approved by the decision of the Board of Astana IT University LLP Protocol No. 1 dated 9.11.2020). Risk analysis is carried out through monitoring of business processes, based on reports on the activities of departments. The purpose of the current inspections is to study and control the parameters of educational, methodological, scientific, and other processes. Ensuring the quality of the implementation of EP is achieved on the basis of approved internal regulatory documentation.

The presence of a mechanism of communication with students, employees and other interested parties is demonstrated through communication within the Internet sites with the presence of e-mail, Facebook, Instagram, Telegram, etc.

The university has organized information support for scientific research through access to Kazakh and foreign electronic resources Remote access to the resources of the Electronic Library is provided around the clock and can be carried out through local and global networks, in particular through the local network of the university <https://astanait.edu.kz/library/> and the Republican Interuniversity Electronic Library. RIEL unites electronic, educational and scientific resources of universities of Kazakhstan and works within the framework of the Association of Universities of the Republic of Kazakhstan.

Analytical part

The university has demonstrated the existence and evidence of the use in the management processes of EP of a system for collecting and analyzing statistics on the contingent of students, available resources, personnel, consulting, research and international activities, with which it manages both the EP itself and other areas of activity, using a variety of methods.

In order to improve the quality of the organization of the educational process, internal monitoring of satisfaction with the quality of the university's work is carried out. One of the important monitoring tools at the University is the questionnaire system, so in order to obtain

reliable information about the quality of training of specialists, a questionnaire is conducted. However, according to the results of the survey of target groups at the University, there is no informing of interested persons about the activities carried out following the results of corrective and preventive actions.

Based on the analysis of information on all types of University activities, management decisions are made at meetings of working groups, the rector's office, a collegial body – the Academic Council. Information management and reporting processes are evaluated by analyzing information, decisions of collegial bodies and management, and are also confirmed by data within internal administration systems.

The information collected and analyzed by the university within the framework of EP takes into account:

- the dynamics of the contingent of students EP – reflected in the accounting documents.
- analysis of the level of academic performance - achievements of students.
- students' satisfaction with the implementation of EP and the quality of education at the university, as well as the availability of educational resources and support systems for students - is determined by means of a questionnaire of students. Information about the results of the survey is stored and sent to departments. The analysis and decisions based on the results of the survey are recorded in the protocols of the collegial bodies.

Strengths / Best practices on accredited EP:

not observed

EEC recommendations for 6B04102 "IT Entrepreneurship", 6B06202 "Smart Technologies", 7M04102 "Project Management", 7M06104 "Computational Sciences", 7M06103 "Applied Data Analytics":

1. The management of the university, on an ongoing basis, after conducting a survey of students and teaching staff, and analyzing its results, developing response plans, publish reports on the work done on web resources for interested persons.

Conclusions of the EEC:

According to “Information Management and Reporting” standard, 16 criteria have been disclosed, of which all 16 have a satisfactory position.

6.3. «Design and approval of programs» Standard

The evidentiary part

In accordance with the adopted Mission of "Astana IT University" LLP and according to the Guidelines on the Quality of Education of the university, the implementation of EP is a priority area of the University's activities. According to the approved Development Strategy of the university, AITU is designed to train highly qualified specialists in the field of IT and become a driver of Kazakhstan's digital transformation, supporting the leadership and export orientation of domestic digital solutions in the global market. Accordingly, the implemented educational programs of the University are aimed at comprehensive personal development and professional orientation of future graduates of the university in obtaining academic knowledge and practical skills in the field of IT solutions and digital transformation.

The design and approval of educational programs at Astana IT University LLP is carried out in accordance with the provisions of regulatory legal acts in the field of higher and postgraduate education, as well as according to the documentation developed by the University to ensure transparency and clarity of the implementation of the directions of the university's development strategies.

Starting from the 2021-2022 academic year, the University trains personnel in the field of higher and postgraduate education according to the new 5 accredited bachelor's and master's degree educational programs: "6B06202 - Smart Technologies" (Smart Technologies), "6B04102 - IT Entrepreneurship" (IT entrepreneurship), "7M06103 - Applied Data Analytics" (Applied Data Analytics), "7M06104 - Computational Sciences" (Computational Sciences) and "7M04102 - Project Management" (Project Management) in English.

A distinctive feature of accredited EP is that all programs are designed for 3 years of study and are conducted entirely in English.

The relevance and prospects of the implemented projects at Astana IT University are confirmed by the results of analytical studies of the international labor market. For example, at the end of February 2020, the Digital Trends portal (<https://www.digitaltrends.com/>) published an article "The 15 best tech jobs boast top salaries, high satisfaction, lots of opening", in which the results of the analysis in the field of the most popular professions in the field of information and communication technologies were presented. According to the results of the analysis, the first places are occupied by such professions as: "Data Scientist" (specialist in the field of data science), "Software Engineer" (software engineer), "DevOps Engineer" (operational development engineer), "IT Solutions Architect" (architect of IT solutions).

The University provides the development of accredited EP based on the requirements of the State Educational Standard of the Republic of Kazakhstan, professional and industry standards, AITU Development Strategy and examples of best practices in the field of personnel training in higher education.

The implementation of the relevant levels of education is aimed at the formation of key competencies of future specialists and meeting the needs of the labor market. The EP provides for the possibility of building an individual educational trajectory, taking into account the personal needs and capabilities of students.

Astana IT University LLP defines and documents the procedures for assessing the quality of EP, which are reflected in the developed and approved internal regulatory documents of the university. The assessment of the quality of educational programs is carried out on the basis of an analysis of curricula, a catalog of elective disciplines, schedules, individual plans of students, internal regulatory documents, questionnaires of students, teaching staff and employers.

AITU has adopted and approved the following internal regulatory documents, regulating the procedures for the development and evaluation of the quality of EP, which are approved by the order of the Rector of the University based on the decisions of the Academic Council of the University;

- Academic policy of Astana IT University LLP (DP AITU-01);

- Rules for the development of educational programs of higher and postgraduate education of Astana IT University LLP (DP AITU-17);
- Rules for the organization of the educational process on credit technology of training (DP AITU-03);
- Regulations on the organization of the educational process on distance learning technologies (DOT) of Astana IT University (DP AITU-06);
- Rules on the organization of educational and methodological activities of Astana IT University (DP AITU-81);
- Regulations on the organization and conduct of the practice of students (DP AITU-20);
- Rules for the organization and conduct of intermediate certification of students of Astana IT University (DP AITU-07);
- Regulations on the research work of Astana IT University (DP AITU-32);
- Regulations on the intra-university stage of the Astana IT University Student Research Competition (DP AITU-79);
- Regulations on the assessment system of students of Astana IT University (DP AITU-02);
- Rules for the final certification of students of Astana IT University (DP AITU-08);
- Rules of transfer, reinstatement, deduction and provision of academic leave to students of Astana IT University (DP AITU-09);
- Rules of recognition of learning outcomes of formal and non-formal education of Astana IT University (DP AITU-55).

During the development and formation of the educational program, a Working Group is organized headed by the Provost, Dean and directors of departments of the relevant educational programs. The Working Group, in addition to the dean and directors of departments corresponding to the educational program, includes the most experienced specialists from among the university teaching staff, including teachers with practical experience and/or experience in research activities. As part of the implementation of the principles of student-centered learning, when drawing up an educational program, students (students/undergraduates) of the university are included in the working group.

In addition, Academic committees are created at the university for the development of the EP, implemented in the issuing departments. Academic committees are formed in order to prepare a list of EP, their design, development and improvement of existing EP based on the study of the field of professional activity.

The source documents and the basis for the development of accredited EP are the Regulatory legal acts in the field of education, the State Educational Standards of the Republic of Kazakhstan, standard curricula of specialties and compulsory disciplines, as well as the National Qualifications Framework of the Republic of Kazakhstan, professional standards of the country and the Atlas of New Professions.

In particular, the process of developing and approving educational programs of the University is regulated by: Standard Rules of activity of educational organizations implementing educational programs of higher and (or) postgraduate education, approved by Order of the Minister of Education and Science of the Republic of Kazakhstan on July 14, 2021 No. 339; SES of Higher and Postgraduate Education, approved by order of the Minister of Education and Science of the Republic of Kazakhstan dated October 31, 2018 year, No. 604; The rules of the organization of the educational process on credit technology of education, approved by the Order of the Minister of Education and Science of the Republic of Kazakhstan dated October 12, 2018 No. 563.; Academic Policy, Policy and Standards of Internal Quality Assurance, as well as internal regulatory documents of the University.

Every year, the results of the implementation of the EP are analyzed at meetings of the graduating departments and academic committees with the participation of students, employers and representatives of the business community. After the discussion of the submitted EP, the changes are fixed in the decision of the meetings of the relevant departments and working groups. Further, EP with the changes are sent to employers, representatives of business companies for review. Upon receipt of a positive review, EP is sent to a meeting of the Academic Committee of the Department, where issues related to the development, evaluation, design, improvement and approval of educational programs are considered in an expanded format with the participation of students at all levels, interested employers, the Director of the academic department and heads of structural divisions of the university, teaching staff involved in the design. Further, EP is sent for consideration by an Expert Commission established by order of the Rector of the University to assess its quality. Starting from the 2021-2022 academic year, this examination is carried out by members of Academic Committees, which include experienced teachers, representatives of the professional community and students.

Academic committees conduct an examination and assessment of the quality of the developed EP in accordance with the learning outcomes and key competencies of the graduate. At the same time, the assessment of the quality of EP development is carried out on the basis of key parameters regulated in the Rules for the Development of educational programs of higher and postgraduate education of Astana IT University LLP (DP AITU-17). In accordance with these Rules, EP is evaluated based on the following criteria:

- Demand in the labor market;
- Demonstration of the university's potential for the implementation of EP;
- Clearly described learning outcomes;
- Determination of academic credits required for the full achievement of learning outcomes;
- Adequacy of methods for assessing the development of learning outcomes by students;
- Compliance of the types of activities of students;
- Ensuring constructive interaction with stakeholders;
- Transparency of teaching, learning and evaluation processes;
- Providing the management of the EP with continuous improvement of the EP.

Within the framework of the management of implemented EP, several Collegial bodies function at AITU: academic committees of specialized departments, the Educational and Methodological Council of the University, the Scientific and Technical Council of the University, the Scientific Council of the university.

To organize an internal assessment of the quality of the EP and review the results of the assessment, meetings of the Educational and Methodological Council of the University are held, to which the owners of the processes (developers of the EP) from the relevant departments, interested stakeholders, representatives of the business community in the relevant areas of training specialists, representatives of the teaching staff are invited directly. In addition, students of the university also participate in these collegial bodies, in particular, they report at meetings of relevant departments (semi-annual and annual reports of undergraduates).

To organize an external assessment of the quality of the EP, it is envisaged to involve employers in the areas of training for reviewing EP, and a recognized Accredited body authorized to conduct international accreditation of educational programs is invited.

The procedure for the development, evaluation, improvement and approval of the EP is regulated by "The Rules for the development of educational programs of higher and postgraduate education of Astana IT University LLP" (DP AITU-17), as well as in the "Academic Policy of Astana IT University LLP" (DP AITU-01). These Rules and Policies determine the procedure for the development of the University's EP. According to these Rules, the EP design procedure consists of 4 main stages (Figure 1):

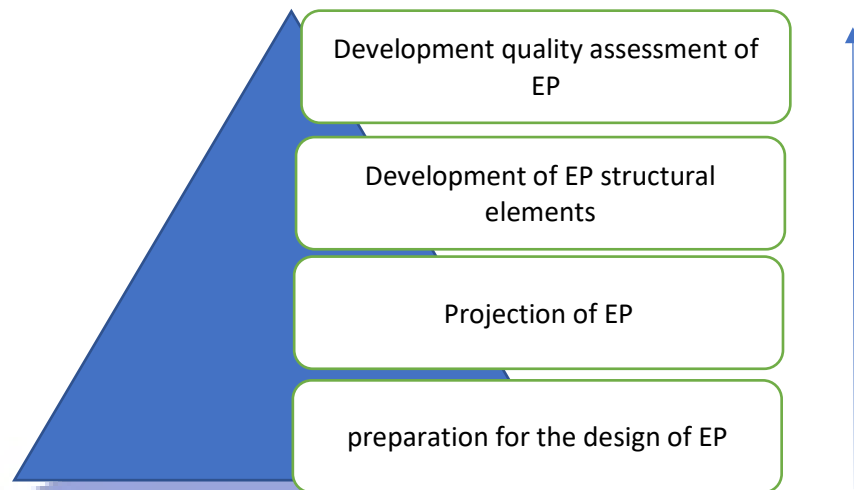


Figure 1 – AITU EP design stages

The Academic Committees (AC) analyze the correctness of the technology of compiling modules, taking into account compliance with the requirements and established Rules of CTL for the formation of educational programs. AC conducts an internal technical audit of educational programs, as a result of which the program is submitted for consideration by the Dean of the university to the AITU Educational and Methodological Council. After the approval of the Academic and Methodological council, the EP is submitted for approval to the Academic Council of the University. This procedure is described in "The Rules for the development of educational programs of higher and postgraduate education of Astana IT University LLP" (DP AITU-17).

The structure of the EP reflects the expected learning outcomes after the completion of the educational program. The learning outcomes reflect the qualification levels and key competencies of the graduate. The main requirements for the content structure of the EP are established in accordance with the requirements and basic provisions of the State compulsory education standard.

