

Vice-rector for AQ
Baibolova L.K.
"20" 06/2022

Report on the work of the Center for Innovative Educational Technologies for 2021-2022 academic year

The Center for Innovative Educational Technologies (CIET) was established in accordance with the project "Modernization of higher education in Central Asia through new technologies (HiEdTec)". Order No. R-04-368 dated July 04, 2019 to amend the structure and staffing

CIET JSC "ATU" carries out its activities in accordance with:

1. MS ISO 9001:2015 "Quality management system. Requirements";
2. MS ISO 9000:2015 "Quality management system. Basic provisions and vocabulary";
3. MS ISO 37001:2016 Anti-corruption management system;
4. Law of the Republic of Kazakhstan "On Education" No. 319-III dated July 27, 2007 (with amendments and additions as of 01/01/2022);
5. Labor Code of the Republic of Kazakhstan dated November 23, 2015 No. 414-V (with amendments and additions as of December 31, 2021);
6. Law of the Republic of Kazakhstan dated November 18, 2015 No. 410-V "On Combating Corruption" (as amended and supplemented as of January 1, 2021);
7. Decree of the President of the Republic of Kazakhstan dated December 26, 2014 No. 986 "On the Anti-Corruption Strategy of the Republic of Kazakhstan for 2015-2025";
8. Normative and legal acts of the Republic of Kazakhstan;
9. Decree of the Government of the Republic of Kazakhstan dated December 12, 2017 No. 827 On approval of the State Program "Digital Kazakhstan" (With changes from 01.10.2020);
10. Documented procedure "Documented information"
11. "Rules for Documentation and Documentation Management"
12. Documented procedure "Risk Management"
13. Charter of JSC "Almaty Technological University";
14. Internal labor regulations
15. Orders and orders of the rector;
16. Anti-Corruption Policy of JSC "ATU" dated January 26, 2022;
17. Anti-corruption standard of JSC "
18. DP SMPK "Assessment of corruption risks"

The staff of the Center for Innovative Educational Technologies is 5 people. (2 vacancies).
Director of CIET - Doctor of Technical Sciences, Professor Medvedkov E.B.

Advanced training of CIET employees:

1. 20.09-06.10.2021 CIET employees underwent advanced training organized by MU for the development of "Compass 3D" for 72 hours.
 - Application of VR/AR technologies in solving professional problems.
 - Use of 3D modeling of technological equipment in professional activities.
 2. 01/27/2022 Training of the project office team to implement the project in accordance with the requirements of the international standard "Anti-Corruption Management Systems" with a volume of 72 hours. ISO agency. Medvedkov E.B.
 3. 31.01.-11.02.2022 Intensive training for professors "Learn to create video lectures in 30 minutes" for 72 hours. Belgian education council. Medvedkov E.B.
- Certificates of CIET employees are posted

<https://drive.google.com/drive/folders/1f6vFZSxWH2bi-3NsbPFLtYN-fdwbk7fe?usp=sharing>

The CIET includes:

1. Department of e-learning (DE) - head of the DE department Kalabina A.A., leading specialist of the DE Kuzin A.A., specialist of the DETalasbayeva G.S.
2. Department for the development of digital educational resources - head of department Abdykhay A.T., programmer designer and programmer animator - vacancy.

Goals of CIET:

- adaptation of the educational system to the digital generation through the active and effective use of innovative educational technologies based on ICT;
- provision of highly qualified educational services for additional educational programs, dissemination of innovative pedagogical experience based on the use of modern pedagogical and ICT in the educational process;
- ensuring the position of JSC "ATU" in the national, European and world educational space.

The main tasks of the CIET:

- implementation of innovative educational technologies in JSC "ATU";
- creation and periodic updating of the database, CIET catalog;
- maintenance of the platform of innovative educational technologies;
- authorization of access to digital educational resources, massive open online courses, web courses;
- provision of information and methodological support;
- organization of courses and seminars to support the innovative direction of the professional and personal development of the teaching staff of ATU JSC;
- systematization of innovative pedagogical experience, development of new approaches to the implementation of the tasks of pedagogical theory and practice, taking into account the trends in the development of the educational space;
- translation of innovative experience into the practice of the region: organization of courses, seminars, trainings, round tables, etc. according to the needs of subjects of the educational services market.
- to promote the equipment of lecture halls, and subsequently, laboratories, interactive presentation systems and laptops;
- present innovative educational technologies used in ATU JSC to expert groups, official guests at the national and international levels, etc.;
- conduct research revealing the real benefits of introducing innovative educational technologies;
- participate in the organization and holding of international, national seminars and conferences on the digital transformation of education;

The work of the CIET in the 2021-2022 academic year was carried out in accordance with the "Action Plan for the development and maintenance of the QMS of ATU JSC for 2022", approved by No. QAM-05/73 dated 17.01.2022 and the "Plan of the CIET work for 2021-2022 academic year", approved No.-CIET-02/3601 dated 06/21/2021

The most significant achievements in 2021-2022 year:

- participation in the international project under the Erasmus + program "Modernization of higher education in Central Asia through new technologies (HiEdTec)";
- On November 26, 2021, a Memorandum was signed in order to develop international cooperation in the field of higher education of ATU JSC and the Belgian Council for Education;
- On May 17-20, Kyrgyzstan hosted the 7th meeting of the Erasmus + project Modernization of higher education in Central Asia using new technologies (HiEdTec);
- successfully completed the project Academic network of universities-members of EMM-PMT;
- On May 27, 2022, to stimulate teachers, a competition was held for the Best ATU e-course - 2022. The winners of the competition were awarded diplomas and cash prizes.

1. Organizational and methodological work
1.1 Update and development of QMS

During the reporting period, CIET developed and approved two provisions on the procedure in Kazakh and Russian, seven job descriptions, and other documented procedures (13 in total, including provisions on the procedure - 5, position of the structural unit - 1, job descriptions - 7) do not need to be adjusted (Table 1).

Table 1 - Documented CIET procedures

№	An identification number	Title of the document	Approval date	Date of change
1	2	3	4	5
Provisions on the procedure for action (PPA)				
1	ATU-IBBTO-ITE-7.5.1-2021-01	Uzdik elektrody kurstyn turaly erezhe	12/28/2021	Not required
2	ATU-CIET-RPP-7.5.1-2021-01	Regulations on the competition for the best electronic course	12/28/2021	Not required
3	ATU-IBBTO-ITE-7.5.1-2021-04	Uzdik tsiflyk bilim take resource contests turaly erezhe	12/28/2021	Not required
4	ATU-CIET-RPP-7.5.1-2021-04	Regulations on the competition for the best digital educational resource	12/28/2021	Not required
Job descriptions (JD) of employees				
5	ATU-HRD-JD-5.3-2022-318	Job description of the director of the center of innovative educational technologies	02/23/2022	Not required
6	ATU-KBB-LN-5.3-2022-318	Innovativelyk bilim I take technology	02/23/2022	Not required
7	ATU-HRD-JD-5.3-2022-319	Job description of the head of the department for the development of digital educational resources	02/23/2022	Not required
8	ATU-KBB-LN-5.3-2022-319	Tsifryk bilim I take resourcestaryn azirleu belimi bastygynyn lauazymdyk nuskaulygy	02/23/2022	Not required
9	ATU-HRD-JD-5.3-2022-320	Job description of the programmer of the animator of the department for the development of digital educational resources	02/23/2022	Not required
10	ATU-KBB-LN-5.3-2022-320	Figures bilim take resources	02/23/2022	Not required

11	ATU-HRD-JD-5.3-2022-321	Job description of a programmer designer of the department for the development of digital educational resources	02/23/2022	Not required
12	ATU-KBB-LN-5.3-2022-321	Figures bilim I take resourcetaryn azirleu bolimi programmer-designer lauazymdyk nuskaulygy	02/23/2022	Not required
13	ATU-HRD-JD-5.3-2022-288	Job description of the head of the e-learning department	02/23/2022	Not required
14	ATU-KBB-LN-5.3-2022-288	Electrons okytu belimi bastygynyn lauazimdyk nyskaulygy	02/23/2022	Not required
15	ATU-HRD-JD-5.3-2022-289	Job description of a leading specialist department of e-learning	02/23/2022	Not required
16	ATU-KBB-LN-5.3-2022-289	Electrodes okytu belimi zhetekshi mamanyryn lauazymdyk nyskaulygy	02/23/2022	Not required
17	ATU-HRD-JD-5.3-2022-290	Job description of a specialist in the e-learning department	02/23/2022	Not required
18	ATU-KBB-LN-5.3-2022-290	Electrodes okytu belimi mamanyryn lauazymdyk nyskaulygy	02/23/2022	Not required

Conclusions and suggestions for improving activities: The documented information of CIET complies with the requirements of MS ISO 9000:2015, MS ISO 9001:2015, MS ISO 37001:2016 updating is not required.

2. Consumer Orientation

Explanatory work and dissemination of best practices are carried out in two directions:

- 1) on the scale of the Republic and abroad;
- 2) inside the university.

In the first case, the EMM-PMT project is used to create an academic network of universities of this structure (a total of 20 Kazakhstani universities and ten foreign ones), headed by the director of the CIET E.B. Medvedkov. During the implementation of the project, teachers of partner universities were trained in digital educational and distance technologies.

Training seminars on innovative educational technologies for the teaching staff of the university departments were held on the basis of the AIT of the university. All information about the seminars held is available on the website of the Center for Innovative Educational Technologies <https://ciet.atu.kz/>.

The platform of the academic network HiEdTec and EMM-PMT are being supported <http://moodle.atu.kz>, which contains educational and methodological materials on DLT and a virtual library of digital educational resources.

4627 DERs and five web courses of ATU teachers, 4 courses of ENU and 2 INEU, as well as 20 courses of EMM-PMT partner universities and 2 courses for AIT "Organization of blended learning and implementation of distance learning technologies" and "Online - teacher "methods and tools for effective distance learning" (developers M.S. Serikkyzy, Medvedkov E.B., Togabaeva G.Sh.).

Web courses of JSC "Almaty Technological University":

- 1.1. Quality audit. Course author: Serikkyzy M.S.
- 1.2. Oner tarihy. Course author: Togabaeva G.Sh
- 1.3. Organizational behavior. Course author: Urkumbaeva A.R.
- 1.4. Machines and equipment for mechanical and mass-exchange processes in the food industry. Course author: Tlevlessova D
- 1.5. Processes and devices of food production. Author of the course: Medvedkov E.B.

Director of CIET, head of the EMM-PMT project Medvedkov E.B. at the meeting of EMM-PMT on December 24, 2021, he made a report on the project "Academic network of member universities of EMM-PMT JSC "Almaty Technological University", on which a number of decisions and recommendations were made on the further development and maintenance of the network and platform moodle.atu.kz in working order.