In accordance with the State Educational Standard of the Republic of Kazakhstan, each cycle of disciplines consists of a mandatory component and an elective component. The ratio, measurement and accounting of mandatory and elective components is regulated by the Standard curriculum of specialties. The elective component of each cycle of the EP provides universities with the opportunity to independently determine the trajectory of the educational program, through the independent formation of a course of elective disciplines, taking into account the specifics of the socio-economic development of the state, the development of Digital Kazakhstan, as well as in accordance with the needs of the labor market of a particular region. Elective courses give students the right to choose their own disciplines in accordance with academic, scientific and personal interests.

As potential employers of AITU, whose activities correspond to the training of personnel in the field of smart technologies, IT entrepreneurship, computing sciences, processing and analysis of big data, project management are: JSC "National Information Technologies", al-Farabi KazNU, Marvel Eurasia LLP, Ditum Group LLP, Advanced Payment Solution State of Emergency, Media Monks Kazakhstan LLP, Kar-Tel LLP, KazDream LLP, TengriLab LLP, Bank Home Credit JSC, Softtrack LLP, LLP "EPAM Kazakhstan", LLP "Tengizchevroil", LLP "Hewlett Packard", LLP "Softtrack", JSC "KazAtomProm", Corporate Fund "International Technopark of IT startups "Astana Hub".

These organizations and business companies are members of academic committees, working groups for the development and evaluation of EP, are external reviewers of EP and modules, give lectures, are involved in the scientific management of theses / projects and master's

theses. Employers and representatives of the business community are involved in the development and adjustment of EP during the passage of professional practices, MEPs, working curriculum, during job fairs organized by departments, faculty and university.

The learning outcomes corresponding to the competencies described in the MEP, at the university are determined by the assimilation of knowledge at various levels of training and the quality of acquired skills, skills in the practical activities of the future specialist. The results of training are determined through the current, intermediate and final certification.

The main criterion for the completion of bachelor's degree programs is the development of at least 240 academic ECTS credits for the entire period of study, including all types of student's educational activities. The main criterion for the completion of the master's degree program is the master of at least 120 academic ECTS credits for the entire period of study, including all types of educational activities of the undergraduate.

Based on the identification of the needs of the labor market, employers' requests, according to the National Qualifications Framework, industry qualifications Framework, professional standards, State compulsory standard of higher education and State compulsory standard of postgraduate education, the persons responsible for the development of the EP determine the set of required professional competencies and a Model of the graduate of the educational program is formed.

The University, in accordance with the knowledge, skills, competencies acquired in the learning process, the development of personal qualities, has developed and implemented its own competence model of a university graduate. This model presents descriptions of the competencies being formed in the process of mastering the EP (Table 2).

Table 2 – Competence model of AITU graduate

Social	<ul style="list-style-type: none"> – Graduate has leadership qualities – Graduate has emotional and social intelligence – Communicative, able to work for results
Instrumental	<ul style="list-style-type: none"> – Graduate develops, tests and debugs computer programs in several programming languages – Graduate works in various operating systems, deploys and operates cloud storage – Graduate deploys, administers and protects computer networks, configures and administers its components and nodes – Graduate develops web and mobile applications with a database, third-party and native services
Fundamental	<ul style="list-style-type: none"> – Graduate applies mathematical methods of describing processes and phenomena, understands the relationship between the process model and the program code – Graduate knows statistical methods and the scope of their practical application – Graduate understands the physical foundations of computer science and telecommunications
Industrial	<ul style="list-style-type: none"> – Graduate has entrepreneurial skills, is able to identify and solve problems, is able to create new opportunities – Graduate demonstrates innovative thinking, solves technological and social problems with the use of digital technologies

Syllabuses and an Educational and Methodological Complex of the discipline are developed for each discipline of the EP, including all the necessary materials (lecture notes, methodological guidelines for practical and laboratory classes, tasks for Student self-work), a map of educational and methodological support. The content of disciplines, teaching materials, including Student self-work, is focused on obtaining the expected results. The relevance of the content is analyzed annually at the meetings of the relevant departments, faculty, Academic Committees and Academic and methodical council during approval.

Within the framework of the EP, Advisors work in the departments of educational programs, who provide individual assistance and advice to students on the educational process and individual learning trajectory.

The organization and conduct of practices is carried out in accordance with the State Standard of the Republic of Kazakhstan 5.03.005-2009 "Professional practice", the procedure "Regulations on the organization and conduct of practice of students (DP AITU-20", the academic calendar for each academic year and working curricula. In the structure of the MEP, along with theoretical and practical classes, various types of practices are provided:

- for bachelors: academic, industrial and pre-graduate;
- for undergraduates: pedagogical and research.

Since the 2020-2021 academic year, 13 memoranda of understanding and cooperation have been concluded with foreign academic partners (Italy, Belgium, China, South Korea, Czech Republic, Ukraine, Belarus, Germany, Latvia, USA), which is a favorable condition for creating opportunities for studying after academic mobility programs with foreign universities and universities of the Republic of Kazakhstan.

The results of the survey of teaching staff shown, that it was satisfied:

- needs of teaching staff by the EP content - 100 %;
- paying appropriate attention to the content of the educational program by the management of the educational institution – 100 %;
- student's knowledge, obtained in this university, the realities of requirements of labour market - 100 %;
- formation of educational programs for the organization of education for students with the ability and skills to analyze situations and make forecasts – 100 %;

Students assessed how much they agree that the taught material is relevant: 42.9% – full agreement, 32.1% – agree, 17.9% – partially agree, 7.1% – disagree.

Analytical part

The University has defined and documented the procedures for the EP design and their approval at the institutional level, ensures that the content of the EP meets the established goals, including the expected learning outcomes. The experts demonstrated the existence of mechanisms for reviewing the content and structure of EP, taking into account changes in the labor market, the requirements of employers and the social request of society. The management of the EP ensures the availability of developed models of the graduate, describing the results of training and personal qualities, and also demonstrated to the EEC experts the conduct of external examinations of the content of the EP and the planned results of its implementation. The qualification assigned upon completion of the accredited EP is defined and corresponds to a certain level of the NSC and QF-EHEA.

It should be particularly noted that there is the possibility of training students and AITU teaching staff for professional certification. The AITU Competence and Excellence Center, together with the Dean's Office and educational program coordinators (department directors), introduced and implemented professional courses from CISCO (CCNA Rounding and Switching: Networking Essentials and NDG Linux Essentials) in educational programs, upon completion of which students had the opportunity to receive professional certificates from leading international vendors.

To provide access to training materials and courses, the administrator of the NetAcad platform provides access to course instructors. In turn, certified instructors add student accounts, thereby giving them access. Throughout the course, students complete assignments and take exams on this virtual platform. At the end of the course study, according to the results of the test tasks and final exams, in case of a set of the required passing score, the teacher-instructor confirms the student's result. Next, the system generates a certificate that is available for download to administrators and teachers.

Professional certification of University students within the framework of taught disciplines, such as: "Computer Networks (Cisco CCNA+R&S)", "Computer Networks Security (CyberOps)", "Computer Organization and Architecture", "Cybersecurity Essential", "Networks Security (CyberOps)", "Computer Networks Security", "Network Application Performance Engineering", is carried out by instructors from among the teaching staff: *Valiev R., Tursinkulova A., Umirov S., Orynbek A., Alshynov Sh.*, etc., who are certified trainers of the Cisco Academy.

It should be noted that the Network Academy awards not only professional certificates, but also corresponding badges and certificates of honor. Badges, certificates and certificates of honor are generated automatically for students who meet certain criteria at the end of the course. Badges are awarded in some courses for obtaining 70% or higher points on the first attempt of the final exam and are marked as passing the course in the assessment journal. A certificate is generated for all students when they receive a passing grade indicated in the assessment log. Certificates of honor are awarded to those students who receive 70% or more points at the first attempt to pass the final exam and are marked as having passed the course in the assessment journal.

Assessment in the course is fully automated and provides practice and support for students to master the basic concepts through the implementation of modular quizzes, interactive actions and simulations, such as: Syntax Checker and Packet Tracer, built into the curriculum.

CISCO NetAcad makes differentiated requirements for receiving a certificate of appreciation. Minimum score at the first attempt of the final exam for this course:

- CCNA v6, CCNP, CCNA Security, CCNA Cybersecurity Operations and ITE 75% or higher on the first attempt of the final exam;
- CCNAv7, IDE v7, Cybercops Associate, DevNet Associates and Network Security;
- 70% or higher on the first attempt of the final exam.

Together with the Department of Quality Assurance, a survey was organized to determine the IT literacy of teaching staff and administrative staff (from October 12-18, 2020), according to the results of which digital literacy courses for teaching staff were organized as part of the Winter School.

In addition, certification of teaching staff and administrative staff was organized under the Microsoft Imagine Academy license, according to the results of which the following teachers were trained under CISCO programs: *Aasso Ziro, Alibek Orynbek, Shyngys Alshynov, Abylay Salimzhanov, Ruslan Omirgaliyev, Ruslan Valeyev, Kamshat Asmaganbetova, Zhanibek Serkulov*.

University teachers who have passed the Microsoft Technology Associate (MTA) certification exams under the Microsoft Imagine Academy license are represented in the following composition:

- *Akizhanov Mugzar Sanatovich* – Software Development Fundamentals;
- *Burkeeva Ekaterina Vladimirovna* – Introduction to Programming Using JavaScript.

All of them have received Microsoft Association Technology certificates.

Teachers *Kalakova Aidana, Kumalakov Bolatzhan* were trained according to HUAWEI programs.

Teaching staff of accredited EP represented by *Valiev R., Tursunkulova A., Umirov S., Orynbek A., Alshynov Sh. et al.* They are certified trainers of the CISCO Academy at AITU.

The experts of the Higher Attestation Commission note the presence in the structure of accredited EP of various types of activities that ensure the achievement of the planned learning outcomes by students. The structure of educational AITU programs provides for activities such as collective discussion, group work, business games, organization of project groups, whose work contributes to the development of professional competencies of students taking into account their personal characteristics.

In addition to the Matrix of correlation of professional competencies with learning outcomes, the University creates and implements a personal portfolio of each student, indicating all the student's achievements, including non-academic achievements. Access to the student portfolio is open to potential employers, for whom the university acts as a guarantor that the

information in the student's portfolio is reliable. For each student, upon request, a personalized review from a teacher in a particular discipline is provided. To do this, the teacher must fill in the data in the system, according to the results of which a competence radar (radar-web) is generated within a certain discipline. The teacher's feedback is based both on the professional skills that the student learns during the study of the discipline, and on flexible (soft) skills, the development of which is no less important for students.

The *EEC experts* note the need for internal monitoring of the university's planning and reporting documentation, for compliance of information on electronic resources with the content of paper versions, since some inconsistencies *related to technical errors were found* during the accreditation procedure.

Strengths / best practices for accredited 6B04102 "IT Entrepreneurship", 6B06202 "Smart Technologies", 7M04102 "Project Management", 7M06104 "Computational Sciences", 7M06103 "Applied Data Analytics":

1. Ensuring the possibility of training students of 6B04102 "IT Entrepreneurship", 6B06202 "Smart Technologies", 7M04102 "Project Management", 7M06104 "Computing Sciences", 7M06103 "Applied Data Analytics" for professional certification, and ensuring, directly, the certification of students and undergraduates within academic disciplines and informal learning.

2. Planning in the structure of 6B04102 "IT entrepreneurship", 6B06202 "Smart Technologies", 7M04102 "Project Management", 7M06104 "Computing Sciences", 7M06103 "Applied data analytics" of various activities that ensure the achievement of the planned learning outcomes by students.

EEC recommendations for 6B04102 "IT Entrepreneurship", 6B06202 "Smart Technologies", 7M04102 "Project Management", 7M06104 "Computational Sciences", 7M06103 "Applied Data Analytics":

1. The management of the university, the management of the EP, by the beginning of the 2022-2023 academic year, to conduct internal monitoring of the planned and reporting documentation of the university, for compliance of information on electronic resources with the content of paper versions.

Conclusions of EEC:

According to the standard "Design and approval of educational programs", 12 criteria are disclosed, of which: 2 positions are strong, 10 positions are satisfactory.

6.4. «On-going monitoring and periodic review of programmes» Standard

The evidentiary part

The university defines and consistently applies procedures for monitoring, periodic evaluation and revision of educational programs in order to ensure that they achieve their goals and meet the needs of students and society. The university ensures the participation of potential employers and other stakeholders in the evaluation and revision of programs. This is confirmed by the participation of teaching staff, students and employers in the Academic Council, the presence of external examinations submitted to the experts of EEC with proposals for studying and making proposals on the content of the MEP. The basis for these procedures are:

- approval of new standard curricula for specialties;
- introduction of new professional standards;
- proposals of potential employers formed based on the results of a survey or joint activities with the departments;
- the results of the research activities of the University faculty in the field of special sciences and innovative research of accredited laboratories;
- changes in regulatory requirements for the EP design.

The improvement of educational programs includes procedures:

- Annual examination of methodological support at the level of the meeting of departments, the university's academic and methodical council, the Scientific Council of the university.
- Annual analysis and expansion of the catalogue of elective disciplines with the involvement of employers.
- Maintaining feedback with stakeholders aimed at improving the EP (round tables, conferences, joint scientific and methodological seminars).
- Monitoring of the implementation of the EP at the level of the academic and methodical council.
- Assessment of the quality of the EP by the main stakeholders.
- Annual internal audits to determine the compliance of the planning, organization, monitoring and quality development processes with the established requirements.
- Analysis of the results of external quality assurance procedures.
- Consideration of the overall results of monitoring and evaluation of the EP at collegial meetings, development of measures for improvement.

The process of monitoring, evaluation and improvement of the EP is the responsibility of the managers of the EP and is controlled by the academic and methodical council. Documentary evidence of changes in educational programs are:

- decisions of collegial bodies;
- action plans to improve the EP;
- updated methodological support based on decisions of collegial bodies;
- event protocols.

The main objectives of discussing the results of monitoring and evaluation of educational programs at collegial meetings are: to promote the evaluation of educational programs and their improvement; to inform about changes in external requirements for educational programs; to maintain an exchange of ideas with other organizations implementing educational programs; to harmonize content with educational programs of Kazakhstani and foreign universities; to identify areas of professional development of teaching staff implementing educational programs; recommendation on passing external quality assurance procedures; determining the forms and content of feedback with stakeholders for the development of educational programs.

The assessment of the quality of the implementation of EP is determined by analyzing the conducted open classes and mutual visits of teaching staff.

The progress of students is systematically monitored in the form of discussion of the results of boundary controls 1 and 2, examination sessions in study groups. Corrective actions and decisions are taken based on the results.

The process of monitoring, evaluation and improvement is reflected in the decisions of the collegial bodies.

The quality of educational programs is assessed annually by the main stakeholders, namely:

- annual survey of students on the quality of the educational program, learning environment and support services;
- analysis of the organization of open classes and mutual visits of teaching staff;
- evaluation of the educational results of students is considered at meetings of departments, at Academic and methodical council.

The management of accredited EP conducts coordinated work with stakeholders, interaction is carried out through joint coordination of educational and professional practice programs, participation in conducting training sessions, performing research, participating in seminars, organizing advanced training courses, discussing topics of final qualifying works. Agreements have been concluded with the main stakeholders on the provision of services for accredited educational programs for conducting practical and laboratory training, as well as the organization of a dual training system.

Internal evaluation of educational programs is carried out through the conclusion of an expert group. Based on the conclusion of the expert group, the educational program is reviewed and recommended for approval at meetings of departments, the Academic and methodical Council of the university and approved by the Academic Council of the university. After passing all the stages of approval, the educational program is introduced into the educational process.

All measures to control the quality of the educational process carried out at different levels are recorded in the form of records, certificates, reports, etc., and are discussed at meetings of departments, educational and methodological commissions, the Academic and methodical Council and the Academic Council of the University. Based on the analysis and evaluation of control indicators, measures are being developed to improve the quality of the implementation of educational programs.

The workload, academic performance and graduation of students comply with regulatory requirements and State compulsory education standard. According to the data of constant monitoring, a report on the results of the sessions is analyzed and formed. This issue is periodically considered at meetings of departments, the Academic and methodical Council, the Scientific Council of the university to take the necessary measures to improve academic performance and achieve the desired results.

A student who does not agree with the results of the assessment on the exam has the right to appeal. In some cases (due to illness, family circumstances, or other objective reasons), the dean of the faculty may allow the student to take an individual examination session.

An annual survey of students is conducted to assess the pedagogical activity of teaching staff. Based on the results of the discussion, the management of the EP decides on corrective actions.

The educational environment and support services correspond to the goals of the EP, so the educational process for accredited programs is implemented in specialized classrooms and training laboratories equipped with the necessary equipment and software.

Analytical part

Informing about changes in 6B04102 "IT Entrepreneurship", 6B06202 "Smart Technologies", 7M04102 "Project Management", 7M06104 "Computing Sciences", 7M06103 "Applied Data Analytics" are held at meetings of departments, Academic and methodological councils, Scientific Council of the university. Also, interested persons are informed about upcoming meetings on the consideration of educational programs by means of communication (mobile communication/e-mail/WhatsApp). The university has accounts in social networks (Instagram, Facebook), through which they inform all interested parties about the events held at the university. However, the EEC Commission notes the absence of a mechanism for informing all interested persons on the university's website about any planned or taken actions in relation to

accredited EP. The university does not publish information about changes made to 6B04102 "IT Entrepreneurship", 6B06202 "Smart Technologies", 7M04102 "Project Management", 7M06104 "Computational Sciences", 7M06103 "Applied Data Analytics" programs.

Strengths / Best practices on accredited EP:

not observed

EEC recommendations for 6B04102 "IT Entrepreneurship", 6B06202 "Smart Technologies", 7M04102 "Project Management", 7M06104 "Computational Sciences", 7M06103 "Applied Data Analytics":

1. The management of EP (6B04102 "IT Entrepreneurship", 6B06202 "Smart Technologies", 7M04102 "Project Management", 7M06104 "Computing Sciences", 7M06103 "Applied Data Analytics") regularly provide publications in various media about any planned or undertaken actions related to the implementation of EP. Based on the results of the revision and amendments to the MEP 6B04102 "IT Entrepreneurship", 6B06202 "Smart Technologies", 7M04102 "Project Management", 7M06104 "Computational Sciences", 7M06103 "Applied Data Analytics", to ensure the publication of the results of the changes made on the university website.

Conclusions of the EEC:

According to the standard "On-going monitoring and periodic evaluation of educational programs", 10 criteria are disclosed, of which: 9 - have a satisfactory position, 1 position – requires improvement.



6.5. «Student-centred learning, teaching and assessment» Standard

The evidentiary part

The university has introduced the principle of student-centered learning into educational programs: the development of flexible learning trajectories is ensured; conditions are created to increase the motivation and involvement of students in the educational process; consistency and objectivity of evaluation of learning outcomes is ensured. The educational process is determined by the interests of students and the competence characteristics of the graduate model. Ensuring equal opportunities for students is achieved by the completeness of educational and methodological, organizational, and informational support of the educational process.

The necessary conditions are created for students to choose an individual educational trajectory, which include:

- possibility of choosing elective disciplines, teachers;
- electronic registration for elective courses;
- formation of an individual curriculum;
- organization of an additional semester for repeated or additional study of disciplines;
- possibility of learning by remote technologies;
- familiarization with personal results of educational achievements;
- possibility of studying within the framework of academic mobility;
- ability to use the educational portal;
- the possibility of using the AITU electronic library, Republican Interuniversity Electronic

Library;

- for conducting laboratory and practical work at the modern level, students can use specialized classrooms of Huawei, Apple, Cisco, Kaspersky, multimedia classes equipped with all necessary technical and audiovisual means.

The organization of the educational process at AITU is carried out using credit technology, which is carried out on the basis of the choice and independent planning of the individual educational trajectory of training aimed at achieving learning outcomes (*The Academic Policy of AITU was approved by the Rector on 29.10.2020* <https://astanait.edu.kz/wp-content/uploads/2020/12/%D0%90%D0%BA%D0%B0%D0%B4%D0%B5%D0%BC%D0%B8%D1%87%D0%B5%D1%81%D0%BA%D0%B0%D1%8F-%D0%BF%D0%BE%D0%BB%D0%B8%D1%82%D0%B8%D0%BA%D0%B0.pdf>).

The formation of individual educational trajectories is carried out on the basis of Academic policy and electability of the disciplines of the Catalogue of elective disciplines of EP, which contains a list of all elective disciplines, indicating the purpose of the study, a summary and expected results of the study. The planning of the educational trajectory (registration for disciplines) is carried out in accordance with the academic calendar of AITU. Students in the framework of "6B04102 IT Entrepreneurship", "6B06202 Smart Technologies", "7M04102 Project Management", "7M06104 Computing Sciences", "7M06103 Applied Data Analytics" have ample opportunities in the formation of an educational trajectory through an individual curriculum. Students independently build their educational program in the form of an individual learning plan, which is formed for each academic period and includes the disciplines of the mandatory component from the curriculum and the elective disciplines from the Catalog of elective disciplines. The catalog of modules of the educational program correspond to the areas of training of specialists and is developed in accordance with the Regulations of the University on the development of a modular educational program (approved on 11/26/2020) and Modular curricula of the EP. Students have full information about the list of disciplines of the module, prerequisites, goals and content of disciplines. Students are informed about the form of control and the necessary learning tools, as well as the main learning outcomes and are available on the web resource:

- "6B04102 IT entrepreneurship" <https://astanait.edu.kz/it-entrepreneurship/>.
- "6B06202 Smart Technologies" <https://astanait.edu.kz/smart-technologies/>.

- "7M04102 Project Management" <https://astanait.edu.kz/magistratura-upravlenie-proektami/>.
- "7M06104 Computational Sciences" <https://astanait.edu.kz/magistratura-vychislitelnye-nauki/>.
- "7M06103 Applied Data Analytics" <https://astanait.edu.kz/magistratura-prikladnaya-analitika/>.

AITU demonstrates the organization of systematic work on the social support of students in the form of a system of grants and discounts, such as a rector's grant, benefits (discounts) for paying students (based on the GNI "Regulations on Scholarships and Social Support for Students", "Regulations on the Rector's Grant", "Regulations on the procedure for providing grants and discounts to students on a fee basis" (<https://drive.google.com/drive/folders/1xSuEsCZa11nLOGVKToRCE7NkBcLusnSf>))

For successful adaptation in the conditions of the credit system of education for freshmen and students who have transferred from other universities, including foreign students, the AITU website contains full-scale information in three languages (Kazakh, Russian and English), which is easy to navigate and find the necessary information (<https://astanait.edu.kz/university-life/>). Thus, in the "Student" section, information is classified into blocks: Information for review (about student life, grants, teachers, academic mobility, etc.); Resources (library resources, Moodle, etc.).

At the University, for individual assistance to the student, the institute of Advisory functions successfully. Advisors carry out consulting and methodological work with students regarding the choice of educational trajectory, disciplines and instructors a month in advance before the start of the subscription to the courses.

The university strives to take into account the needs of various groups of students in accredited EPs, in particular, students with disabilities can study remotely by visiting the university during the examination session and defending practice reports. The management of the EP ensures the harmonious development of students, taking into account the intellectual level of development and individual characteristics.

Courses are taught using the project-based approach. This allows students to gain knowledge through expedient vigorous activity and through the search for knowledge in accordance with the personal interest of the student. Students of these programs create real projects: analyze the situation and design solutions. The use of the project-based approach in teaching is different in that the necessary knowledge, skills and abilities are obtained not in the process of studying a particular discipline, but in the process of working on a real-life project. The project-based approach is accompanied by theoretical material and literature for self-study. As a result of project work, students form their competencies - disciplinary knowledge, skills and abilities, as well as competencies such as the ability to search, process, systematize information, put forward a hypothesis and justify the results of their work, the ability to work in a team. To evaluate the results of the work of students, an Assessment Rubric is created, where all the requirements and points are described.

For example, teachers of "English for academic purposes" in the educational process for EP 6B04102 "IT Entrepreneurship" and 7M04102 "Project Management" are actively implementing innovative teaching methods that are practice-oriented, such as research projects, problem-oriented learning, science-oriented learning, team-oriented learning, and others. Instructors successfully use interactive platforms, multimedia projectors and video equipment, and also integrate courses from Coursera into the learning process for asynchronous and independent work. Many of the above methods are aimed both at mastering professional knowledge and at developing transferable (soft) skills required to find non-standard approaches and creative thinking in solving applied and scientific problems, which, according to the recommendations of employers and members of the Academic Committee from industries, are paramount in employment of future professionals.

The faculty members while implementing the EP use active teaching methods and new approaches to teaching:

- Yeschenkulova G. has extensive experience in international exchange such as ITEC, National University of Agricultural Extension Management (MANAGE), Computer Applications on Agriculture, Hyderabad, India, GW4 universities (Bath, Bristol, Cardiff and Exeter), Erasmus Mundus Action 2 Euro -Asian Cooperation for Excellence and Advancement (Euro-Asian CEA), Humboldt- Universität zu Berlin, Germany.

- Nurguzhina, A. Associate Professor of DSN, as well as a practicing entrepreneur in the field of IT management. She has developed a course on financial literacy and entrepreneurship. She has extensive experience in attracting investments and implementing IT projects in the field of secondary education (Unified Educational Environment project) consulting in the field of IT project management.

- Ibadildin N.A. is an associate professor at DSN and teaches courses in Financial Management, Project Management, Quality Management, has over 10 years of business experience as a leader and project manager and is a certified PMP and SAFe 5 Scrum Master.

- Zueva A., completed an internship at High Performance Computing - Center for the Development of Advanced Computing (CDAC), India; Data analysis - International Association for the Evaluation of Educational Achievement (IEA), Germany; Survey operations and field testing, Germany; and Data analysis for policy research – University of Jyväskylä in cooperation with IEA, Finland.

- Igbaev S.B. is a teacher at SDS, an expert in strategic and operational management, a recognized internationally accredited consultant and trainer of PeopleCert for improving operational efficiency based on ITIL and PRINCE2, a long-term consultant for global companies Fox IT SM Limited (UK) and BSMimpact (Australia), business author at the international practical publication about IT Management itsm.tools.