Director of CIET Medvedkov E.B. On May 16-20, 2022, he took part in the 7th working meeting on the HiEdTec project in partner universities of Kyrgyzstan, at which he presented the virtual library of Kazakhstan and the web courses of ATU JSC.

On June 10, 2022, EMM-PMT together with CIET held a methodological seminar for the teaching staff of ATU JSC, at which Medvedkov E.B. presented a report on the topic "Education of the Future" based on the materials of the project coordinator Angel Smrikarov from the University of Ruse (Bulgaria). The seminar also addressed the following issues:

1. 2021-2022 оқу жылының 1 академиялық кезеңіндегі сабақтардың сапасын бағалау парақтарының талдау нәтижелері бойынша оқу сабақтарының ұйымдастыру және өткізу үрлері бойынша ұйымдастыру // Methodological recommendations on the forms of organizing and conducting training sessions based on the results of the analysis of the sheets for assessing the quality of classes for the 1 academic period 2021-2022 academic year.

Beisenbekova G.T. Head of Methodological Department, EMM-PMT, Candidate of Pedagogical Sciences, Associate Professor

2. Sandyk bilim take ressourcestaryn ZhOO-da koldanudyn tiimdi zholdary// Effective ways to use digital educational resources at the university

Matibaeva A.I., Tagam onimderinin tekhnologisy of the departmentsynyn kauymdastyrylgan professors, technicians gylymdarynyn candidates

3. Bilim take the process of interactive okytu adisterin koldanu// The use of interactive teaching methods in the educational process

Kirbetova Zh.S.

4. Zappay online ashhyk kursinda interactive әдістерді қолдану мүмкіндіктері / / Possibilities of using interactive methods in a massive online open course

Aldibekova A.N., Zhogary mathematics and physics department, son lecturers, technique and technology

Teacher training is carried out trainers trained under the HiEdTec program with the organizational support of CIET and AIT using web courses on an online platform.

On the basis of the Institute for Advanced Studies by trainers trained under the program HiEdTech, courses were held:

1. "Organization of blended learning and implementation of distance learning technologies" in the amount of 72 hours. 11/26/2021-12/15/2021. Serikkyzy M., Togabaeva G.

2. "Online teacher" Practices and tools for organizing effective distance learning" in the amount of 72 hours. 07.02.2022-19.02.2022. Serikkyzy M., Medvedkov E.B., Togabaeva G.Sh.

3. "Online teacher" Practices and tools for organizing effective distance learning" in the amount of 72 hours. 05/30/2022-06/14/2022. Serikkyzy M., Medvedkov E.B., Togabaeva G.Sh.

In total, for the 2021-2022 academic year, 157 teachers / 36 from other universities were trained.

To make adjustments to the course programs, CIET, with the support of EMM-PMT, organized an online survey of teachers from EMM-PMT partner universities about the competencies of online teachers. The questionnaire and survey results are posted on the CIET website https://atu.edu.kz/ciet/?page_id=169

A total of 593 teachers took part in the survey. The study made it possible to identify competencies in which teachers have insufficient skills. This will make it possible to make adjustments to the programs of advanced training courses for teaching staff both at ATU JSC and at other universities.

Within the framework of the Erasmus+ project “Modernization of Higher Education in Central Asia through New Technologies” (HiEdTec), during the first and second semesters of the 2021-2022 academic year, CIET conducted an anonymous online survey of students of ATU JSC about the use of web courses and DER during the remote pandemic education.

395 students took part in the survey, which is only 6.1% of the total contingent. Of these, students of the 2nd and 1st courses showed the greatest activity - 68.0%.

Summing up the results of the survey, it can be noted that students regularly use web courses, find them useful, and also note that classes using interactive presentations (DERs) are more informative and interesting. Students prefer the online form of lectures. Named the best and worst courses and teachers.

Most teachers use interactive presentations in the classroom, many use web courses. However, not all teachers are involved in this process and not all of their developments meet the needs and expectations of students. Therefore, the management of the university and the services involved in the educational process should develop a system of measures aimed at improving the effectiveness of education through the use of innovative technologies. First of all, it is training and motivation of teaching staff.

In the next academic year, it is planned to continue training teachers of JSC "ATU" and other universities and colleges.

The CIET staff developed educational and methodological materials, incl. training videos that are posted after the update on the university website in the CIET section and sent in electronic form to the heads of departments for distribution among teachers.

Everyone has online access to the Guide, posted on the website of the virtual library of the project HiEdTec of the Ruse University in Bulgaria, which is the coordinator of the project <https://hiedtec.ecs.uni-ruse.bg/index.php?cmd=cmsPage&pid=38>. Entrance is also possible through the website of JSC "ATU".

Training using the CIET chat for heads of departments in WhatsApp is used. Educational materials in the form of screenshots or short videos are sent to this chat, links to useful online services are also posted.

Work on the motivation of teachers. To motivate teachers, individual and indicative plans provide for mandatory planning of work on the publication and implementation of the results of the development of innovative teaching methods in the educational process and advanced training in this direction. The points obtained as a result of the implementation of the plans are used in calculating the salary supplement for the year.

Competitions are held for the best electronic course and digital educational resource.

On May 27, 2022, to stimulate teachers, a competition was held for the Best ATU e-course - 2022. The courses are hosted on the dot.atu.kz platform. The winners were:

Diploma of the 1st degree - Aldibekova Aitkul Nurbakytovna, Department of Higher Mathematics and Physics.

Diploma of the II degree - Matibaeva Ainur Ibraevna, Department of Food Technology.

Diploma of the III degree - Grigorieva Olga Vasilievna, department "Technology and design of products and goods".

Diploma of the participant of the final of the competition for the best support of the course - Ainur Zheldybayeva, Department of Food Safety and Quality

Diploma of the participant of the final of the competition for the best methodological support of the course - Zhanar Kirbetova, Department of Economics and Management.

All participants in the final of the competition were awarded certificates and a cash reward of 25 thousand tenge from the University Board of Trustees.

2.1 Analysis of the web course development plan, DER for the 2021-2022 academic year

The e-learning department of CIET is filling the educational platform open.atu.kz and dot.atu.kz. The Department for the Development of Digital Educational Resources places the DER in the catalog on the platform moodle.atu.kz

On the platform <http://open.atu.kz> JSC "Almaty Technological University" department of e-learning hosts massive open online courses. In total, at the end of the academic year, it contains **175** MOOCs. AT Appendix 1 there is a list with links to MOOC teaching staff. Online courses on the platform contain video-audio materials, interactive and test tasks, surveys, forums (chat), virtual laboratory work. Through IQ&Q Massive Open Online Course "Food Safety and Quality" http://open.atu.kz/courses/course-v1:ATU+BKiPP07+2019_C2/about open for registration, course author Azimova S., Department of BiKPP.

The number of uploaded web courses to the dot.atu.kz platform in the 2021-2022 academic year is 374 or 80% of the plan. In the context of departments and faculties, it is distributed as follows (Table 1). The dynamics of filling with web courses is given, beginning from the 2020-2021 academic year (launch of the dot.atu.kz platform in the 2020-2021 academic year).

Table 1 - Number of ECs on the platforms of JSC "ATU"

No.	Faculty/Department	Number of courses		
		2020-2021	2021-2022	Total
Faculty of Engineering and Information Technology				
1	Machinery and apparatus for production processes	2	0	2
2	Information Technology	13	86	99
3	Higher mathematics and physics	4	11	15
4	Engineering Graphics and Applied Mechanics (Automation and Robotics)	0	15	15
5	Vocational Training and Social Sciences (Social and Humanitarian Disciplines)	25	9	34
Total for FIIT		44	121	165
Faculty of Design, textile and clothing technologies				
6	Technology and design of products and goods	15	26	41
7	Design	24	53	77
8	Technology of textile production	6	5	11
9	State and foreign languages	31	2	33
Total for FDTTiO		76	86	162
Faculty of Economics and Business				
10	Tourism and service	16	5	21
11	Economics and management	20	38	58
12	Accounting and finance	18	6	24
Total for FEiB		54	49	103
Faculty of Food Technology				
13	Food biotechnology	11	24	35
14	Food technology	10	43	53

fifteen	Technology of bakery products and processing industries	11	11	22
16	Chemistry, chemical technology and ecology	13	19	32
17	Food safety and quality	14	21	35
Total for FPT		59	118	177
Total for ATU		233	374	607

In the catalog of digital educational technologies on the platform <http://moodle.atu.kz>, the DER development department has placed **4627** digital educational resources, this year - **2124** (06/20/2022). Digital educational resources on the platform contain interactive presentations with a survey, video-audio materials, interactive and test tasks, surveys, virtual labs, animations, dialogue simulators.

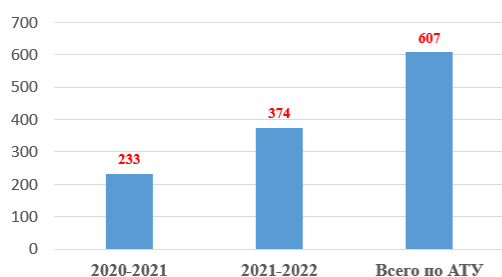
In the context of departments and faculties, the number of loaded DERs is distributed as follows (Table 2).

Table 2 - Number of DERs in the catalog on the moodle.atu.kz platform

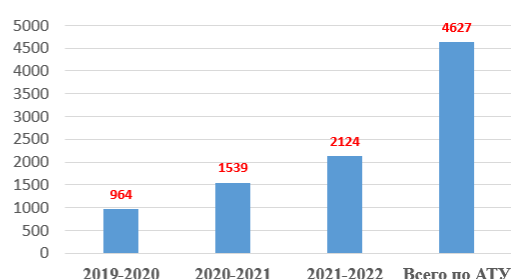
No.	department	Number of digital educational resources			
		2019-2020	2020-2021	2021-2022	Total
Faculty of Engineering and Information Technology					
1	Machinery and apparatus for production processes	53	46	64	163
2	Information Technology	4	76	96	176
3	Higher mathematics and physics	12	20	186	218
4	Engineering Graphics and Applied Mechanics (Automation and Robotics)	20	13	10	43
5	Vocational Training and Social Sciences (Social and Humanitarian Disciplines)	54	113	221	388
Total for FIIT		143	268	577	988
Faculty of Design, textile and clothing technologies					
6	Technology and design of products and goods	146	287	88	521
7	Design	67	200	520	787
8	Technology of textile production	34	36	62	132
9	State and foreign languages	16	77	86	179
Total for FDTiO		263	600	756	1619
Faculty of Economics and Business					
10	Tourism and service	65	31	0	96
11	Economics and management	91	101	215	407
12	Accounting and finance	184	26	11	221
Total for FEiB		340	158	226	724
Faculty of Food Technology					
13	food biotechnology	92	234	93	419
14	food technology	40	82	229	351
15	Technology of bakery products and processing industries	22	31	87	140

16	Chemistry, chemical technology and ecology	47	79	88	214
17	Food safety and quality	17	87	68	172
Total for FPT		218	513	565	1296
Total for ATU		964	1539	2124	4627

Below is a schedule for placing EC and DER for the last three academic years on the educational platforms of ATU JSC.