For the duration of the examination sessions, in order to ensure openness and transparency, the work of appeal commissions is organized, from among the experienced teaching staff of the EP. The procedure for granting the right to take a session individually is defined in the Academic Policy. The knowledge assessment mechanism in AITU is regulated by the “Regulations on the student assessment system of Astana IT University LLP”. A mechanism for evaluating learning outcomes based on the principle of transparency (transparency), objectivity and impartiality. The mechanism for assessing knowledge, skills and competencies is a built-in assessment system, that is, current control, intermediate and final attestations. The methods and forms of assessing knowledge, skills and competencies used by university teachers are aimed at tracking a holistic view of the achievement of planned learning outcomes by students and at obtaining an integral assessment of the achievement of a particular level of competence.

In the learning process, a criterion generally accepted in world practice is used on a scale of letter and number designations, which reflects the mechanism for implementing a credit transfer based on the ECTS credit system. In accordance with this scale, grades are given in oral and written exams.

When implementing a student-centered approach in the feedback process, the wishes and needs of students are taken into account and decisions are made that are taken into account when compiling the EP. Feedback with the student is carried out through the definition of an individual login and password, which creates the possibility of forming a two-way connection between the subjects of the educational process.

The implementation of the principles of academic integrity is ensured by the Rules of Academic Integrity (approved by the Rector on February 16, 2022).

<https://drive.google.com/drive/folders/1A8fNGFIVa4cO--1BovUYJSOFIMMkNYDe>

Analytical part

Systematic work is carried out at the university to monitor the academic performance of

students. The mechanism of assessment of knowledge, skills and qualities acquired by students in the course of training is reflected in the "Regulations on the system of assessment of students of Astana IT University LLP".

The management of the MEC draws the attention of the representatives of the university to the need to pay special attention and provide additional measures to create learning conditions for people with disabilities by planning these opportunities in the planning documentation, the development of MEP, etc. documents, regardless of the presence or absence of students of this category of persons.

Strengths / best practices in accredited educational programs 6B04102 "IT Entrepreneurship", 6B06202 "Smart Technologies", 7M04102 "Project Management", 7M06104 "Computational Sciences", 7M06103 "Applied Data Analytics":

1. The use of various forms and methods of teaching and learning in the implementation of educational programs 6B04102 "IT entrepreneurship", 6B06202 "Smart Technologies", 7M04102 "Project Management", 7M06104 "Computational Sciences", 7M06103 "Applied data Analytics".

MEC recommendations on educational programs 6B04102 "IT Entrepreneurship", 6B06202 "Smart Technologies", 7M04102 "Project Management", 7M06104 "Computational Sciences", 7M06103 "Applied Data Analytics":

1. The management of the university, by the beginning of the 2022-2023 academic year, in the documented procedure for the development of educational programs 6B04102 "IT entrepreneurship", 6B06202 "Smart Technologies", 7M04102 "Project Management", 7M06104 "Computational Sciences", 7M06103 "Applied data Analytics" (development of syllabuses, etc.), determine the requirements for entering information within the framework of educational programs (courses) on learning opportunities for people with disabilities.

MEC conclusions:

According to the standard "Student-centered learning, teaching and assessment of academic performance", 10 criteria are disclosed, of which 1 position is strong, 9 positions are satisfactory.

6.6. The "Students" Standard

The evidentiary part

The University has a transparent policy and a published procedure for the formation of a contingent of students, which regulate the life cycle of students and are reflected in regulatory documents.

In order to implement a systematic policy of forming a contingent of students, the University conducts a set of measures that ensure the image of the University in the region and the republic as a whole. The current management system is reflected in the strategic development plan of the University and is based on constant monitoring in order to improve the quality of the educational process. Determining the professional orientation and professional qualities of applicants is a key aspect of the policy of forming a contingent of accredited educational programs "6B04102 IT Entrepreneurship", "6B06202 Smart Technologies", "7M04102 Project Management", "7M06104 Computing Sciences", "7M06103 Applied Data Analytics" AITU.

Work is being successfully carried out to provide applicants with information about the university and educational programs. Informing students about the requirements of the educational program and the specifics of its implementation before training is provided through publications on the official resources of the university (Facebook, Instagram), as well as through mailings to personal e-mail.

On the basis of the state educational grants allocated to the university, the provision of educational programs with qualified personnel in the areas of training, and the sufficiency of material and technical resources, the Directors of the Departments of Educational Programs of the Dean's Office are forecasting the contingent of the upcoming academic year. The stability of student recruitment is ensured by a set of career guidance activities aimed at implementing high-quality recruitment of applicants for educational programs.

In order to ensure quality education at the university, there are requirements for the formation of a group during seminars, practical, laboratory, and studio classes. Academic streams and groups are formed according to the principle of a sufficient number of students enrolled in this discipline and to this teacher, and achieving a sufficient level of their profitability. The occupancy rate of the academic stream at Astana IT University is 40-100 students and an academic group of 15-20 students. For the purposes of profitability and the formation of full-fledged academic groups, it is allowed to carry out only group selection of educational programs and general elective disciplines. The contingent of accredited educational programs of the cluster is presented in Table 3.

Table 3 - Contingent of students enrolled in accredited educational programs for the AY 2021/2022

<i>№</i>	<i>Educational programs</i>	<i>Contingent of students</i>	<i>Course</i>
1	6B04102 - IT Entrepreneurship	19	1
2	6B06202 - Smart technologies	36	1
3	7M06102 - Computational sciences	4	1
4	7M06101 - Applied Data Analytics	34	1
5	7M04102 - Project Management	6	1

The university provides the following to be ready to implement unique adaptation and support programs for newly enrolled and international students: Freshmen's Orientation Week, which involves introducing students to the university's structure, as well as the documents of the internal regulations of the university and student organizations.

For freshly enrolled students, available various cultural and socio-educational activities: Orientation Week, the Activities Fair, informational meetings, roundtable discussions, and other activities for adapting students.

The adaptation program includes a set of measures for socio-psychological and academic support for international students and a regular psychiatric therapy office. Furthermore, the university hosts a traditional introductory week, university tours, tours of the city, roundtable for a review of the identity and culture of the Kazakh society.

The university has regularly an advisory institute for individual assistance to students to prevent the occurrence of various problems for students. Advisors conduct consulting and methodological work for students a month before the academic year on educational direction, courses, and professors, in addition to providing methodological and socio-educational activities.

To improve the educational process, the university is provided with information and academic resources, including scientific literature, educational-methodological manual, e-resources of the "EBSCO" database, Science direct, Scopus, Web of Science, and access to the republican interuniversity e-library. The analysis of information resources, i.e., monitoring of the availability of the library fund, implements the scientific library of the university.

The directors of the Departments and the Dean's office of the university analyze the staff capacity within the framework of the EP to provide the faculty. Recruitment and admission of the faculty of new or planned educational programs released competitively.

The analysis of potential social conditions for students, including the provision of places in the dormitory, is determined using a survey, questionnaire, and interviews. Based on the survey and questionnaire results, the Department of Social and Educational Work makes the

necessary decisions to improve students' social circumstances. The distribution of dormitories is being done by considering the grounds and queues.

The university has defined the requirements for the recognition of formal and non-formal education results, which are regulated by the "Rules for the recognition of learning outcomes of formal and non-formal education."

The university places a high priority on the development of student academic mobility and international internships and training. Academic mobility is the basis of the Bologna process. The Bologna Process aims to create a unified European educational and scientific space with diverse educational and scientific programs. There is an opportunity for effective interaction between universities and research centers; furthermore, the individualization of educational programs due to the existing opportunities for interaction and factors of comparability and mutual recognition. For the implementation of academic mobility of students, preparation work is being done. In the context of academic mobility, the Department of International Cooperation informs media announcements about the competition for studying abroad.

To promote academic mobility among students and to expand international cooperation. Faculty and staff have agreements with 26 universities in 11 different worldwide countries. Educational mobility processes are governed by the internal regulatory document "Regulations on Academic Mobility of LLP "Astana IT University."

For example, Bolatova Shynar, Rakhimkul Adina, Ibraimova Aliya, Oraz Zhazira, and Akhmetbayev Azamat are studying under the academic mobility program at the Beijing Institute of Technology from 01.03.2022 to 12.06.2022 as master's students of the accredited EP 7M06103 - "Applied Data Analytics."

According to the Regulations on academic mobility, students in the 1st year (bachelor's degree) are not eligible to participate in educational mobility programs.

In addition to theoretical education, graduates' professional competence has a significant impact on professional practices. Practical training is an essential component of competitive specialist training and is critical for graduates' social and psychological adaptation to the labor market.

For the development of corporate relations, the University entered into agreements on professional practices.

The bases of internship within the framework of accredited educational programs are:

- «6B04102 IT entrepreneurship» "Kazdream Technologies" LLP, "Sapa Software" LLP, "E-commerce center" LLP, «Digital System Servis» LLP etc.
- «6B06202 Smart Technologies» - JSC "State Technical Service", JSC "Astana-Energy", Municipal State Institution "Center of digital technologies", JSC "Transtelecom" etc.
- Educational Program «7M04102 Project Management», Educational Program «7M06104 Computational Science », Educational Program «7M06103 Applied Data Analytics » - Kazakhstan engineering Research and development, Kazakhstan Investment development, PJSC Sberbank etc.

Students of the EP "6B04102 IT Entrepreneurship", "6B06202 Smart Technologies", "7M04102 Project Management", "7M06104 Computational Sciences", "7M06103 Applied Data Analytics" have the opportunity for professional certification within the disciplines of the EP.

Employment of graduates is carried out in accordance with the Decree of the Government of the Republic of Kazakhstan on Approval of the Rules for Sending a Specialist to Work and the Law "On Education" of the Republic of Kazakhstan.

The rules establish the procedure for sending university graduates who studied under the state educational order to work, granting the right to self-employment, exemption, and termination from the obligation to repay the state grant by working at local company, as well as the responsibility of graduates. The structural unit that promotes employment and organization of types of practices is the Career and Employment Center (CCT). One of the main tasks of the University's CCT is to work to ensure the employment of graduates and maintain further contacts. For all graduates, a data bank will be formed on their distribution, including the following

information: name, address of the organization to which the graduate is distributed, as well as the proposed position. To communicate with graduates, a bank of their e-mail addresses is being formed.

Employment processes at the university are implemented on the basis of the Decree of the Government of the Republic of Kazakhstan on Approval of the Rules for Sending a Specialist to Work and the Law "On Education" of the Republic of Kazakhstan and are regulated by the internal regulatory document "Regulations on organizing and conducting the internship of students"

The Career and Employment Center holds monthly coaching meetings "Company Day at the University" where company representatives advise and assist in the correct writing of a resume, choosing employment conditions. One of the prominent events is the "MOSK Interview", which integrates specialists in the field of modern HR industry and university students. The traditional "Job Fair" is also held to search for a job for graduates of the University, which were held on November 12, 2021 and April 12, 2022.

Analytical part

The university demonstrated the policy of forming a contingent of students at the University. The current model for the formation of a contingent of students complies with the legislation of the Republic of Kazakhstan, is based on the principle of transparency, unity, consistency. To increase the number of applications for admission from applicants, the University is working to provide applicants with information about the university and specialties.

The university regulates procedures that ensure the life cycle of students (from admission to graduation).

The university provides an opportunity for external and internal mobility of EP students. To develop the interaction between internal and external mobility, agreements were concluded with 26 universities from 11 countries.

To assess the satisfaction of students with places and the organization of internships, a survey and questionnaire is conducted, which reflects the quality processes of the organization of internships, as well as the results of students' activities during the internship.

Graduation and employment of students are the main indicator of the effectiveness of the university. For students at the University, the Department of Marketing and Public Relations, the Department of Science and Innovation, as well as the dean's office and directors of the Departments of Educational Programs organize many events, seminars and master classes in order to provide potential employment opportunities. However, due to the lack of graduations at the University as a whole (the first graduation will take place in the summer of 2022), documents on the creation and functioning of the Alumni Association have not yet been developed.

A survey of students conducted during the External Expert Commission visit showed that: the organization of education provides a sufficient opportunity for sports and other leisure activities: full agreement - 32.1%, agree - 28.6%, partially agree - 25%, complete disagreement - 14.3%, disagree - 0%.

- students assess the availability of counseling on personal problems as follows: fully satisfied - 25%, partially satisfied - 46.4%, partially dissatisfied - 10.7%, dissatisfied - 7.1%, difficult to answer - 10.7%, and availability for academic consulting: fully satisfied - 21.4%, partially satisfied - 60.7%, partially dissatisfied - 10.7%, dissatisfied - 0%, difficult to answer - 7.1%.

According to the submitted documents, analytical information, interviews, as well as the results of studying the self-control report OP 6B04102 "IT Entrepreneurship", 6B06202 "Smart Technologies", 7M04102 "Project Management", 7M06104 "Computational Sciences", 7M06103 "Applied Data Analytics": in the context of the "Students" standard, they meet the criteria of the IAAR Standard.

Strengths / best practices for accredited EPs:

not observed

Recommendations for EPs 6B04102 "IT Entrepreneurship", 6B06202 "Smart Technologies", 7M04102 "Project Management", 7M06104 "Computer Science", 7M06103 "Applied Data Analytics":

By the end of 2022, the University management is to create an Alumni Association, namely, draw up a work plan for the Alumni Association, begin its implementation, while informing university graduates about the activities of the Association through all possible informative sources.

Conclusions of the External Expert Commission:

According to the standard "Students" according to EPs 6B04102 "IT Entrepreneurship", 6B06202 "Smart Technologies", 7M04102 "Project Management", 7M06104 "Computer Science", 7M06103 "Applied Data Analytics" disclosed 12 criteria, of which: all 12 criteria have a satisfactory position.

6.7. Standard "Teaching Staff"

Evidence

Personnel policy is an integral part of the strategic policy of the University, designed to bring the personnel potential in line with its mission and goals. The personnel policy of "Astana IT University" is carried out in accordance with the Professional Standard of "Pedagogue" (order No. 133 of the Chairman of the Board of the National Chamber of Entrepreneurs of the Republic of Kazakhstan "Atameken" dated June 8, 2017) and the Sectoral Qualifications Framework for the field of "Education" (Minutes of the meeting of the sectoral commission of the MES RK No. 3 dated November 27, 2019) the faculty of the University ensures the implementation of curricula and educational programs for undergraduate and graduate programs.

The personnel policy of "Astana IT University" is focused on effective personnel support for the implementation of the university's strategy with a strong corporate culture, which provides for the provision of uniform approaches to working with personnel as part of the best corporate practices throughout the university.

The main goal of the University Personnel Policy is to improve the efficiency of personnel management by creating a human resource management system aimed at ensuring leadership in a competitive environment based on the qualitative and quantitative indicators of personnel.

The University has an objective and transparent personnel policy, including recruitment, professional growth, and development of personnel, ensuring the professional competence of teaching staff in the context of accredited EP 6B04102 "IT entrepreneurship", 7M04102 "Project Management", implemented in the Department of Social Sciences, 6B06202 "Smart Technologies", implemented in the Department of Intelligent Systems and Cybersecurity, 7M06104 "Computational Sciences", 7M06103 "Applied Data Analytics", implemented in the Department of Computing and Data Science.

The teaching staff is the main resource for the implementation of the mission of the University, for which clear, transparent, and objective criteria for hiring, appointment, filling vacancies, promotions, and dismissals are being developed.

For the full professional development and implementation of the creative needs of each category of employees, the university creates appropriate favorable conditions: a rating system of remuneration and financial incentives based on its results; free access to the library fund and information resources of the university; providing an opportunity to improve qualifications at the expense of the university in accordance with the decision of the administration; organization of multi-level English language courses; creation of conditions for the use of computer and office equipment, technical training aids, and other equipment; facilitating participation in Kazakhstani and international competitions of scientific works and competitions for individual grants; publication of methodological developments of employees; anticipatory promotion with the growth of scientific qualifications (after pre-defense or dissertation defense); nomination to

participate in city and republican commissions; awarding certificates and appreciation from the top management of the university, city and region for achievements in the field of educational and scientific activities, social work and many years of conscientious work; favorable conditions for teaching staff created at the university act as a mechanism for motivating and stimulating teaching staff.

Table 4 shows the quantitative and qualitative composition of teachers of accredited EPs.

Table 4 - Composition of the teaching staff of accredited EPs for the 2021-2022 academic year.

<i>EP</i>	<i>Total teaching staff</i>	<i>Doctors of Science</i>	<i>Candidates of Science</i>	<i>PhD Doctors</i>	<i>Masters</i>	<i>Degree %</i>
6B04102 IT entrepreneurship	25	1	6	6	12	52 %
6B06202 Smart Technologies	24	1	5	6	12	50 %
7M04102 Project management	10	2	3	3	2	80 %
7M06104 Computational sciences	9	2	3	3	1	89 %
7M06103 Applied Data Analytics	9	2	2	4	1	89 %

Personnel procedures governing the management of the teaching staff are regulated by the Human Resources Policy of the University, job descriptions of the teaching staff, Rules for the competitive replacement of positions of the teaching staff of Astana IT University LLP, Internal and labor regulations of Astana IT University LLP.

The personnel potential of the teaching staff of the university corresponds to the development strategy and the specifics of the educational program. Full information on all teaching staff of educational programs, including education, areas of professional and scientific interests, completed advanced training courses, available high-ranking articles and other information can be found at the link: <https://astanait.edu.kz/academic-staff/>.

The University successfully employs teachers who have received diplomas from foreign universities. The teaching staff of the Departments of accredited EP received education abroad at such universities as, The University of Manchester, Bauman Moscow State Technical University, People friendship the University of Russia, Dnepropetrovsk National University named after O.Gonchar, Monash University, Melbourne, Hajattepe University, (Ankara, Turkey), etc.

Research work of teaching staff. Scientific research of AITU teaching staff is organized within the framework of the activities of research centres and laboratories where scientific projects are being implemented, seminars, scientific internships, publications of monographs and scientific articles in journals with an impact factor, and publications recommended by the Committee for Quality Assurance in Education of the Ministry of Education and Science of the Republic of Kazakhstan are organized. The university has 5 SIC and 2 Laboratories: "Smart City", "Industry 4.0", "Big Data", "Agrotech", "EdTech", laboratories of prototyping "FabLab" and robotics together with KUKA Robot.

The implementation of 5 projects totaling 566.9 million tenges and three contractual projects worth 4.1 million tenges is a favourable condition for increasing the publication activity of teaching staff in the international databases Web of Science and Scopus within the framework of scientific projects.

International cooperation in the field of research activities of teaching staff is carried out in the following areas: Joint scientific research, writing and publishing scientific articles in collaboration with foreign authors, reviewing research papers and scientific publications (monographs, manuals, etc.), participation of teachers in international scientific and practical competitions, seminars, congresses, symposiums, and the involvement of teaching staff as jury members in the following areas.

For example, teachers Shayakhmetov N., Beloshitsky A., etc., conduct joint scientific research with foreign scientists. Active cooperation is conducted with the British Council in Nursultan, the Oxford Press Center, the Regional Center of the US Embassy, and the UN Office in Nur-Sultan. There is a contract for the provision of consulting services within the framework of the project KZSJ-1.2/CS-03-SSS "Parameters for measuring learning outcomes in educational programs" (Consortium Steinbeis GmbH & Co. KG for Technology transfer (Autus Global Limited), for 3000 euros - Mukhataev A. and a grant "champions of borders" for 10,000 pounds (5.8 million tenges) from the Royal Academy of Engineering (Great Britain) for the development of scientific potential between UK scientists (University of Edinburgh) and KZ on the topic of sustainable smart cities (for 2022).
<https://www.raeng.org.uk/global/sustainabledevelopment/frontiers/funding/frontiers-champions>

Professional Development of teaching staff. The teaching staff of accredited educational programs regularly take advanced training courses in the field of their specification.

Conditions for personal development are being created for teachers, advanced training courses, events (seminars, webinars) aimed at training teachers and university staff, studies on working with foreign Web of Science databases from Clarivate Analytics, Scopus from Elsevier, as well as activate the publication of scientific articles by teaching staff in journals with non-zero IF.

The teaching staff of accredited EP 6B04102 "IT Entrepreneurship", 6B06202 "Smart Technologies", 7M04102 "Project Management", 7M06104 "Computational Sciences", 7M06103 "Applied Data Analytics" at advanced training courses are carried out based on other universities, as well as in specialized training centres of the Republic of Kazakhstan. Certificates and certificates of advanced training of teaching staff are placed in employees' files. Advanced training of teaching staff also takes place in the form of participation in scientific and methodological seminars, conferences, exhibitions, and other events, in the form of research work, master's degree, and doctoral studies for 2020 - 2022. The teaching staff of EP 6B04102 "IT Entrepreneurship", 6B06202 "Smart Technologies", 7M04102 "Project Management", 7M06104 "Computing Sciences", 7M06103 "Applied Data Analytics" have completed advanced training courses in Coursera MOOC and other platforms, as evidenced by their numerous certificates. Certificates and relevant supporting documents on the passage of the teaching staff 6B04102 "IT Entrepreneurship", 6B06202 "Smart Technologies", 7M04102 "Project Management", 7M06104 "Computing Sciences", 7M06103 "Applied Data Analytics" are presented to the External Expert Commission.

An interview with the teaching staff of the accredited cluster confirmed the existence of favourable conditions for their work. Identification of the needs of teaching staff is carried out through the mechanisms of questioning of teaching staff and discussion of issues at the collegial bodies of the university. The experts of the external expert commission note that the university has a reasonably successful motivation mechanism for the research activities of teaching staff, which is prescribed in the Regulation on the stimulation of teaching staff and the remuneration system for research achievements.

Mobility of teaching staff. One of the EP Departments' main activities is the development of academic mobility, attracting the best foreign and domestic teachers and practitioners. Guest

lecturers to perform educational work and conduct master classes on research methods for teaching staff, young scientists, doctoral students, and undergraduates, where they share their experience, new directions in the field of science, and relevant research topics in their scientific interest.

The university successfully implements the program of the Ministry of Education and Science of the Republic of Kazakhstan, "Attracting foreign specialists to universities in Kazakhstan". In 2020-2022, foreign scientists from the USA, Germany, Great Britain, Ukraine, and Russia were invited to the university to teach within the framework accredited by the EP. University teachers, within the framework of the Academic Mobility program, travel to universities near and far abroad and participate in various international conferences. So, Professor Salykova L.N. and Dr Wulff Karsten spoke at the international conference "Research and education in the field of project management 2020" in Bilbao, Spain, with a report "Digital and Projected education in Astana University".

Analytical part

The university demonstrates an objective and transparent personnel policy, including recruitment, professional growth, and development of personnel, ensuring the professional competence of the entire staff.

The implementation of educational programs 6B04102 "IT Entrepreneurship", 6B06202 "Smart Technologies", 7M04102 "Project Management", 7M06104 "Computer Science", 7M06103 "Applied Data Analytics" is provided by highly qualified teaching staff with an education corresponding to the profile of the discipline taught, and systematically engaged in scientific and/or scientific and methodological activities.

Much attention is paid to improving the qualifications of scientific and teaching staff in modern methods of teaching and assessing the level of knowledge, as well in the field of conducting disciplines, if necessary, they undergo an internship, introduce the results of scientific and innovative activities into the educational process.

According to the Internal Labor Regulations, the University provides employees with vocational training, retraining, and advanced training. Based on the results of the assessment of the quality of teaching, as well as the results of student surveys, the University determines the necessary directions for the development and advanced training of both academic and administrative staff.

LLP "Astana IT University" systematically develops the academic mobility of teaching staff within the framework accredited by 6B04102 "IT Entrepreneurship", 6B06202 "Smart Technologies", 7M04102 "Project Management", 7M06104 "Computational Sciences", 7M06103 "Applied Data Analytics", as well as to ensure implementation of the educational process attracts the best foreign and domestic teachers, including young ones.

Questioning of the teaching staff conducted during the EEC visit showed that:

- the level of encouragement and involvement of young specialists in the educational process: very good - 82.4%, good - 17.6%.
- the organization provides opportunities for professional development of teaching staff: very good - 82.4%, good - 17.6%.

Strengths / best practice in accredited EP 6B04102 "IT Entrepreneurship", 6B06202 "Smart Technologies", 7M04102 "Project Management", 7M06104 "Computational Science", 7M06103 "Applied Data Analytics":

1. The presence in the university of active motivation for the professional and personal development of teachers, including encouragement for the integration of scientific activities and assistance in the commercialization of scientific research results.

2. The university management is responsible for its employees by creating favorable social conditions for them, such as the work of a health center, the functioning of sports halls, the work of a psychological counseling room, and living in service apartments.

Recommendations for EP 6B04102 "IT Entrepreneurship", 6B06202 "Smart Technologies", 7M04102 "Project Management", 7M06104 "Computer Science", 7M06103 "Applied Data Analytics":

EEC conclusions:

According to the standard "Teaching staff and teaching effectiveness" according to EP 6B04102 "IT Entrepreneurship", 6B06202 "Smart Technologies", 7M04102 "Project Management", 7M06104 "Computer Science", 7M06103 "Applied Data Analytics" 9 criteria is disclosed: 2 positions of which - strong, 7 criteria have a satisfactory position.

6.8 Standard "Educational Resources and Student Support Systems."

Evidence

The University ensures that sufficient, accessible, and appropriate educational resources and student support services are available. In allocating, planning, and providing educational resources, the university takes into account the needs of different groups of students.

The infrastructure of Astana IT University is a unified educational and scientific complex and includes 1 academic building, 3 dormitories for students, and 2 houses for faculty and staff. The total area of the educational building is 37.6 thousand square meters, including the usable 28, 3 thousand square meters, the 18 thousand square meters of which are educational areas. University dormitories (3 buildings) are designed for 734 beds.

The university has modern Cisco, Huawei, Kaspersky, FabLab educational laboratories, 8 lecture halls, 27 classrooms, 37 computer labs, 17 classrooms and 4 specialized laboratories, a modern assembly hall with 450 seats, a reading room with 250 seats, a gym, and gymnasium. All classrooms are equipped with interactive projectors, computers, and audio-video systems. There is a modern Media Center with an innovative television and radio studio.

Training and laboratory facilities and classroom funds correspond to the contingent of students in the implemented educational programs and sanitary and epidemiological norms and requirements.

The need for the purchase of equipment and software is determined by the directors of the EP departments. When studying the discipline of information and communication technologies, licensed Office 365 software is used, which includes a full package of Microsoft Office local applications: Word, Excel, PowerPoint, Outlook, Publisher, and OneNote. For special disciplines, the licensed MATLAB software is used.