Электронные курсы dot.atu.kz



Цифровые образовательные ресурсы moodle.atu.kz

Conclusions and suggestions for improving activities:

At the beginning of the academic year, the CIET staff carried out preparatory work, which includes: the site posted documentation, regulations, instructions for developing web courses, MOOCs, DER, as well as the time for consultations for the 2021-2022 academic year.

CIET conducts weekly monitoring of the placement of web courses, MOOCs, DER on ATU platforms. Based on the results of monitoring electronic courses on the dot.atu.kz platform on May 27, 2022, the following comments were identified:

- low registration of students for e-courses (average student activity is 30%);
- in 60% of ECs there is no feedback from students;
- there are no assessments for assignments (tests, SIW, practical or laboratory work);
- low views of text and video materials.

According to the FEIB: Department of T&SE: for the 2021-2022 academic year, not a single digital educational resource was developed, completed electronic courses on the dot.atu.kz platform only 20% (according to the certificates issued by the CIET), the department of BUiF - completely ready-made electronic courses on the dot platform .atu.kz only 40% (according to the issued CIET certificates).

According to FIiIT: Department of MAPP - there are no completed electronic courses on the dot.atu.kz platform.

On June 7, 2022, the administration made the following recommendations:

1. When developing electronic courses, the teaching staff needs to add questionnaires-surveys "Satisfaction of students of the EC and the CER".
2. Teaching staff to ensure the participation of students in the use of courses, the implementation of control tasks and discussions of individual issues.
3. The departments, by July 1, 2022, should be included in the work plan for 2022-2023. and submit to the CIET plans for the development of MOOCs on the platforms recommended by the Ministry of Education and Science of the Republic of Kazakhstan, electronic courses, digital educational resources, the acquisition or development of virtual laboratories, simulators, simulators, training programs, etc. for the 2022-2023 academic year.
4. Departments of TiSO, BUiF, MAPP, by 07/01/2022, submit to the CIET a justification for not fulfilling the plan for the development of MOOCs, DER.

An analysis of the acts of introducing innovative teaching methods showed that in JSC "ATU" over the last 3 academic years, the main attention, in addition to the creation of MOOCs and DERs, has been paid to such types as technologies for collective mutual learning and cooperation using receptive information technologies, the method of cooperation, POPS - the formula, text composition algorithm: C - C / C - PR - T., discussion, on-line tests, construction of sync wine; question attack; linguistic (business) game; "thick and thin question"; cluster; Bloom Chamomile. (foreign language), Blended learning technology, Flip method, business training game, Cluster teaching methodology, project method, problem situations, visualization lecture, etc.

Work is underway to train teachers in the use of feedback systems during lectures and after hours using smartphones and cloud technologies, gamification elements: Kahoot, Google forms and polls, Google drive, Hangout, WhatsApp, Skype, TeamViewer, etc.

3. Technological upgrade and digitalization

In the project's boundaries, "Modernization of higher education in Central Asia through new technologies (HiEdTec)" lecture rooms are being modernized. To create the DER, the university updated the license for the ISpring program, which is installed on computers at the CIET and is available for teachers to work with. The free version of this program is widely used by teachers.

Material and technical base of CIET:

- Studio for video recording and broadcasting online classes (room 204-2B)
- Active learning classroom (room 323-2B, 508-2B, 702-1, 614-1)
- Educational platform for massive open online courses <http://open.atu.kz>
- Virtual Library of Digital Educational Resources <http://moodle.atu.kz>

Access to recordings of online classes of teachers on certain topics of the courses is provided by posting them on YouTube channels. For this, the CIET staff created channels for each department, for the filling of which the head is responsible.

For filming video lectures and broadcasting online classes, a. 204 educational building 2B. Recording is carried out at the time declared by the teacher in the presence of materials in the form of a presentation.

Educational software is purchased in various disciplines, as well as for the development of DER elements: ISpringSuite, ERA computer program (for ecologists), specialized CAD computer program GRAFIS 11, MathCAD, MatLAB, SCAD, Auto CAD, thermoCALC, Camtasia studio, etc.

As part of the project "Modernization of higher education in Central Asia through new technologies", the following work was carried out:

- A new platform moodle.atu.kz has been opened for the virtual library and academic network of universities as part of the project. The platform contains 5 planned ready-made web courses for teachers of JSC "ATU" and, as well as 4 web courses for teachers from ENU and 2 from INEU (HiEdTec), 20 courses of universities EMM-PMT and 2 AIT.

- The number of electronic courses on the open.atu.kz platform has been increased to 175, on the new dot.atu.kz platform - 607. The number of DERs developed this academic year on the moodle.atu.kz platform is 2124 in total.

- All teachers were trained in the development of DER and e-learning courses. The CIET website provides access to Parts 1 and 2 of the Guide to Innovative Educational Technologies.

- Director of CIET Medvedkov E.B. and head of Uvakasova L.T. took part in the 7th working meeting in Kyrgyzstan, held on May 16-20, 2022, at which the chairman of the ILT section of the NMS Medvedkov E.B. reported on the completion of the development of the planned web courses.

- The virtual library of web-courses of Kazakhstan, through the virtual library of Ruse University, is connected to the libraries of partner countries from Central Asia. In total, it is planned to open access to 75 courses.

The main unresolved issues include:

- Untimely and incomplete placement of content on the educational platform;
- Insufficient use of web courses and MOOCs in the educational process;
- The inability of a number of teachers to create and use digital content;
- Poor awareness of teachers about their official duties and about regulatory documents on digital resources and technologies.

With the spread of digital and distance learning technologies, it is important to provide consultations and technical support to teachers. Consultations for teachers were carried out using innovative educational technologies in the zoom system, on the forums of the open.atu.kz platform, as well as using additional communication software (for example, Skype, Team Viewer, Whatsapp, etc.). Face-to-face individual consultations were held by appointment. All educational and methodological documentation is posted on the website of ATU and CIET. https://atu.edu.kz/ciet/?page_id=170

For the work of teachers developing digital resources, a special audience is used, equipped with laptops with Internet access. If necessary, teachers can also get advice from employees of the e-learning department there. Teachers can get acquainted with the schedule of consultations on the development of MOOCs on the CIET website. Online teaching staff courses are placed on the ATU online learning platform <http://dot.atu.kz>, <http://open.atu.kz>. Digital educational resources are placed in the catalog on the platform <http://moodle.atu.kz>.

4. Functioning of the QMS

4.1 The effectiveness of internal audits.

Total inspections according to the schedule of internal audits: 1

Actual checks carried out: 1

Grounds for inspections (order, order, etc. No.)

By order No. P-01/125 dated 20.09.2021 “On conducting an internal audit in ATU” in the period from 04.10.2021 to 11.10.2021 in the structural subdivisions of JSC “ATU” in the period from 4.10.2021 to 11.10.2021 an internal audit was planned according to MS ISO 9001:2015 according to the IA Schedule for the 2021-2022 academic year.

The list of non-resolved non-conformities identified during internal audits and the reasons for not eliminating them

SP abbreviation	Paragraph ISO 9001:2015	Content of the discrepancy	Responsible executor	Required Corrective Measures	Reasons for not correcting nonconformities	Undertaken measures
1	2	3	4	5	6	7
CIET	-	-	-	-	-	-

according to MS ISO 9001:2015

Analysis of results: no violations were found during the inspection

date: 05.10.2021

auditor: Moldybaeva A.A.

Suggestions for improvement: no

4.2 The effectiveness of external audits.

Total audits according to the schedule of external audits: -

Actual checks carried out: -

Grounds for inspections (program, plan)

The list of non-resolved non-conformities identified during external audits, the reasons for not eliminating them

SP abbreviation	Paragraph ISO 9001:2015	Content of the discrepancy	Measures to eliminate the causes of nonconformities	Designated performers KD	Estimated date of correction / actual date of correction	Reasons for non-fulfillment of the design documentation
1	2	3	4	5	6	7
CIET	-	-	-	-	-	-

Analysis of results: external audit according to MS ISO 9001:2015 is not provided for by the Program Plan.

Recommendations for improvement: No

4.3 Information on the implementation of the action plan to improve the QMS for the 2021-2022 academic year.

Date of approval of the plan No. -CIET-02/3601 dated 06/21/2021 / QMS plan of ATU JSC **01/17/2022.**

How many points are included in the CIET plan / QMS plan of ATU JSC 43/24

Of them completed: 41/22

failed: 2/2.

List of outstanding works:

№	Abbreviation joint venture	Name of the event	Period of execution	Responsible executor, co-executors	Reasons for non-compliance	Measures taken
1	2	3	4	5	6	7
1	CIET	Training on QMS issues in third-party organizations	conducting classes at the CIET according to the plan	Director of CIET Head of DE Head of DDDER	There was no information about relevant courses from third parties	Training of employees on QMS issues in CIET
2	CIET	Employee certification	by order of the rector	Director of CIET	Deadline hasn't come	Preparation of attestation cases
3	CIET	Preparation of the CIET annual report	June 2022	Director of CIET Head of DE Head of DDDER	Deadline hasn't come	Preparation and approval of the CIET annual report for the 2021-2022 academic year
4	CIET	Preparation of the CIET work plan for the 2022-2023 academic year	June 2022	Director of CIET Head of DE Head of DDDER	Deadline hasn't come	The approved work plan of the CIET for the 2022-2023 academic year

Analysis of results: the action plan for the development and maintenance of the ATU QMS was completed by 91.7%, except for the items indicated in the table above. For other items all planned activities in terms of the QMS of ATU JSC, CIET were completed in full and on time.

Recommendations for improvement: No

**4.4 Passport of risks according to MS ISO 9001:2015 for the 2021-2022 academic year
Center for Innovative Educational Technologies**

F. QAM-6.1-2021-10-01

№	Process name	Name of risk/opportunity	The reasons	Risk probability score	Probabilities of risk consequences
1	2	3	4	5	6
1	Planning and development of the QMS of JSC "ATU"	Risk of non-fulfilment of strategic quality objectives	- lack of executive discipline	2 points /moderate	- failure to achieve strategic quality goals
2	Management Analysis (SP)	The risk of late receipt documented information about the functioning of all processes	- low performance discipline of university staff - insufficient informing employees about changes in the rules for paperwork	1 point /minimum 1 point /minimum	- failure to monitor developed MOOCs, DERs - untimely analysis, monitoring of questionnaires, surveys of listeners MOOC, DER
3	Public information	The risk of late receipt	- low performance discipline of university staff	2 points /moderate	- lagging behind the MOOC recording schedule, CER
			- inconsistency of actions of different performers	2 points /moderate	- untimely filling of MOOCs with educational materials - disruption of the launch of MOOCs, DER on the platform
4	Personnel management (SP)	Risk of insufficient practical experience of employees	- lack of advanced training courses for university staff in the field of digital	1 point /minimum	- insufficient processing, video editing of educational materials - stop work educational platform

			educational technologies		- low quality of consultations on MOOCs, DERs
5	Planning and development of educational activities	Risk of delayed planning and development of MOOCs, DERs	- dishonest attitude of employees of JSC "ATU"	2 points /moderate	- behind schedule for recording and consultations on MOOC development
			- inefficient use of human resources in JV JSC "ATU"	2 points /moderate	- suspension of work on recording, development, video editing of educational materials MOOC, DER
			- unavailability of information resources (failures on the platform)	2 points /moderate	- stopping the platform
6	Implementation of educational activities	Risk of lack of demand for MOOCs, DER	- distorted information about demand	2 points /moderate	- no demand for MOOCs, DER on the platform
			- insufficient level of qualification of employees of JSC "ATU"	2 points /moderate	- low number of students on the course MOOC, DER
		Risk of insufficient (low) quality of MOOCs, DER	- shortcomings in the development of MOOCs, DERs	2 points /moderate	- no demand for MOOCs, DER on the platform
			- insufficient material and technical base for the implementation of MOOCs, DER	2 points /moderate	- low quality of developed MOOCs, DERs
			- insufficient number of highly qualified teachers	2 points /moderate	- low number of students on the MOOC course
			- weak motivation of students by teachers to participate in the	2 points /moderate	- low interest in learning on a MOOC course

			development of MOOCs, DER		
7	Monitoring of educational activities	The risk of imperfection of the quality control system MOOC, CER	- untimely development of a work plan for monitoring	2 points /moderate	- untimely development of the work plan - untimely approbation of MOOC, DER
			- failure to complete assigned tasks	2 points /moderate	- incorrect processing of survey data
			- incomplete coverage of listeners	2 points /moderate	- low number of students on the MOOC course
			- incorrect processing of survey data and the development of MOOCs, DER based on the results of the survey	2 points /moderate	- unclaimed MOOCs, DERs
8	Design and implementation of additional education programs	The risk of lack of students, and high competition in the market of educational services	- distorted information about demand	2 points /moderate	- no demand for MOOCs, DER on the platform
			- insufficient number of courses offered	2 points /moderate	- platform suspension
			lack of demand for the courses offered	2 points /moderate	- stop work on the implementation of MOOCs, DER
			- insufficient advertising	2 points /moderate	- Low enrollment in courses (MOOC registration)
9	Provision and management of resources (library and information services)	Risk of platform catalog mismatch with modern requirements	- untimely updating of MOOC, DER	2 points /moderate	- no demand for MOOCs, DER on the platform
			- Difficulty in accessing MOOCs, DERs	2 points /moderate	- low number of students on the course MOOC, DER
			- untimely execution of contracts	2 points /moderate	- underdevelopment of the platform

		Risk of catalog understaffing on the platform	- not carrying out work on the collection of schedules of the joint venture for the development of MOOCs, DER	2 points /moderate	- insufficient content of the catalog MOOC, DER
10	Ensuring life safety	Risk of injury to workers in the course of activities	- non-compliance with fire safety and safety measures at the training places of practical training	1 point /minimum	- suspension of work on recording, development, video editing of teaching materials of teaching staff - platform suspension
		The risk of contracting the coronavirus	- non-compliance with sanitary and epidemiological requirements, presenting a threat to life, illness, job loss	4 points	Infection with coronavirus, severe course of the disease, exacerbation of chronic diseases, job loss
		The risk of cluttering of workplaces and territories (garbage, snow, ice)	- non-fulfillment of official duties by responsible persons	1 point /minimum	- loss of data (electronic catalog) on the platform - decrease in the number of platform traffic
11	Information environment management	Server failure risk	- lack of funding	2 points /moderate	- loss of MOOC database, DER
		Risk of attacks on network servers	- lack of training of personnel involved in the implementation of the proposed safety controls	2 points /moderate	- low quality of developed MOOCs, DERs
12	Purchasing management	Risk of discrepancy between the planned results and the resources spent	- no contracts when buying goods	1 point /minimum	- failure to purchase equipment, software necessary for the implementation of MOOCs
			- change in the exchange rate	1 point /minimum	- lack of marketing research of suppliers;

			difference affecting the cost of goods		
			- low-quality goods and violation of delivery dates	1 point /minimum	- stop work on recording, developing, video editing teaching materials of teaching staff

***Note**

- The table shows the processes required for each joint venture from 1 to 7 processes.
- "8 etc." all processes in which the joint venture participates are indicated (according to the Album of information cards of processes);
- The table contains all the risks of the joint venture according to MS ISO 9001:2015, each risk is separately assessed by a point system;

**4.5 Plan-report of measures to eliminate risks according to MS ISO 9001:2015 for 2021-2022 academic year
Center for Innovative Educational Technologies**

F. QAM-6.1-2021-10-02

Note: if the level of risk exceeds the established level of acceptability (“=” or “>” 3 points), then measures aimed at reducing risks to an acceptable level should be implemented in relation to it. For opportunities with a low level (“=” or “>” 1-2 points), no management actions are taken and are not included in the table.

№	Process name	Name of risk	Measures to eliminate the risk	Responsible	Period of execution	Completion mark (date, signature)	Supporting documented information containing information to eliminate the risk
1	2	3	4	5	6	7	8
1	Ensuring the life safety of CIET	The risk of contracting the coronavirus	Revaccination of employees	All employees	As needed	21.02.2022 06.09.2021 06.09.2021	Revaccination passports: Medvedkov.E.B. Kuzin A.A. Abdikhai A.T.
			Compliance with sanitary and epidemiological requirements	All employees	Constantly	During the school year	Keeping distance, washing hands frequently and using antiseptics, wearing masks

**4.6 Action plan for improving the QMS
Center for Innovative Educational Technologies
for 2022-2023 academic year**

№	Name of events	Deadlines	Responsible executor, co-executor	Completion mark
1	2	3	4	5
<i>1 Planning to maintain and improve the QMS</i>				
1.1	Development and approval of the CIET work plan for the 2022-2023 academic year	June 2022	Director of CIET	Approved CIET plan for the 2022-2023 academic year
1.2	Studying the legal documents of the QMS of newly arrived employees: MS ISO 9000:2015, MS ISO 9001:2015, MS ISO 37001:2016	as needed	Director of CIET	Familiarization sheets
1.3	Development and approval of a consultation schedule for the development of web courses, MOOCs, DERs	September2022	Director of CIET Head of DDDER Head of DE	Approved consultation schedule for web courses, MOOCs, CERs
1.4	Checking the planned indicators of IP teaching staff, IP of the department and IP of the faculty in the program "Univer"	September2022	Director of CIET	AS "Univer" Indicative Plan IP teaching staff, IP department and IP faculty
1.5	Development and approval of the annual work plan of the DE, DDDER for the 2022-2023 academic year	August 2022	Head of DDDER	Approved CIET plan for the 2022-2023 academic year
<i>2 Management of documented QMS information</i>				
2.1	Work in the program "Documentolog 7"	constantly	Director of CIET	Electronic version of the nomenclature
2.2	Work on maintaining nomenclature folders in accordance with the nomenclature of cases	constantly	Head of DDDER Head of DE	Systematized nomenclature folders
2.3	Familiarization of CIET employees with incoming documented information on the specification of QMS processes	as needed	Head of DDDER Head of DE	Familiarization sheets
2.4	Familiarization of new employees with the CIET Regulation and job descriptions (instruction at the workplace)	as needed	Head of DDDER Head of DE	Approved regulations and job descriptions in the state and Russian languages
<i>3 Customer orientation</i>				
3.1	Coverage of the activities of the CIET on the official website of JSC "ATU"	Constantly	Head of DDDER Head of DE	Consumer information

3.2	Actualization and modernization of educational platforms of JSC "ATU" for web courses, MOOCs, DER	as needed	Head of DDDER Head of DE	Link to the platform with updated data
3.3	Coverage of the activities of the CIET on the official website of JSC "ATU"	constantly	Head of DDDER Head of DE	Link to CIET materials
3.4	Distribution of regulations, recommendations for the development of web courses, MOOCs, DER and other methodological materials	during the academic year	DE Specialist Lead DE Specialist	Distribution list
3.5	Conducting consultations for teaching staff on the development of web courses, MOOCs, DER	during the academic year	DE Specialist Leading Specialist DDDER	Turnout list, presentation
3.6	Development of questionnaires to study the satisfaction of the developed web courses, MOOCs, DER on the educational platforms of JSC "ATU"	as needed	Head of DDDER Head of DE	Report on the results of the questionnaire
4 Internal communication				
4.1	Providing access to educational platforms of JSC "ATU" to all structural divisions	constantly	Head of DDDER Head of DE	Links to educational platforms
5 Management review				
5.1	Preparation of documented information for management review	September-October 2022	Head of DDDER Head of DE	Report "Management Analysis" in accordance with the DP
5.2	Risk management: filling out a risk passport, compiling a report	September-October 2022	Director of CIET Head of DDDER Head of DE	Passport of risks, plan-report to eliminate risks
5.3	Preparation for internal, external audit of CIET	according to the Schedule for 2022-2023 academic year	Director of CIET Head of DDDER Head of DE	Acts of non-compliance, reports of internal auditors
5.4	Monitoring the implementation of corrective action plans based on the results of internal and external audits	as needed	Director of CIET Head of DDDER Head of DE	Plan / report of design documentation, entries in the "Journal of registration of non-conformities and design documentation" F. QAM-10.2-2020-03-01 Acts of inconsistencies
6 Competence, training and awareness				
6.1	Monitoring and confirmation of indicators prof. rating JSC "ATU"	May-June 2023	Director of CIET	Professional rating results