For the students of accredited programs "6B04102 IT Entrepreneurship", "6B06202 Smart Technologies", "7M04102 Project Management", "7M06104 Computer Science", and "7M06103 Applied Data Analytics" the University created conditions for conducting research activities on the basis of scientific and innovative Aggrotech, EdTech and Industry 4.0.

The university has a corporate computer network. It includes all departments, divisions, services, and educational units. The work on the development of electronic document management is in progress. There are 250 Wi-Fi hotspots with free Internet access on the territory of the university. The total number of computers in the university is 1215 units.

Each student is provided with individual unlimited access to the following personalized information educational resources during the whole period of study: the official website of the University; scientific library; electronic library; information-analytical complex for the management of the educational process; e-Learning distance learning system. All resources are available during academic and extracurricular hours and include learning materials.

Students can get technical support by sending their requests to Helpdesk@astanait.edu.kz and support_du@astanait.edu.kz if they have problems with logging into the corporate network and the personal page in the LMS Moodle, or when working with the IS "Digital University".

When distributing, planning, and providing educational resources, the university takes into account the needs of different groups of students and adheres to student-centered learning: all students have 24/7 access to information resources and an electronic library; the university

infrastructure and the information systems structure are designed to meet the needs of students with disabilities; there is a program on adaptation for international students, which includes a set of socio-psychological and academic support activities.

Compliance with safety requirements in the learning process. The teaching facilities comply with the current sanitary standards, fire safety requirements, and qualification requirements for the organization of educational activities. In order to ensure the safety of students and employees, all academic buildings of the University are equipped with fire and security alarm systems. In accordance with the requirements of the order of the Minister of Health and Social Development of RK from 25.12.2015 № 1019 items 7,8 "On approval of rules and terms of training, instructing and testing knowledge of safety and labor protection of employees" heads of departments of the University are trained in safety and labor protection. Electrical technicians are trained in electrical safety. Classrooms and laboratories are repaired according to the university plans. Firefighting equipment, fire hoses, and fire extinguishers are tested. Fire alarms work in all academic buildings, and evacuation plans have been developed for each floor.

In laboratories, the presence and correct installation of devices, stands, cabinets, sockets, and the serviceability of exhaust ventilation, and lighting are ensured and checked. In computer classrooms, the correct connection of computers is checked, and instructions for working with them. In computer labs, computers are checked for proper connection. Sanitary conditions are maintained in the classrooms.

Support for students at the university is also carried out by ensuring public order and security of academic buildings and dormitories, the safety of the material base, and the functioning of public catering in the academic buildings. The university employs an engineer for safety and labor protection. There is a pass control at the university.

Questioning of students showed positive data on the issues of ensuring the availability of computer classes (75%) and the availability and quality of Internet resources (71.4%).

Library fund. The scientific library is an important educational and cultural center of the university. The library provides access to all types of information, teaches how to use scientific and educational resources, promotes the development of the intellectual and cultural potential of students, teaching staff and university staff. The library is one of the major structural divisions of the university. The scientific library is located on the 1st floor. The total area of the library is 1203.01 square meters. Library and information services for teaching staff and university students are carried out on a subscription basis, in the reading room, which is designed for 250 seats. The library is equipped with equipment for the automation of library services. Comfortable conditions for the work of readers have been created in the reading room of the library, 20 computers with Internet access have been installed, a WI-FI zone has been opened, which provides access to Internet resources.

All students are provided with access to the book fund of the library, which includes educational, methodological and scientific literature in Kazakh, Russian and English, as well as foreign and domestic periodicals. Information support of the library is carried out within the "Scientific Library" section of the official website of the university <https://astanait.edu.kz/library/>. The library website provides an opportunity to search for literature in the electronic catalog in the automated library system "Mega-Pro". Sections of the site provide information in three languages about the rules of using the Scientific Library, about electronic resources, reflect current information, announcements and news.

The library provides all students with modern educational publications, dictionaries and methodological literature from the world's leading publishers.

The RMEB electronic resource contains 77,943 titles of educational literature, including: educational publications - 18,125; educational and methodological publications - 19 392, scientific articles and journals - 28085, monographs - 4404, abstracts and dissertations - 5 121, other publications (reference publications, collections, fiction, etc.) - 2 816: in Kazakh language - 28 863, in Russian - 46 896, in English - 2 060, in other languages - 124.

The provision of educational and scientific literature in the context of accredited bachelor's degree programs "6B04102 IT Entrepreneurship", "6B06202 Smart Technologies" for 1st year disciplines is 100%, as presented in Table 5.

Table 5 - Provision of educational and scientific literature in the context of EP (1st course)

№	EP	Number of disciplines	Quantity of educational literature	Provision
1.	6B04102 – IT Entrepreneurship	17	4430	100%
2.	6B06202 – Smart Technologies	19	4031	100%

According to the results of the survey, 71.4% of students were satisfied with the level of availability of library resources, and 60.7% of students were satisfied with the quality of services provided in libraries and reading rooms.

Analytical part

EEC experts got acquainted with the equipment of the material and technical base for the implementation of accredited EPs. In general, the material, technical, information and library resources used to organize the learning process and support students are sufficient and meet the requirements of ongoing educational programs. According to the results of interviewing the management of the EP and students, the EEC noted that the university provides various means of communication and communication for teaching staff and students, access to Internet resources, the University Library and specialized electronic library resources.

EEC experts note the functioning of high-quality WI-FI on the territory of the university, a survey of teaching staff and students revealed the same feedback.

EEC experts noted a good opportunity for the development of additional professional competencies of undergraduates accredited by EP 7M04102 "Project Management", 7M06104 "Computer Science", 7M06103 "Applied Data Analytics", obtained by conducting research activities on the basis of research and innovation centers AgroTech, EdTech and Industry 4.0.

EEC experts verified the availability of technological support (online trainings, modeling, databases, data analysis programs). Students learn new professional skills and knowledge through workshops, labs and virtual learning platforms.

EEC experts noted the lack of targeted actions on the part of the university management and the management of the EP on preliminary planning of training opportunities for students and undergraduates with disabilities.

A survey of students conducted during the visit of the EEC IAAR showed satisfaction:

- with the existing educational resources of the university: fully satisfied - 50%, partially satisfied - 39.3%, partially dissatisfied - 10.7%.

- classrooms, classrooms for large groups: fully satisfied – 67.9%, partially satisfied – 10.7%, partially dissatisfied – 17.9%, dissatisfied – 0%, difficult to answer – 3.6%.

- Lounges for students: fully satisfied - 35.7%, partially satisfied - 21.4%, partially dissatisfied - 10.7%, dissatisfied - 2.5%, difficult to answer - 7.1%.

- available scientific laboratories: fully satisfied - 42.9%, partially satisfied - 21.4%, partially dissatisfied - 14.3%, dissatisfied - 0%, difficult to answer - 21.4%.

- provision of students with a hostel: fully satisfied - 10.7%, partially satisfied - 28.6%, partially dissatisfied - 17.9%, dissatisfied - 7.1%, difficult to answer - 35.7%.

EEC experts draw the attention of the university management and the management of the EP to the results of the survey results as part of the accreditation procedure, for which there are more than 20% with unsatisfactory answers: partially / not completely satisfied / found it difficult to answer:

Students:

- Availability of counseling on personal problems -28.5%;
- The activities of the financial and administrative services of the educational institution - 28.6%;
- Accessibility of health services - 35.7% %
- **! The quality of medical care at the university - 46.4%;**
- **! Lounges for students - 42.8%;**
- Clarity of procedures for taking disciplinary measures - 25%;
- Teaching methods in general - 21.4%;
- The quality of teaching in general - 25%;
- Academic load / requirements for the student - 28.6%;
- Available scientific laboratories - 35.7%
- Providing students with a hostel - 60.7%.

Students noted other problems regarding the quality of teaching:

- "biased attitude, indifferent attitude";
- "more information for undergraduates".

When conducting interviews with students, the problems of lack of feedback on the results of the survey, and access to gyms in the evening were voiced.

Teaching Staff:

- The unavailability of the necessary literature in the library is noted by 35.3% of the teaching staff;
- Inconvenient schedule - 23.5%;
- Students' lack of interest in learning - 35.3%;
- Untimely receipt of information about events - 23.5%;
- Lack of technical teaching aids in classrooms - 23.5%.

Strengths / best practice in accredited EP 6B04102 "IT Entrepreneurship", 6B06202 "Smart Technologies", 7M04102 "Project Management", 7M06104 "Computational Science", 7M06103 "Applied Data Analytics":

1. The educational equipment and software of the university used to master the EP is modern, high-tech and similar to those used in the relevant industries.
2. The possibility of training students and undergraduates of accredited EPs on the basis of partner enterprises that have modern innovative software and make it possible to use resources to develop the practical skills of students.

EEC recommendations for EP 6B04102 "IT Entrepreneurship", 6B06202 "Smart Technologies", 7M04102 "Project Management", 7M06104 "Computer Science", 7M06103 "Applied Data Analytics":

1. The management of the university, by the end of 2022, should consider the development (organization) of conditions for the education of persons with disabilities with the inclusion of indicative features in the development strategy of the university.
2. The administrators of the university, heads of structural divisions, according to the data obtained from the survey of students (Appendix 4) conducted by the EEC, hold an additional extended anonymous survey of students of the university to identify existing problems, including within the framework of the EP, and, based on the results of the analysis of the survey, develop a corrective action plan and start implementing them starting in the 2022-2023 academic year.

EEC conclusions:

According to the standard "Educational Resources and Student Support Systems" according to EP 6B04102 "IT Entrepreneurship", 6B06202 "Smart Technologies", 7M04102 "Project Management", 7M06104 "Computer Science", 7M06103 "Applied Data Analytics" disclosed 9 criteria, of which: 1 the position is strong, 8 criteria have a satisfactory position.

6.9 “Informing the public” standard

Evidence

The university employs various communication channels in social media. Communication languages on the website and social media are Kazakh, Russian and English. The University pays special attention to the transparency and relevance of information for all audiences and stakeholders. Informing the public is carried out in accordance with the Regulations on the information policy of AITU.

Official information is published on the website and in the social media of the university at <https://astanait.edu.kz/>. The information is aimed at a wide audience: students, staff, teachers, applicants and their parents, employers, university partners, scientific and public organizations. The University provides information to the public also on the official pages on social networks Facebook, Instagram, Telegram, Youtube, TikTok, in Republican and regional media and information resources of partner organizations. The information is available at the following links:

- Facebook <https://www.facebook.com/astanaituniversity>.
- Instagram университет https://www.instagram.com/astana_it_university/.
- Instagram колледж https://www.instagram.com/astana_it_college/.
- Telegram <https://t.me/aitu2020info>.
- Youtube <https://www.youtube.com/c/AstanaITUniversity?app=desktop>.
- TikTok https://www.tiktok.com/@astana_it_university.

Information about academic opportunities (<https://astanait.edu.kz/academic-opportunities/>) and the educational process (<https://astanait.edu.kz/academic-process/>) is published on the official website and includes all the necessary information about the student's opportunities and a detailed description of the learning process at the university.

Information about employment opportunities for graduates is published on the career center page (<https://astanait.edu.kz/center-karyery-i-trudoustr/>), which includes information about the center and department functions, vacancies and internships for students, as well as information about the partners of the university in the framework of the employment of students.

The procedure for publishing information about the activities of the university is defined and provided for in the regulation “Coverage of activities through the website, social networks and other media.” Information is published on the official website of the university, as well as in the official social networks of the university.

The University Departments and structural subdivisions have the opportunity to make the necessary changes and additions to the website. The Web Designer analyzes the University Website for compliance with the rules of visual web representation.

A detailed description of each educational program of undergraduate and graduate programs is available at the links:

- EP “6B04102 IT entrepreneurship” <https://astanait.edu.kz/it-entrepreneurship/> ,
- EP “6B06202 Smart Technologies” <https://astanait.edu.kz/smart-technologies/> ,
- EP “7M04102 Project Management” <https://astanait.edu.kz/magistratura-upravlenie-proektami/> ,
- EP “7M06104 Computational Sciences” <https://astanait.edu.kz/magistratura-vychislitelnye-nauki/> ,
- EP “7M06103 Applied Data Analytics” <https://astanait.edu.kz/magistratura-prikladnaya-analitika/> .

When informing the public, the Press Service provides for support and explanation of the national and state programs for the development of the country and the system of higher and postgraduate education, including the programs: “Development of Education and Science”, “Rukhani Zhangyru”, “Digital Kazakhstan”, the “Year of Youth” and others. All published materials fully reflect the scientific achievements and contribution of students, faculty, and the administration of the University to the development of national programs.

The entire list of publications containing information about partnerships, collaborations and various types of collaborations is available at the following link: <https://astanait.edu.kz/partnership/> . Information about the types of cooperation is published in the news at <https://astanait.edu.kz/news-and-events/> .

The financial statements of Astana IT University are published on the web resource of the university to inform the general public and are available at the link <https://astanait.edu.kz/wp-content/uploads/2022/04/553353db-b1ad-4710-aead-e6240ca101e6.pdf>

Analytical part

The university publishes information on various activities, such as: support and clarification of national development programs for the country and the system of higher and postgraduate education, international cooperation, the results of external and internal evaluation procedures, information for applicants, information about the structural divisions of the university, information for students, information about site services, information about dissertation councils, financial statements. The site contains information about the history of the university, its mission, strategy in accordance with which the university operates. The university has a page on social networks Facebook, Instagram, Youtube, etc. The website and the educational portal of the university make a single system of information support for the students and teaching staff.