6.2	Organizational, scientific and methodological support for the development and improvement of web courses, MOOCs, DER	during the academic year	Head of DDDER Head of DE	Approved consultation schedule
6.3	Organization for teaching staff of departments of courses (seminars) on the development and design of innovative educational resources	during the academic year	Head of DDDER Head of DE	Approved seminar program, attendance list
6.4	Promotion of web courses of JSC "ATU" on the National platform moocs.kz.	during the academic year	Head of DE	Links of web courses on the moocs.kz platform
6.5	Participation in the competition for the selection of PMO employees	by order of the rector	Head of DDDER Head of DE	Competitive cases of employees
7 Analysis, monitoring and measurement				
7.1	Analysis of the development of web courses, MOOCs, DER by faculties, departments	during the academic year	Director of CIET Head of DDDER Head of DE	Reports at the council, administrations, minutes of meetings
7.2.	Organization of a sociological survey "Application of innovative teaching methods"	during the academic year	Head of DDDER Head of DE	Questionnaire and survey results
7.3	Monitoring the workload of web courses, MOOCs, DER on the educational platforms of JSC "ATU"	during the academic year	DE Specialist Lead DE Specialist	Reports at the council, administrations, minutes of meetings
7.4	Control and adherence to the schedule for the development of web courses, MOOCs, DER	during the academic year	Head of DDDER Head of DE	Reporting, explanatory (if there are discrepancies)
7.5	Monitoring in IPK "Univer" IP PPS ATU	during the academic year	Director of CIET	Information in the Univer
7.6	Preparation of the annual report of the OEE, ORCOR for the 2022-2023 academic year	May 2023	Head of DDDER Head of DE	Approved CIET annual report for the 2022-2023 academic year
7.7	Preparation of the CIET annual report for the 2022-2023 academic year	May-June 2023	Director of CIET	Approved CIET annual report for the 2022-2023 academic year
7.8	Preparation of an annual report on the functioning of the QMS CIET for the 2022-2023 academic year	May-June 2023	Director of CIET	Approved annual report on the functioning of the QMS CIET for the 2022-2023 academic year
7.9	Preparation of the CIET work plan for the 2023-2024 academic year	June-July 2023	Director of CIET	The approved work plan of the CIET for the 2023-2024 academic year

SWOT-ANALYSIS

S(strength) - strengths	W(weakness) - weaknesses
<ul style="list-style-type: none"> ➤ Organization and development of digital educational resources and massive open online courses, web courses ➤ Adapting the educational system to the digital generation through the active and effective use of innovative educational technologies based on ICT ➤ Provision of educational services for additional educational programs, dissemination of innovative pedagogical experience based on the use of modern pedagogical and ICT in the educational process 	<ul style="list-style-type: none"> ➤ Problems with the acquisition of new software for the development of digital educational resources due to the high cost of software products ➤ Additional time spent on the annual update of the online course platform due to new network requirements ➤ New types of services in the field of innovative educational technologies (unscheduled)
O (opportunity) - favorable opportunities	T (threat) - anxiety, obstacles
<ul style="list-style-type: none"> ➤ Implementation of innovative educational technologies ➤ Creation and periodic updating of the database, CIET catalog ➤ Authorization of access to digital educational resources, massive open online courses, web courses ➤ Organization of courses and seminars to support the innovative direction of the professional and personal development of teaching staff ➤ Systematization of innovative pedagogical experience, development of new approaches to the implementation of the tasks of pedagogical theory and practice, taking into account the trends in the development of the educational space ➤ translation of innovative experience into the practice of the region: organization of courses, seminars, trainings, round tables, etc. according to the needs of subjects of the educational services market 	<ul style="list-style-type: none"> ➤ Service failure, no internet connection ➤ Attacks on network servers ➤ External power outages, interruption of communication channels at providers ➤ Probability of shortage of qualified specialists and their outflow

- **Conclusions:** QMS CIET complies with the requirements of MS ISO 9001:2015;
- The quality policy complies with the requirements of MS ISO 9001:2015;
- The organizational structure of management and available resources are suitable and sufficient for the functioning of the QMS ;
- Activities for the creation and preparation for certification of the QMS have been completed.
- Internal audits of the QMS are carried out in accordance with the requirements of MS ISO 9001:2015 in a planned manner;
- Personnel are aware of the requirements and are involved in QMS activities;

- The created QMS lays the foundation for continuous improvement of the organization's activities;
- Planned development and implementation of innovative educational technologies in the educational process;
- The process of functioning of the platform of online courses and the catalog of digital educational resources is controlled;
- Installed software for organizing the development of online courses and digital educational resources;
- There is a platform for web courses and a platform for digital educational resources.

5. Conclusions and proposals on the work of the CIET in the 2021-2022 academic year

In general, for the reporting 2021-2022 academic year, the CIET team did a lot of work aimed at optimizing and improving the educational process using innovative educational technologies.

The work of the CIET is carried out within the framework of the Erasmus + project "Modernization of higher education in Central Asia through new technologies" (HiEdTec) in 3 main areas:

1. Promotion and explanation of the meaning of the use of digital educational resources and technologies, online learning.
2. Training and professional development, as well as the motivation of teachers in this area.
3. Development of distance, electronic and other types of innovative education. Improving the material and technical base for the implementation of innovative types of training.

The following works have been completed:

- A new platform moodle.atu.kz has been opened for the virtual library and academic network of universities as part of the project. The platform contains 5 planned ready-made web courses for teachers of JSC "ATU" and, as well as 4 web courses for teachers from ENU and 2 from INEU (HiEdTec), 20 courses of universities EMM-PMT and 2 AIT.

- The number of electronic courses on the open.atu.kz platform has been increased to 175, on the dot.atu.kz platform developed in the 2021-2022 academic year - **374**. The number of DER developed this academic year on the moodle.atu.kz platform is **4627** in total.

- All teachers were trained in the development of DER and e-learning courses. The CIET website provides access to Parts 1 and 2 of the Guide to Innovative Educational Technologies.

- Director of CIET Medvedkov E.B. and head of Uvakasova L.T. took part in the 7th working meeting in Kyrgyzstan, held on May 16-20, 2022, at which the chairman of the section Medvedkov E.B. reported on the completion of the development of the planned web courses.

- The virtual library of web-courses of Kazakhstan, through the virtual library of Ruse University, is connected to the libraries of partner countries from Central Asia. In total, it is planned to open access to 75 courses.

The main unresolved issues include:

- Untimely and incomplete placement of content on the educational platform;
- Insufficient use of web courses and MOOCs in the educational process;
- The inability of a number of teachers to create and use digital content;
- Poor awareness of teachers about their official duties and about regulatory documents on digital resources and technologies.

Suggestions for correcting deficiencies:

1. Organize competitions for DER and web courses among teachers of JSC "ATU" and partner universities under the projects of UMO-SUE and HiEdTec.

Responsible: CIET

2. Continue training of teachers of JSC "ATU" in order to bring the level of training of teaching staff to 100%, taking into account newcomers. Provide advice and technical support to educators in the development of the DER and web courses. Train at least 50 teachers of third-party organizations and untrained teachers of ATU JSC. Make additions to the course program based on the results of the survey and clarify regulatory documents in the field of digital learning technologies.

Responsible: CIET, AIT

3. Provide at least 80% of academic disciplines with DER and web courses.

Responsible: Deans of faculties

4. At the faculties, organize monitoring of the use of interactive classrooms, strengthen control over the timely filling and use of content on the dot.atu.kz educational platform in the educational

process, organize seminars on innovative educational technologies and changes in regulatory documents on a regular basis.

Responsible: Deans of faculties

5. Draw up a program and conduct regular methodological seminars in the field of digital learning technologies and clarification of regulatory documents.

Responsible: EMM, CIET

Director of CIET E.B. Medvedkov

LIST OF COURSES ON THE OPEN.ATU.KZ PLATFORM

No.	Course name	Course number	Course Author	Link to the course	Note
Faculty of food production					
Department of Food Technology					
1.	Balalar tamaqtanuyna arnalğan sut onimderi men konservileri	TPP01	Dzhetpisbayeva Bagila Shakhimardanovna	http://open.atu.kz/courses/course-v1:ATU+TPP01+2018_C2/about	2018-2019
2.	Et zhane et nimderinin technology	TPP03	Abzhanova Sholpan Amankeldykyzy	http://open.atu.kz/courses/course-v1:ATU+TPP03+2018_C2/about	2018-2019
3.	Syt zhәне syt өnimderin өndirudiң physical-chemistry zhane biochemical negizderi	TPP04	Akilova Fatima Yesimkhanovna	http://open.atu.kz/courses/course-v1:ATU+TPP04+2019_C2/about	2018-2019
4.	Auyl sharuashylyk maldarynyn anatomy men histology	TPP05	Dzhetpisbayeva Bagila Shakhimardanovna	http://open.atu.kz/courses/course-v1:ATU+TPP05+2020_C2/about	2019-2020
5.	Azyk-tulik onimderin tanu zhane saraptau	TPP02	Matibaeva Ainur Ibraevna	http://open.atu.kz/courses/course-v1:ATU+TPP02+2020_C2/about	2019-2020
6.	Gylymi zhane jobalyk zertteuler	TPP06	Matibaeva A.I.	http://open.atu.kz/courses/course-v1:ATU+TPP06+2020_C2/about	2019-2020
7.	Et zhane balyk өnerkәsibi kәsiporyndaryndary technochemistry bakylau zhane sapany baskaru.	TPP07	Abilmazhinova Nazim Kylyshbekovna	http://open.atu.kz/courses/course-v1:ATU+TPP07+2021_C2/about	2020-2021
8.	sensory analysis	TPP07	Zhexenbay Nurshash	http://open.atu.kz/courses/course-v1:123+1231+2020_C2/about	2020-2021
9.	Technology of milk and dairy products	TPP08	Dikhanbayeva F.T.	http://open.atu.kz/courses/course-v1:ATU+TPP08+2021_C2/about	2020-2021
10.	Technochemical control and quality management at catering establishments	TPP09	Shambulova Gulnara Dosanbekovna	http://open.atu.kz/courses/course-v1:ATU+TPP09+2021_C2/about	2020-2021
11.	Theoretical foundations of food storage	TPP10	Syzdykova L.S.	http://open.atu.kz/courses/course-v1:ATU+TPP10+2021_C2/about	2020-2021
Department "Technology of bakery products and processing industries"					

12.	Nan ondirisinin technology	THiPP01	Baiysbaeva Meruert Pernebaevna	http://open.atu.kz/courses/course-v1:ATU+TKHiKPP01+2018_C2/about	2018-2019
13.	Technology of brewing production	THiPP02	Kekibayeva Anara Kanbekovna	http://open.atu.kz/courses/course-v1:ATU+THiPP02+2019_C2/about	2018-2019
14.	Alcohol technology	THiPP03	Baigazieva Gulgaisha Ilyasovna	http://open.atu.kz/courses/course-v1:ATU+THiPP03+2019_C2/about	2018-2019
15.	Astyk ondeu ondirisi shikizattarynyn kasietin zertteu adisteri	THiPP04	Batyrbayeva Nurgul Bazilovna	http://open.atu.kz/courses/course-v1:ATU+THiPP04+2019_C2/about	2018-2019
16.	Ampelography with the basics of viticulture	THiPP05	Rustemova Ainash Zhubaikhanovna	http://open.atu.kz/courses/course-v1:ATU+THiPP05+2020_C2/about	2019-2020
17.	Automata zhobalau zhyyesi negizinde naubaykhana kasiporyndaryn zhobalau	THiPP06	Baiysbayeva Meruert Pernebaykyzy	http://open.atu.kz/courses/course-v1:ATU+THiPP06+2020_C2/about	2019-2020
18.	Technology of flour products for special purposes	THiPP08	Izembraeva Asel Kamalseitovna	http://open.atu.kz/courses/course-v1:ATU+THiPP08+2021_C2/about	2020-2021
19.	Technology of bakery production	THiPP09	Iskakova Galiya Kuandykovna	http://open.atu.kz/courses/course-v1:ATU+THiPP09+2021_C2/about	2020-2021
Department of Food Biotechnology					
20.	Bioethics and safety fundamentals in biotechnology	PB01	Alibaeva Bakhit Nasikhatovna	http://open.atu.kz/courses/course-v1:ATU+PB01+2019_C2/about	2018-2019
21.	Microbiology and Virology	PB02	Saltybaev Arsen Demosfenovich	http://open.atu.kz/courses/course-v1:ATU+PB02+2019_C2/about	2018-2019
22.	Januarlar biotechnologies	PB03	Katasheva Alma Chamaevna	http://open.atu.kz/courses/course-v1:ATU+PB03+2019_C2/about	2018-2019
23.	Өsimdikter biotechnology	PB04	Utegalieva Raisa Saktaganovna	http://open.atu.kz/courses/course-v1:ATU+PB04+2019_C2/about	2018-2019
24.	Animal biotechnology	PB05	Aralbaeva Araylym Nugmanovna	http://open.atu.kz/courses/course-v1:ATU+PB05+2019_C2/about	2018-2019
25.	Azyk-tulik ondiristeri shikizatynyn kasietterin zertteu	PB06	Zhaparkulova Nazgul Iksanovna	http://open.atu.kz/courses/course-v1:ATU+PB06+2019_C2/about	2018-2019
26.	Microbiology vs Virology	PB07	Mamataeva Aigul Tymaikyzy	http://open.atu.kz/courses/course-v1:ATU+PB07+2019_C2/about	2018-2019
27.	Research on the properties of raw materials in the food industry	PB08	Seidakhmetova Zaure Zhunusovna	http://open.atu.kz/courses/course-v1:ATU+PB08+2019_C2/about	2018-2019

28.	Environmental Biotechnology	PB09	Asenov Aueskhan Rakhyshevich	http://open.atu.kz/courses/course-v1:ATU+PB09+2020_C2/about	2019-2020
29.	Industrial biotechnology	PB10	Amirova Aigul Kuzembaevna	http://open.atu.kz/courses/course-v1:ATU+PB10+2020_C2/about	2019-2020
30.	Apparatus for biotechnological production	PB11	Shambulova Gulnara Dosanbekovna	http://open.atu.kz/courses/course-v1:ATU+PB11+2020_C2/about	2019-2020
31.	Plant Biotechnology and Breeding	PB12	Lesova Zhanikha Tureevna	http://open.atu.kz/courses/course-v1:ATU+PB12+2020_C2/about	2020-2021
32.	Bioconversion	PB13	Asembayeva Elmira Kuandykovna	http://open.atu.kz/courses/course-v1:ATU+PB13+2021_C2/about	2020-2021
33.	Modern methods in biotechnology	PB14	Gabdullina Elzada Zhumagalievna	http://open.atu.kz/courses/course-v1:ATU+PB14+2021_C2/about	2020-2021
Department of "Chemistry, chemical technology and ecology"					
34.	Ecology and sustainable development	HHTiE01	Dzhakupova Inkar Borisovna	http://open.atu.kz/courses/course-v1:ATU+HHTiE01+2018_C2/about	2018-2019
35.	Ecologylyk normalau negizderi zhane saraptama	HHTiE02	Dzhakupova Inkar Borisovna Bozhbanov A.Zh.	http://open.atu.kz/courses/course-v1:ATU+HHTiE02+2018_C2/about	2018-2019
36.	Ecology Zhane turakty lady	HHTiE03	Sultangazieva Gulbaram Sapina	http://open.atu.kz/courses/course-v1:ATU+HHTiE03+2019_C2/about	2018-2019
37.	Chemistry of drugs	HHTiE04	Zainullina Aigul Shaikhullaevna	http://open.atu.kz/courses/course-v1:ATU+HHTiE04+2019_C2/about	2018-2019
38.	Biogeochemistry vs. Ecotoxicology	HHTiE05	Alimkulova Jamila Dzhakypberkyzy	http://open.atu.kz/courses/course-v1:ATU+HHTiE05+2019_C2/about	2018-2019
39.	Nanotechnology Negizderi	HHTiE06	Abilkasova Sandugash Orynbaevna	http://open.atu.kz/courses/course-v1:ATU+HHTiE06+2019_C2/about	2018-2019
40.	Chemistry	HHTiE07	Almagambetova Saule Tulegenovna	http://open.atu.kz/courses/course-v1:ATU+HHTiE07+2019_C2/about	2018-2019
41.	environmental chemistry	HHTiE08	Moldagaziyeva Zhanar Yspanovna	http://open.atu.kz/courses/course-v1:ATU+HHTiE08+2019_C2/about	2018-2019
42.	nature management	HHTiE09	Egeubayeva Salamat Sabitovna	http://open.atu.kz/courses/course-v1:ATU+HHTiE09+2019_C2/about	2018-2019

43.	Biochemistry	HHTiE10	Kalimoldina Laila Mautenovna	http://open.atu.kz/courses/course-v1:ATU+HHTiE10+2019_C2/about	2018-2019
44.	Chemistry	HHTiE11	Shaikhova Zhanat Erezhinovna	http://open.atu.kz/courses/course-v1:ATU+HHTiE11+2019_C2/about	2019-2020
45.	Analytical chemistry	HHTiE12	Alipbaev Amanbol Namatzhanovich	http://open.atu.kz/courses/course-v1:ATU+HHTiE12+2019_C2/about	2019-2020
46.	Basic processes and apparatuses of chemical technology	HHTiE13	Berkinbayeva Aknur Sabitovna	http://open.atu.kz/courses/course-v1:ATU+HHTiE13+2019_C2/about	2019-2020
47.	Biological ecology	HHTiE14	Musina Zukhra Malikovna	http://open.atu.kz/courses/course-v1:ATU+HHTiE14+2019_C2/about	2019-2020
48.	Soil science	HHTiE15	Kalimoldina L.M.	http://open.atu.kz/courses/course-v1:ATU+HHTiE15+2020_C2/about	2019-2020
49.	Environmental monitoring	HHTiE16	Sultangaziva Gulbaram Sapina	http://open.atu.kz/courses/course-v1:ATU+HHTiE16+2020_C2/about	2020-2021
50.	Chemistry	HHTiE17	Egeubaeva S.S.	http://open.atu.kz/courses/course-v1:ATU+HHTiE17+2020_C2/about	2020-2021
51.	Physico-chemical methods for the analysis of petroleum products	HHTiE18	Zainullina Aigul Shaikhullaevna	http://open.atu.kz/courses/course-v1:ATU+HHTiE18+2021_C2/about	2020-2021
52.	Nanotechnology in ecology	HHTiE18	Moldagaziyeva Zh. Y.	http://open.atu.kz/courses/course-v1:ATU+HHTiE18+2020_C2/about	2020-2021
Department of Food Safety and Quality					
53.	Tirshilik kauipsizdigi negizderi	BiKPP	Asilova Gulzhan Mukhangalieвна	http://open.atu.kz/courses/course-v1:ATU+BiKPP01+2018_C2/about	2018-2019
54.	Quality system	BKiPP01	Serikkyzy Mira Serikovna	http://open.atu.kz/courses/course-v1:ATU+BKiPP01+2019_C2/about	2018-2019
55.	Fundamentals of safety and life	BKiPP02	Omirbai Roza Suleimenkyzy	http://open.atu.kz/courses/course-v1:ATU+BKiPP02+2019_C2/about	2018-2019
56.	Tirshilik kauipsizdik negizderi	BiKPP03	Egemova Shynar Batyrbekovna	http://open.atu.kz/courses/course-v1:ATU+BKiPP03+2019_C2/about	2018-2019
57.	Fundamentals of life safety	BiKPP04	Bugubaeva Gulnar Ospanakunovna	http://open.atu.kz/courses/course-v1:ATU+BKiPP04+2019_C2/about	2018-2019
58.	Toxicological bases of environmental pollution by radionuclides	BiKPP05	Asilova Gulzhan Mukhangalieвна	http://open.atu.kz/courses/course-v1:ATU+BKiPP05+2019_C2/about	2018-2019
59.	Sapa zhuyesi	BiKPP06	Tattibaeva Damira Baktiyarovna	http://open.atu.kz/courses/course-v1:ATU+BKiPP06+2019_C2/about	2018-2019