However, the university management needs to take targeted actions to improve the content of objective information about the teaching staff in the framework of the EP.

Strengths / best practices within Eps being accredited:

not observed

EEC recommendations for EP 6B04102 "IT Entrepreneurship", 6B06202 "Smart Technologies", 7M04102 "Project Management", 7M06104 "Computational Sciences", 7M06103 "Applied Data Analytics":

1. Coordinators of EPs 6B04102 "IT Entrepreneurship", 6B06202 "Smart Technologies", 7M04102 "Project Management", 7M06104 "Computational Sciences", 7M06103 "Applied Data Analytics", until July 01, 2022, should ensure the publication of up-to-date unified information about the teaching staff (CVs) on the university website and keep it up to date in subsequent periods.

EEC conclusions:

According to the "Informing the Public" standard, 10 criteria are disclosed, of which: 9 - have a satisfactory position, and 1 position - requires improvement.

(VII) OVERVIEW OF STRENGTHS/BEST PRACTICES FOR EACH STANDARD

The standard "Educational Program Management"

is not observed.

The standard "Information management and reporting"

is not observed.

Standard "Development and approval of educational programs"

1. Ensuring the possibility of training students of EP 6B04102 "IT Entrepreneurship", 6B06202 "Smart Technologies", 7M04102 "Project Management", 7M06104 "Computing Sciences", 7M06103 "Applied Data Analytics" for professional certification, and ensuring, directly, the certification of students and undergraduates within academic disciplines and informal learning students.

2. Planning in the structure of EP 6B04102 "IT entrepreneurship", 6B06202 "Smart Technologies", 7M04102 "Project Management", 7M06104 "Computational Sciences", 7M06103 "Applied data analytics" of various activities that ensure the achievement of the planned learning outcomes by students.

The standard "Continuous monitoring and periodic evaluation of educational programs"

is not observed.

The standard "Student-centered learning, teaching and assessment of academic performance"

1. The use of various forms and methods of teaching and learning in the implementation of EP 6B04102 "IT entrepreneurship", 6B06202 "Smart Technologies", 7M04102 "Project Management", 7M06104 "Computational Sciences", 7M06103 "Applied data Analytics".

The standard "Learners" are not observed.

Standard "Teaching staff"

1. The presence at the university of active motivation for the professional and personal development of teachers, including encouragement for the integration of scientific activities and assistance in the commercialization of research results.

2. The university management is responsible for its employees by creating favorable social conditions for them, such as the work of the health center, the functioning of gyms, the work of the psychological counseling office and living in office apartments.

Standard "Educational resources and student support systems"

1. The educational equipment and software of the university used for the development of the EP is modern, high-tech and similar to those used in the relevant industries.

2. The possibility of training students and undergraduates of accredited educational institutions on the bases of partner enterprises that have modern innovative software and make it possible to use resources for the development of practical skills of students.

The standard of "Informing the public" is not observed.

(VIII) OVERVIEW RECOMMENDATIONS FOR IMPROVING QUALITY FOR EACH STANDARD

According to the standard "Management of the educational program":

EEC recommendations for EP 6B04102 "IT Entrepreneurship", 6B06202 "Smart Technologies", 7M04102 "Project Management", 7M06104 "Computer Science", 7M06103 "Applied Data Analytics":

1. The management of the university, by the beginning of the 2022-2023 academic year, approve and publish the Quality Assurance Policy in the form of a separate document that will reflect the relationship between research, teaching and learning.

2. EP guidelines 6B04102 "IT Entrepreneurship", 6B06202 "Smart Technologies", 7M04102 "Project Management", 7M06104 "Computational Sciences", 7M06103 "Applied Data Analytics", by the beginning of 2022-2023 account. of the year, annually, by the beginning of the academic year, ensure the involvement in the analysis of the 1st year of the implementation of EP development plans, making changes, if necessary, interested parties (external and internal stakeholders, including representatives from students of accredited EPs).

3. Guidelines for accredited EP 6B04102 "IT Entrepreneurship", 6B06202 "Smart Technologies", 7M04102 "Project Management", 7M06104 "Computer Science", 7M06103 "Applied Data Analytics", when developing and adjusting plans for the development of educational programs, include a section describing possible risks, indicating their names, possible consequences in case of failure to take and (or) timely response measures, as well as a description of risk management mechanisms and measures.

4. The management of the university on an ongoing basis to ensure control over the implementation of all points of the documented procedure DP-AITU-31 "Risk Management Policy of Astana IT University LLP".

According to the "Information Management and Reporting" standard:

EEC recommendations for EP 6B04102 "IT Entrepreneurship", 6B06202 "Smart Technologies", 7M04102 "Project Management", 7M06104 "Computer Science", 7M06103 "Applied Data Analytics":

1. The management of the university, on an ongoing basis, after conducting a survey of students and teaching staff, and analyzing its results, developing response plans, publish reports on the work done on web resources for interested parties.

According to the Standard "Development and approval of the educational program":

EEC recommendations for EP 6V04102 "IT Entrepreneurship", 6V06202 "Smart Technologies", 7M04102 "Project Management", 7M06104 "Computer Science", 7M06103 "Applied Data Analytics":

1. The management of the university, the management of the EP, by the beginning of the 2022-2023 academic year, conduct internal monitoring of the planning and reporting documentation of the university, for compliance with the information on electronic resources with the content of paper versions.

According to the Standard "Continuous monitoring and periodic evaluation of educational programs":

Higher degree commission recommendations for EP 6B04102 "IT Entrepreneurship", 6B06202 "Smart Technologies", 7M04102 "Project Management", 7M06104 "Computer Science", 7M06103 "Applied Data Analytics":

1. EP guidelines 6B04102 "IT Entrepreneurship", 6B06202 "Smart Technologies", 7M04102 "Project Management", 7M06104 "Computational Sciences", 7M06103 "Applied Data Analytics" to regularly provide publications in various media about any planned or undertaken actions related to the implementation EP. Based on the results of the revision and amendments to the MOP 6B04102 "IT Entrepreneurship", 6B06202 "Smart Technologies", 7M04102 "Project Management", 7M06104 "Computer Science", 7M06103 "Applied Data Analytics", ensure the publication of the results of the changes made on the university website.

According to the Student-Centered Learning, Teaching and Assessment Standard:

EEC recommendations for EP 6B04102 "IT Entrepreneurship", 6V06202 "Smart Technologies", 7M04102 "Project Management", 7M06104 "Computer Science", 7M06103 "Applied Data Analytics":

1. To the management of the university, by the beginning of the 2022-2023 academic year, in the documented procedure for the development of EP 6B04102 "IT Entrepreneurship", 6B06202 "Smart Technologies", 7M04102 "Project Management", 7M06104 "Computational Sciences", 7M06103 "Applied Data Analytics" (development of syllabuses, etc.), determine the requirements for entering information within the framework of the EP (courses) on learning opportunities for persons with disabilities.

According to the Standard "Students":

EEC recommendations for EP 6B04102 "IT Entrepreneurship", 6B06202 "Smart Technologies", 7M04102 "Project Management", 7M06104 "Computational Sciences", 7M06103 "Applied Data Analytics":

1. The top management of the University should create an Alumni Association by the end of 2022, namely, draw up a work plan for the Alumni Association, start its implementation, while informing university graduates about the activities of the Association through all possible informative sources.

According to the Standard "Teaching staff":

EEC recommendations for EP 6B04102 "IT Entrepreneurship", 6B06202 "Smart Technologies", 7M04102 "Project Management", 7M06104 "Computational Sciences", 7M06103 "Applied Data Analytics":

According to the Standard "Educational resources and student support systems":

EEC recommendations for EP 6B04102 "IT Entrepreneurship", 6B06202 "Smart Technologies", 7M04102 "Project Management", 7M06104 "Computational Sciences", 7M06103 "Applied Data Analytics":

1. The management of the University should consider the development (organization) of conditions for the education of disabled people with the inclusion of indicative indicators in the development strategy of the university by the end of 2022.

2. The governance of the University, heads of structural divisions, based on the data obtained from the survey of students (Appendix 4) conducted by the EEC, should conduct an additional extended anonymous survey of students of the university to identify existing problems, including within the framework of the EP, and, based on the results of the analysis of the survey results, a plan of corrective actions should be developed and begun implementing them starting in the 2022-2023 academic year.

According to the Standard "Public Information":

EEC recommendations for EP 6B04102 "IT Entrepreneurship", 6B06202 "Smart Technologies", 7M04102 "Project Management", 7M06104 "Computational Sciences", 7M06103 "Applied Data Analytics":

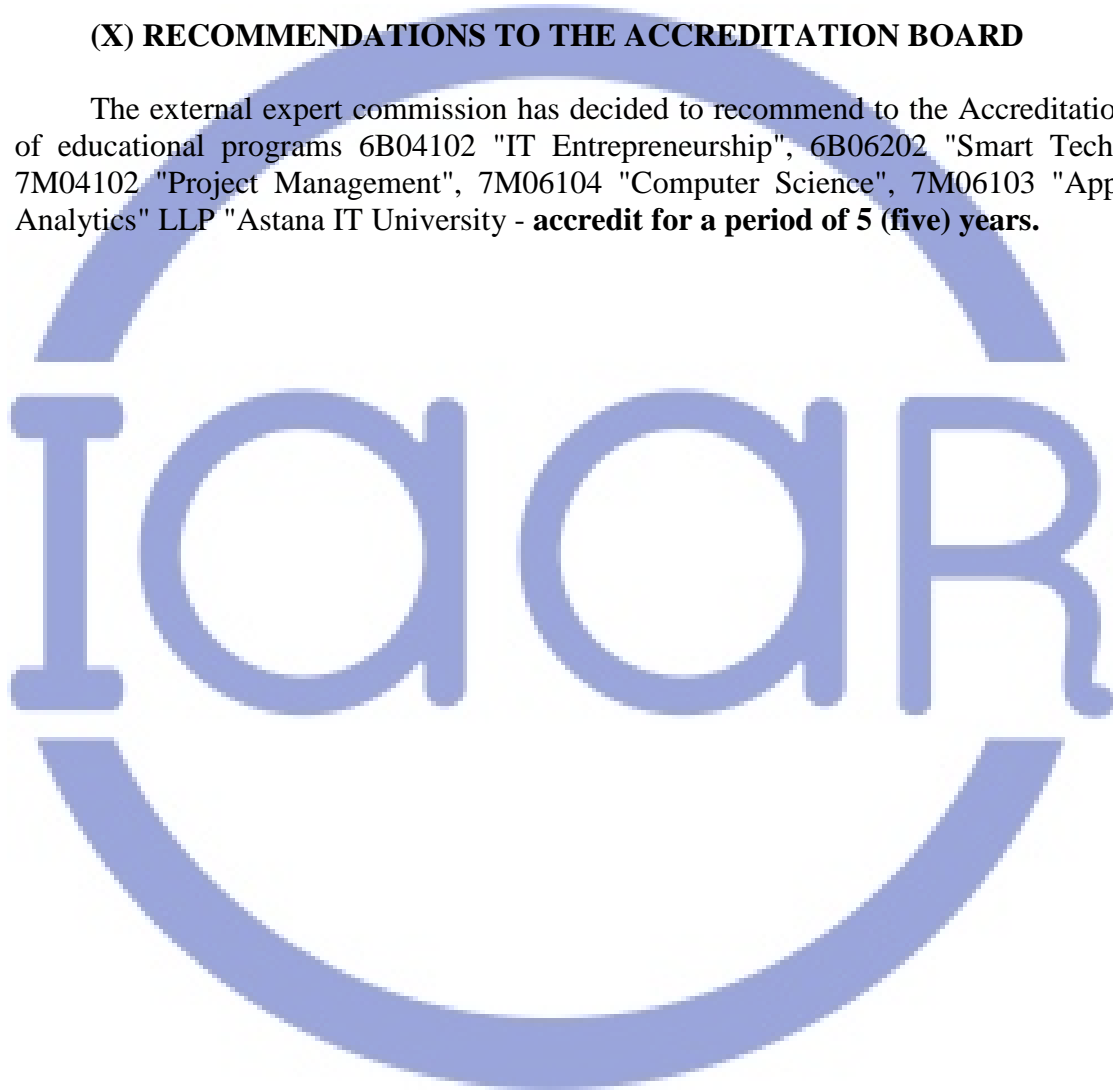
1. The managers of EP 6B04102 "IT Entrepreneurship", 6B06202 "Smart Technologies", 7M04102 "Project Management", 7M06104 "Computational Sciences", 7M06103 "Applied Data Analytics" should ensure the placement of relevant unified information about teaching staff (CV) on the website of the university until July 01, 2022 and keeping it up to date in subsequent periods.

(IX) OVERVIEW OF THE RECOMMENDATIONS FOR THE DEVELOPMENT OF EDUCATIONAL ORGANIZATION

- Harmonization of the content of the university EP with foreign educational organizations, purposeful work on the development of joint (network) educational programs with partner universities (including the implementation of the double diploma program).
- Expansion of the geography of universities for the development of international relations with foreign educational organizations involving all interested parties, including employers, in the process.

(X) RECOMMENDATIONS TO THE ACCREDITATION BOARD

The external expert commission has decided to recommend to the Accreditation Council of educational programs 6B04102 "IT Entrepreneurship", 6B06202 "Smart Technologies", 7M04102 "Project Management", 7M06104 "Computer Science", 7M06103 "Applied Data Analytics" LLP "Astana IT University - **accredit for a period of 5 (five) years.**



Appendix 1: Evaluation Table "SPECIALIZED PROFILE PARAMETERS" (EX-ANTE)
Findings of the EEC on the evaluation of educational programs 6B04102 "IT Entrepreneurship", 6B06202 "Smart Technologies", 7M04102 "Project Management", 7M06104 "Computer Science", 7M06103 "Applied Data Analytics".

# s/i	# s/i	Assessment criteria	The position of the educational institution			
			Str ong	Sati sfac tor y	Ma y imp rov e	Uns atis fact ory
Educational Program Management Standard						
1		A higher and/or postgraduate educational institution should have a published quality assurance policy that defines the connection between research, teaching, and learning		+		
2		A higher and (or) postgraduate educational institution should demonstrate the development of a culture of quality assurance, including in the context of EP		+		
3		A commitment to quality assurance should apply to all activities performed by contractors and partners (outsourcing), including joint/double-degree education and academic mobility		+		
4		EP management demonstrates transparency in the development plan for the EP, containing the timing of the implementation beginning based on an analysis of its functioning, the real positioning of the EP, and the focus of its activities to meet the needs of the state, employers, students, and other stakeholders		+		
5		EP management demonstrates the existence of mechanisms for the formation and regular review of the EP development plan and monitoring of its implementation, assessment of the achievement of learning objectives, compliance with the needs of students, employers, and society, and making decisions aimed at continuous improvement of EP		+		
6		EP management should engage representatives of stakeholders, including employers, students, and faculty in the formation of the EP development plan		+		
7		EP management should demonstrate the individuality and uniqueness of the development plan of the EP, its consistency with national priorities, and the development strategy of the higher and (or) postgraduate educational institution (English language instruction)		+		
8		A higher and (or) postgraduate educational institution should demonstrate a clear definition of those responsible for business processes within EP, an unambiguous distribution of personnel duties, delineation of functions of collegial bodies		+		
9		EP management should provide evidence of the transparency of the educational program management system		+		
10		EP management should demonstrate the existence of an internal quality assurance system for EP, including its design, management and monitoring, improvement, and decision-making based on facts		+		
11		EP management should implement risk management, including within the EP undergoing initial accreditation, and demonstrate a system of measures to reduce the degree of risk			+	
12		EP management should ensure the participation of representatives of employers, faculty, students, and other stakeholders in the collegial management bodies of the educational program, as well as their representativeness in decision-making on the management issues of EP		+		
13		HEI should demonstrate the management of innovation in the EP context, including the analysis and implementation of innovative proposals		+		

14		EP management should demonstrate evidence of willingness to be open and accessible to students, faculty, employers, and other stakeholders		+		
15		EP management should be trained in educational management programs		+		
Total by Standard			0	14	1	
Information Management and Reporting Standard						
16		HEI should demonstrate the existence of the system for collecting, analyzing, and managing information through the use of modern information and communication technologies and software, and the usage of a variety of methods to collect and analyze information in the context of EP		+		
17		EP management should demonstrate a mechanism for the systematic use of processed, relevant information to improve the internal quality assurance system		+		
18		EP management should demonstrate fact-based decision-making		+		
19		EP should provide for a system of regular reporting, demonstrating all levels of the structure, including evaluating the performance and efficiency of units and departments, scientific research		+		
20		HEI should establish the frequency, forms, and methods of evaluation of the EP management, the activities of collegial bodies and structural units, senior management, and implementation of research projects		+		
21		HEI should define procedures and ensure the protection of information, including determining those responsible for the reliability and timeliness of the information analysis and data provision		+		
22		An important factor is a mechanism to involve students, employees, and faculty in the process of collecting and analyzing information, as well as making decisions based on them		+		
23		EP management should demonstrate a mechanism for communication with students, employees, and other stakeholders, as well as mechanisms for conflict resolution		+		
24		HEI should demonstrate the existence of mechanisms to measure the degree of satisfaction of the needs of the faculty, staff, and students in EP		+		
25	10.	HEI should provide an evaluation of the performance and efficiency of activities including in the context of EP		+		
		<i>The information to be collected and analyzed in the EP context should take into account:</i>				
26	11.	key performance indicators		+		
27	12.	dynamics of the student contingent in terms of forms and types		+		
28	13.	levels of academic achievement, student achievement, and expulsion		+		
29	14.	student satisfaction with the EP implementation and the training quality at the university		+		
30	15.	accessibility of educational resources and support systems for students		+		
31	16.	HEI should confirm the implementation of procedures for processing personal data of students, employees, and faculty on the basis of their documentary consent		+		
Total by Standard			0	16	0	
Standard "Development and approval of an educational programme"						
32		HEI must define and document the procedures for developing the EP and its approval at the institutional level		+		
33		The EP management must ensure that the content of the EP is consistent with the stated objectives, including the intended learning outcomes		+		
34		The EP management must demonstrate that mechanisms are in place to review the content and structure of the EP taking into account changes in the labor market, employers' requirements and the social demands of society		+		
35		The EP management must ensure that developed models of the graduate have been included, describing learning outcomes and personal qualities		+		

36		The management of the EP must ensure external expertise on the content of the EP and its intended outcomes		+		
37		The qualification awarded upon completion of the EP must be clearly defined and meet the particular level of the NSK and QF-EHEA		+		
38		The EP management must determine the impact of the disciplines and professional practice works on the formation of learning outcomes		+		
39		Preparation of learners for professional certification is an important factor	+			
40		The EP management must provide evidence of the involvement of learners, teaching staff and other stakeholders in the development of the EP and its quality assurance		+		
41		The EP management must ensure that the content of the disciplines and the intended learning outcomes are appropriate to the level of education (bachelor, master, doctoral)		+		
42		The structure of the curriculum should include a variety of activities to ensure that students achieve the intended learning outcomes	+			
43		An important factor is the conformity of the content of EP and learning outcomes of EP implemented by higher and/or postgraduate educational institutions in the EHEA		+		
Total by standard			2	10	0	
Standard "Continuous monitoring and periodic evaluation of educational programmes"						
44		HEI must define mechanisms for monitoring and periodic evaluation of the EP to ensure that it achieves its objectives and meets the needs of learners, society and show that the mechanisms are aimed at continuous improvement of the EP	+			
		<i>The monitoring and periodic evaluation of the EP must include:</i>				
45		curriculum content in the light of the latest scientific developments in specific disciplines to ensure relevance to the discipline being taught		+		
46		changes in the needs of society and the professional environment		+		
47		the workload, performance, and graduation of students		+		
48		the effectiveness of student assessment procedures		+		
49		the expectations, needs, and satisfaction of the learners with the EP		+		
50		the educational environment and support services, and their conformity to the objectives of the EP		+		
51		the EP management must demonstrate a systematic approach in monitoring and periodically assessing the quality of the EP		+		
52		HEI, the management of the EP must define a mechanism for informing all stakeholders of any planned or taken actions concerning the EP			+	
53		All changes made to the EP must be published			+	
Total by standard			0	9	1	
Standard "Student-centered learning, teaching and assessment"						
54		The EP management must ensure that different groups of learners and their needs are respected and taken into account, providing them with flexible learning pathways		+		
55		The EP management must provide for the use of various forms and methods of teaching and learning	+			
56		The availability of in-house research in the field of teaching methodology of the EP disciplines is considered to be an important factor		+		
57		The EP management must demonstrate that there are feedback mechanisms in place for the use of different teaching methodologies and for the assessment of learning outcomes		+		
58		The EP management must demonstrate that mechanisms are in place to support learner autonomy, while being guided and assisted by the teacher		+		

59		The EP management must demonstrate that there is a procedure in place for responding to learners' complaints		+		
60		HEI must ensure a consistent, transparent and objective mechanism for assessing learning outcomes for each EP, including appeals		+		
61		HEI must ensure that the assessment procedures for the learning outcomes of the EP are in line with the planned outcomes and objectives of the programme, and that the assessment criteria and methods are published in advance		+		
62		HEI must define mechanisms to ensure that each graduate's learning outcomes are achieved and that they are complete		+		
63		Assessors and evaluators must be familiar with modern methods of assessing learning outcomes and receive regular professional training in this area		+		
Total by standard			1	9	0	
Standard «Learners»						
64		HEI must demonstrate that it has a policy on student enrolment by EP and that its procedures governing the lifecycle of students (from entry to completion) are transparent and made public		+		
		<i>The EP management must determine how the student population is formed on the basis of:</i>				
65		minimum requirements for applicants		+		
66		maximum group size for seminars, practical, laboratory and studio sessions		+		
67		the forecast of the number of state grants		+		
68		the analysis of available logistical, informational and human resources		+		
69		the analysis of potential social conditions for students, including the provision of places in dormitories		+		
70		The management of the EP should demonstrate willingness to carry out special adaptation and support programmes for new and international students		+		
71		HEI must demonstrate compliance with the Lisbon Recognition Convention, a mechanism for recognising the results of academic mobility of learners, as well as the results of additional, formal and non-formal learning		+		
72		HEI must cooperate with other educational organisations and the national centres of the "European Network of National Academic Recognition and Mobility Information Centres/National Academic Recognition Information Centres" ENIC/NARIC in order to ensure comparable recognition of qualifications		+		
73		HEI must provide opportunities for external and internal mobility of EP learners and be ready to assist them in obtaining external study grants		+		
74		The EP management should demonstrate a willingness to provide learners with internships, to facilitate the employment of graduates and to liaise with them		+		
75		HEI must provide for the possibility of providing graduates of an educational qualification, including the learning outcomes achieved, as well as the context, content and status of the education received and the evidence of its completion		+		
Standard «Teaching staff»						
76		HEI must have an objective and transparent personnel audit, as in the context of the EP, including recruitment, professional growth and development of personnel, ensuring the professional competence of all personnel		+		
77		HEI must demonstrate the compliance of the potential of the teaching staff with the specifics of the EP		+		
78		The management of the EP must demonstrate awareness of responsibility for its employees and provide favorable working conditions for them	+			
79		The management of the EP should demonstrate the change in the role of the teacher in connection with the transition to student-centered learning		+		

80		HEI must determine the contribution of the teaching staff of the EP to the implementation of the development strategy of HEI, and other strategic documents	+			
81		HEI should provide opportunities for career growth and professional development of the teaching staff of the EP		+		
82		The management of the EP must demonstrate readiness to involve practitioners in the relevant sectors of the economy in teaching		+		
83		The PO must demonstrate the motivation for the professional and personal development of EP teachers, including encouragement for the integration of scientific activities and education, the use of innovative teaching methods		+		
84		An important factor is the readiness to develop academic mobility within the framework of the EP, to attract the best foreign and domestic teachers		+		
Total by standard			2	7	0	
Standard "Educational resources and student support systems"						
85	1.	HEI must guarantee a sufficient number of educational resources and student support services to ensure the achievement of the goal of the EP		+		
86	2.	HEI must demonstrate the sufficiency of material and technical resources and infrastructure, taking into account the needs of various groups of students in the context of the EP (adults, working, foreign students, as well as students with physical disabilities)		+		
87	3.	The management of the EP must demonstrate the existence of procedures for supporting various groups of students, including information and counseling		+		
		<i>The EP management must demonstrate the compliance of information resources with the specifics of the EP, including:</i>				
88	4.	technological support for students and teaching staff (for example, online learning, modeling, databases, data analysis programs)	+			
89	5.	library resources, including a fund of educational, methodical and scientific literature on general education, basic and major disciplines on paper and electronic media, periodicals, access to scientific databases		+		
90	6.	examination of the results of research, graduation works, dissertations for plagiarism		+		
91	7.	access to educational Internet resources		+		
92	8.	functioning of WI-FI on the territory of the educational organization		+		
93	9.	HEI demonstrates the planning of providing the EP with educational equipment and software similar to those used in the relevant sectors of the economy		+		
Total by standard			1	8	0	
Standard «Informing the Public»						
		<i>HEI must publish reliable, objective, up-to-date information about the educational program and its specifics, which should include:</i>				
94	1.	expected learning outcomes of the implemented educational program		+		
95	2.	qualification and (or) qualifications that will be awarded upon completion of the educational program		+		
96	3.	approaches to teaching, learning, as well as a system (procedures, methods and forms) of assessment		+		
97	4.	information about passing scores and learning opportunities provided to students		+		
98	5.	information about employment opportunities for graduates		+		
99	6.	The management of the EP should provide for a variety of ways to spread information, including the media, information networks to inform the public and interested parties		+		
100	7.	Informing the public should include support and explanation of the national development programs of the country and the system of higher and postgraduate education		+		

101	8.	HEI must demonstrate the reflection of information on the web resource that characterizes it as a whole and in the context of educational programs		+		
102	9.	An important factor is the availability of adequate and objective information about the teaching staff of the EP			+	
103	10.	An important factor is informing the public about cooperation and interaction with partners within the framework of the EP		+		
Total by standard			0	9	1	
Total			6	94	3	