60.	Food Safety	BKiPP07	Azimova Sana Tuglukovna	http://open.atu.kz/courses/course-v1:ATU+BKiPP07+2019_C2/about	2019-2020
61.	Sensory assessment of food quality	BiKPP08	Izteleva Raushan Akmuratovna	http://open.atu.kz/courses/course-v1:ATU+BKiPP08+2019_C2/about	2019-2020
62.	Ondiristik kauipsizdik	BiKPP	Egemova Shynar Batyrbekovna	http://open.atu.kz/courses/course-v1:ATU+BiKPP+2020_C2/about	2019-2020
63.	Azyk-tulik zhane auylsharuashhylyk onimderin certificatetau	BiKPP02	Zheldybayeva Ainur Amangeldinovna	http://open.atu.kz/courses/course-v1:ATU+BiKPP02+2020_C2/about	2019-2020
64.	Tagam himiyasy	BiKPP09	Toktamysova Aiman Baibatyrova	http://open.atu.kz/courses/course-v1:ATU+BKiPP09+2019_C2/about	2019-2020
65.	Tagam onimderinin kauipsizdigi	BiKPP10	Tnymbaeva Bagymkul Temirkhanovna	http://open.atu.kz/courses/course-v1:ATU+BKiPP10+2019_C2/about	2019-2020
66.	Quality audit	BiKPP11	Serikkyzy Mira Serikovna	http://open.atu.kz/courses/course-v1:ATU+BKiPP011+2020_C2/about	2019-2020
67.	Industrial safety	BiKPP12	Omirbai Roza Suleimenkyzy	http://open.atu.kz/courses/course-v1:ATU+BiKPP12+2020_C2/about	2019-2020
68.	Product Analysis Methods	BiKPP13	Bugubaeva Gulnar Ospanakunovna	http://open.atu.kz/courses/course-v1:ATU+BiKPP13+2020_C2/about	2019-2020
69.	Authentication and falsification of food products	BiKPP14	Tattibayeva Damira Baktiyarovna	http://open.atu.kz/courses/course-v1:ATU+BiKPP14+2020_C2/about	2019-2020
70.	Fundamentals of scientific research and patent science	BiKPP15	Omirbay R.S.	http://open.atu.kz/courses/course-v1:ATU+BiKPP15+2021_C2/about	2020-2021
71.	Tagam onimderin technochemistry bakylau	BiKPP16	Zheldybayeva Ainur Amangeldinovna	http://open.atu.kz/courses/course-v1:ATU+BiKPP16+2021_C2/about	2020-2021
72.	Technochemical control of food products	BiKPP16	Zheldybayeva Ainur Amangeldinovna	http://open.atu.kz/courses/course-v1:ATU+BiKPP16+2021_C2/about	2020-2021
73.	Qualimetry	BiKPP17	Azimova Sana Tuglukovna	http://open.atu.kz/courses/course-v1:ATU+BiKPP17+2021_C1/about	2020-2021
74.	Technochemical control of food products	BiKP18	Zheldybayeva Ainur Amangeldinovna	http://open.atu.kz/courses/course-v1:ATU+BiKP18+2021_C1/about	2020-2021

75.	Product Analysis Methods	BiKP19	Zheldybayeva Ainur Amangeldinovna	http://open.atu.kz/courses/course-v1:ATU+BiKP19+2021_C1/about	2020-2021
76.	Radiation Control of food products	BiKP20	Azimova Sana Tuglukovna	http://open.atu.kz/courses/course-v1:ATU+BiKP20+2021_C1/about	2020-2021
Faculty of Economics and Business					
Department of Economics and Management					
77.	Organizational behavior	EiM01	Urkumbayeva Asiya Rakhimzhanovna	http://open.atu.kz/courses/course-v1:ATU+EiM01+2018_C2/about	2018-2019
78.	Kasiporyn economics	EiM02	Abutalipova Zhuldyz Abakkyzy	http://open.atu.kz/courses/course-v1:ATU+EiM02+2019_C2/about	2018-2019
79.	Economics sayasat	EiM03	Kusainova Saule Bukenbaevna	http://open.atu.kz/courses/course-v1:ATU+EiM03+2019_C2/about	2018-2019
80.	Macroeconomics	EiM04	Aitkhodzhaeva Gulraykhan Ikramovna	http://open.atu.kz/courses/course-v1:ATU+EiM04+2019_C2/about	2018-2019
81.	Kasipkerlik	EiM05	Kusainova Saule Bukenbaevna	http://open.atu.kz/courses/course-v1:ATU+EiM05+2019_C2/about	2018-2019
82.	Ondiristik management	EiM06	Murzabekova Baglan Maglumbekkyzy	http://open.atu.kz/courses/course-v1:ATU+EiM06+2019_C2/about	2018-2019
83.	Baskaru personnel	EiM07	Naimanova Altynai Orynbaevna	http://open.atu.kz/courses/course-v1:ATU+EiM07+2019_C2/about	2018-2019
84.	Halykaralyk economy	EiM08	Kirbetova Zhanar Sagatovna	http://open.atu.kz/courses/course-v1:ATU+EiM08+2019_C2/about	2018-2019
85.	Industry economics	EiM09	Baktgereeva Alma Taganovna	http://open.atu.kz/courses/course-v1:ATU+EiM09+2019_C2/about	2019-2020
86.	Personnel Management	EiM10	Esakhmetova Lyailya Muratbekovna	http://open.atu.kz/courses/course-v1:ATU+EiM10+2019_C2/about	2019-2020
87.	Marketing	EiM11	Sauranova Meruert Mamyraimovna	http://open.atu.kz/courses/course-v1:ATU+EiM11+2019_C2/about	2019-2020
88.	Economists memlekettik retteu	EiM12	Ospanova Almagul	http://open.atu.kz/courses/course-v1:ATU+EiM12+2019_C2/about	2019-2020

89.	Manufacturing economics	EiM13	Epanchintseva Svetlana Eduardovna	http://open.atu.kz/courses/course-v1:ATU+EiM13+2020_C2/about	2019-2020
90.	Microeconomics	TiKIT05	Momynkulova Saule Madiyarbekovna	http://open.atu.kz/courses/course-v1:ATU+TiKIT05+2021_C2/about	2020-2021
91.	Corporate Social Responsibility	EiM14	Esakhmetova Lyailya Muratbekovna	http://open.atu.kz/courses/course-v1:ATU+EiM14+2021_C2/about	2020-2021
92.	Management	EiM15	Sauranova Meruert Mamyraimovna	http://open.atu.kz/courses/course-v1:ATU+EiM15+2021_C2/about	2020-2021
Department of "Tourism and service"					
93.	Service psychology	TiSO01	Tuebekova Zeynep Zhaparovna	http://open.atu.kz/courses/course-v1:ATU+TiSO01+2019_C2/about	2018-2019
94.	Entrepreneurship Fundamentals	TiSO02	Tokaeva Layli Abdulazizovna	http://open.atu.kz/courses/course-v1:ATU+TiSO02+2019_C2/about	2018-2019
95.	Oiyn-sauyk industries	TiSO03	Tumazhanova Marhaba Orazalyevna	http://open.atu.kz/courses/course-v1:ATU+TiSO03+2019_C2/about	2018-2019
96.	Kyzmet korsetu salasyndagy zhosparlau	TiSO04	Sarsebaeva Aigul Muktarovna	http://open.atu.kz/courses/course-v1:ATU+TiSO04+2019_c/about	2018-2019
97.	Tourist kyzmet korsetu salasyndagy zharnama	TiSO05	Tokbergenova Ulzhalgas Abdugapparovna	http://open.atu.kz/courses/course-v1:ATU+TiSO05+2019_C2/about	2018-2019
98.	Meymankhana zhane meynamkhana management	TiSO06	Isakov Erlan Duisenbekovich Joya Kairat	http://open.atu.kz/courses/course-v1:ATU+TiSO06+2019_C2/about	2018-2019
99.	Analysis of the organization and regulation of the service sector	TiSO07	Ramazanov Altai Abdrakhmanovich	http://open.atu.kz/courses/course-v1:ATU+TiSO07+2019_C2/about	2018-2019
100.	Restaurant and hotel marketing	TiSO08	Belgibaev Almaz Kanashevich Myrzagulova Gulnaziya Rakhymbaykyzy	http://open.atu.kz/courses/course-v1:ATU+TiSO08+2019_C2/about	2018-2019
101.	Introduction to hotel and restaurant business	TiSO09	Tagaeva Aisulu Zhorabekovna	http://open.atu.kz/courses/course-v1:ATU+TiSO09+2019_C2/about	2018-2019

102.	entertainment industry	TiSO10	Zhatkanbayeva Elmira Alimzhanovna	http://open.atu.kz/courses/course-v1:ATU+TiSO10+2019_C2/about	2019-2020
103.	Meiramkhana isi men konak yy biznesindegi kәsipkerlik qyzmet negizderi	TiSO11	Sarsebaeva Aigul Muktarovna	http://open.atu.kz/courses/course-v1:ATU+TiSO11+2020_C2/about	2019-2020
104.	Tarija tourism	TiSO12	Tumazhanova Marhaba Orazalyevna	http://open.atu.kz/courses/course-v1:ATU+TiSO12+2020_C2/about	2020-2021
Department of "Accounting and Finance"					
105.	Pricing	BUiF	Nurpeisova Nazim Satybaldievna	http://open.atu.kz/courses/course-v1:ATU+BUiF+2019_C2/about	2018-2019
106.	Bank isi	BUiF01	Orazaliev Babakhan	http://open.atu.kz/courses/course-v1:ATU+IS01+2019_2/about	2018-2019
107.	Financial markets and intermediaries	BUiF02	Sartova Rysty Bozmanaevna	http://open.atu.kz/courses/course-v1:ATU+BUiF02+2019_C2/about	2018-2019
108.	Accounting in catering	BUiF03	Maukebaeva Roza Myrzataevna	http://open.atu.kz/courses/course-v1:ATU+BUiF03+2019_C2/about	2018-2019
109.	Fundamentals of Accounting	BUiF04	Nesipbekov Erkin Nesipbekovich	http://open.atu.kz/courses/course-v1:ATU+BUiF04+2019_C2/about	2018-2019
110.	Karzhlyk bakylau	BUiF05	Alenova Karlygash Kairatovna	http://open.atu.kz/courses/course-v1:ATU+BUiF05+2019_C2/about	2018-2019
111.	1-C: Accounting 8.2	BUiF06	Tailak Marat Kuanyshuly	http://open.atu.kz/courses/course-v1:ATU+BUiF06+2019_C2/about	2019-2020
112.	Economics Taldau	BUiF07	Dәuletbaқov Baқytқan Dәuletbaқұly	http://open.atu.kz/courses/course-v1:123+1231+123/about	2019-2020
113.	Accounting in tourism and hotel business	BUiF08	Makishева Zhanna Anatolyevna	http://open.atu.kz/courses/course-v1:ATU+BUiF08+2020_C2/about	2020-2021
114.	Management Accounting I	BUiF09	Kalibaev M.K.	http://open.atu.kz/courses/course-v1:ATU+BUiF09+2021_C2/about	2020-2021
115.	Financial management	BUiF10	Nurpeisova Nazim Satybaldievna	http://open.atu.kz/courses/course-v1:ATU+BUiF10+2021_C2/about	2020-2021
116.	Investment financing and lending	BUiF11	Kalіeva Elena Vladimirovna	http://open.atu.kz/courses/course-v1:ATU+BUiF11+2021_C2/about	2020-2021
Faculty of Engineering and Information Technology					

Department of Engineering Graphics and Applied Mechanics					
117.	Engineer zhane computer graphics	IGiPM01	Mazhiev Yerzhan Myrzakhmetuly	http://open.atu.kz/courses/course-v1:ATU+IGiPM01+2019_C2/about	2018-2019
118.	Teoriyalyk zhәне koldanbaly mechanics	IGiPM02	Akimkhanova Aigerim Anarbekovna Mazhieva Elba Myrzakhmetovna Akyingaziev Zhamesh Akyingazievich	http://open.atu.kz/courses/course-v1:ATU+IGiPM02+2019_C2/about	2018-2019
Department "Mechanization and automation of production processes"					
119.	Processes and apparatuses of food production	MiAPP	Medvedkov Evgeny Borisovich	http://open.atu.kz/courses/course-v1:ATU+MAPP01+2019_C2/about	2018-2019
120.	Interchangeability, standardization and technical measurements	MiAPP01	Alshynova Aiman Medeubekovna	http://open.atu.kz/courses/course-v1:ATU+MiAPP01+2018_C2/about	2018-2019
121.	Electric technicas zhane electric zhabdygy	MiAPP02	Abdukarimov Sadratdin Abdukarimovich	http://open.atu.kz/courses/course-v1:ATU+MiAPP02+2019_C2/about	2018-2019
122.	Tamaқ өндірісінің protesteri men apparatus	MiAPP03	Kuzembaev K.K., Medvedkov E.B., Kuzembaeva G.K.	http://open.atu.kz/courses/course-v1:ATU+1+1_1/about	2019-2020
Department of Higher Mathematics and Physics					
123.	Maths	VMiF01	Kultasov Amantai Akhmadievich	http://open.atu.kz/courses/course-v1:ATU+VMiF01+2019_C2/about	2019-2020
Department of Vocational Training and Social Sciences					
124.	Special Pedagogy	POiON01	Kuperbayeva Aigul Zhaksylykovna	http://open.atu.kz/courses/course-v1:ATU+POiON01+2018_C2/about	2018-2019
125.	Psychology Zhane Adam Damui	POiON02	Kalykova Almagul Oralbekovna	http://open.atu.kz/courses/course-v1:ATU+POiON02+2018_C2/about	2018-2019
126.	Kazakhstannyn kazirgi zaman tarihy	POiON03	Dosekeyeva Kulmira Aldenbaevna	http://open.atu.kz/courses/course-v1:ATU+POiON03+2018_C2/about	2018-2019
127.	Law basics	POiON04	Shindauletova Lyazzat Baurzhanovna	http://open.atu.kz/courses/course-v1:ATU+POiON04+2018_C2/about	2018-2019

128.	Religious studies	POiON06	Ospanov Kairly Imanalievich	http://open.atu.kz/courses/course-v1:ATU+POiON06+2019_C2/about	2018-2019
129.	Madeniyettanu	POiON07	Kiikbai Abdilla Atamuratuly	http://open.atu.kz/courses/course-v1:ATU+POiON07+2019_C2/about	2018-2019
130.	Dintana negizderi	POiON08	Igisenova Aida Rakhimberdievna Suleimenova Aizhan Khamitovna	http://open.atu.kz/courses/course-v1:ATU+POiON08+2019_C2/about	2018-2019
131.	Kazakhstannyn kazirgi zaman tarihy	POiON09	Aldeken Aynur Sabyrbaykyzy Akhmetova Shynar Kadirbekovna	http://open.atu.kz/courses/course-v1:ATU+POiON09+2019_C2/about	2018-2019
132.	Psychology of Zhane Madeniettanu	POiON10	Ibraimova Zhanar Kazhibaevna	http://open.atu.kz/courses/course-v1:ATU+POiON10+2019_C2/about	2018-2019
133.	Philosophy of tarija	POiON11	Bizhanova Meruert Altynbekovna	http://open.atu.kz/courses/course-v1:ATU+POiON11+2019_C2/about	2018-2019
134.	History of philosophy	POiON05	Kodar Zamza Mytashkyzy	http://open.atu.kz/courses/course-v1:ATU+POiON05+2020_C2/about	2019-2020
135.	Philosophy	POiON12	Kodar Z.M.	http://open.atu.kz/courses/course-v1:ATU+POiON12+2020_C2/about	2019-2020
136.	Sociology and Political Science	POiON13	Ashimova Zaytuna Iseidullaevna	http://open.atu.kz/courses/course-v1:ATU+POiON13+2020_C2/about	2019-2020
Department of Information Technology					
137.	Python Programming Fundamentals	IT01	Izbasarov Erlan Zhakysybaevich	http://open.atu.kz/courses/course-v1:ATU+IT01+2019_C2/about	2018-2019
138.	Koldanbaly esepeterdi Mathcad ortasynda modeldeu	IT02	Orazayeva Layla Iliyaskyzy	http://open.atu.kz/courses/course-v1:ATU+IT02+2019_C2/about	2018-2019
139.	C++	IT03	Kerimakyn Ainur Seitbekova Gulzhan Bizhigitova Dana	http://open.atu.kz/courses/course-v1:ATU+IT03+2019_C2/about	2018-2019
140.	Baskarudyn modelderi men adisteri	IT04	Sharipova Birzhan Dabaevna	http://open.atu.kz/courses/course-v1:ATU+IT04+2019_C2/about	2018-2019
141.	HTML	IT05	Seitbekova Gulzhan Orazbakovna	http://open.atu.kz/courses/course-v1:ATU+IT05+2019_C2/about	2019-2020

142.	Algorithm, director kurylymy w / e programlau	IT06	Ismayilov Amankeldi Yesirkegenovich	http://open.atu.kz/courses/course-v1:ATU+IT06+2019_C2/about	2019-2020
143.	Economy	IT07	Sharipova Birzhan Dabaykyzy	http://open.atu.kz/courses/course-v1:ATU+IT07+2020_C2/about	2019-2020
144.	Web technology	IT08	Kerimbayeva Venera Zharasovna	http://open.atu.kz/courses/course-v1:ATU+IT08+2020_C2/about	2019-2020
145.	JavaScript tyli	IT09	Aituganova Zh.T. Medetbaeva S.A.	http://open.atu.kz/courses/course-v1:ATU+IT09+2020_C2/about	2019-2020
146.	Kory Dereker	IT10	Talpakova Balzhan auezhankyzy, Uypalakova Dinara Mukanovna	http://open.atu.kz/courses/course-v1:ATU+IT10+2020_C2/about	2020-2021
147.	Web bagdarlamlau	IT11	Aitbaeva R.B.	http://open.atu.kz/courses/course-v1:ATU+IT11+2020_C2/about	2020-2021
148.	Mobile device programming	IT12	Kozbakova Ainur Holdasovna	http://open.atu.kz/courses/course-v1:ATU+IT12+2021_C2/about	2020-2021
Faculty of light industry and design					
Department "Design"					
149.	Kiim zhane sön tarihy	D01	Togabaeva Gulvira Shakenovna	http://open.atu.kz/courses/course-v1:ATU+D01+2019_C2/about	2018-2019
150.	Materialman zhymys zhasau	D02	Zhumanazarova Aliya Erbolatkyzy Kenzhebayeva Aknyr Myrkybaykyzy	http://open.atu.kz/courses/course-v1:ATU+D02+2019_C2/about	2018-2019
151.	Old Russian architecture	D03	Parfenova Elena	http://open.atu.kz/courses/course-v1:ATU+D03+2019_C2/about	2019-2020
152.	Renaissance art	D04	Parfenova Elena	http://open.atu.kz/courses/course-v1:ATU+D04+2019_C2/about	2019-2020
153.	Oner tarihy2	D05	Togabaeva Gulvira Shakenovna	http://open.atu.kz/courses/course-v1:ATU+D05+2020_C2/about	2020-2021
154.	TV design	D06	Togabaeva Gulvira Shakenovna	http://open.atu.kz/courses/course-v1:ATU+D06+2021_C2/about	2020-2021

155.	Tekstildik materialdardy court erigish polimerlerdi koldanumen songy ondeu tehnologiyasy	D07	Burkitbai Asemgul	http://open.atu.kz/courses/course-v1:ATU+D07+2021_C2/about	2020-2021
156.	fashion design III	D08	Abilkalamova K.K.	http://open.atu.kz/courses/course-v1:ATU+D08+2021_C1/about	2020-2021
157.	Production of design objects (tattoo)	D09	Shaizadanova Gulnar Seitbekkyzy	http://open.atu.kz/courses/course-v1:ATU+D09+2021_C1/about	2020-2021
158.	Suit Construction III	D10	Shaizadanova Gulnar Seitbekkyzy	http://open.atu.kz/courses/course-v1:ATU+D10+2021_C1/about	2020-2021
159.	Kurastyruy costume III	D11	Shaizadanova Gulnar Seitbekkyzy	http://open.atu.kz/courses/course-v1:ATU+D11+2021_C1/about	2020-2021
160.	Tustanu zhane coloring	D12	Zhumanazarova Aliya Erbolatkyzy	http://open.atu.kz/courses/course-v1:ATU+D12+2021_C1/about	2020-2021
161.	floristry	D13	Zhumanazarova Aliya Erbolatkyzy	http://open.atu.kz/courses/course-v1:ATU+D13+2021_C1/about	2020-2021
162.	Flower science and coloring	D14	Zhumanazarova A.E	http://open.atu.kz/courses/course-v1:ATU+D14+2022_c2/about	2020-2021
Department "Technology of textile production"					
163.	Zhenil onerkasip byyimdarynyn materialtanuy	TTP01	Abishova Aigul Slanbekovna	http://open.atu.kz/courses/course-v1:ATU+TTP01+2019_C2/about	2019-2020
164.	Technological equipment and processes of sewing and knitwear production	TTP02	Abishova Aigul Slanbekovna	http://open.atu.kz/courses/course-v1:ATU+TTP02+2021_C2/about	2020-2021
165.	Knitwear	D08	Ormanova Møldir Əbilmazhinkyzy	http://open.atu.kz/courses/course-v1:ATU+D08+2021_C2/about	2020-2021
Department "State and foreign languages"					
166.	Russian language (level A2)	GiYA01	Mizanbekov Serik Kospievich	http://open.atu.kz/courses/course-v1:ATU+GiYA01+2018_C2/about	2018-2019
167.	Basic English Language A1-A2 ATU	GiYA02	Ainur Abdullayeva	http://open.atu.kz/courses/course-v1:ATU+GiYA02+2019_C2/about	2018-2019
168.	English language	GiYA03	Khadzhiev A.Kh Erdalieva M.S. Karakulova L.Zh Nigmatullaeva G.T	http://open.atu.kz/courses/course-v1:ATU+GiYA03+2020_C2/about	2019-2020

169.	Professionally oriented foreign language	GiYA04	Khadzhiev A.Kh	http://open.atu.kz/courses/course-v1:ATU+GiYA04+2021_C2/about	2020-2021
170.	Short Basic English Course	GiYA05	Ainur Abdullayeva	http://open.atu.kz/courses/course-v1:ATU+GiYA05+2021_C1/about	2020-2021
Department of "Technology and design of products and goods"					
171.	Tigin buyimdarýn constructive ulgileu	TiKIT01	Sarttarova Lazzat Turgunbekovna	http://open.atu.kz/courses/course-v1:ATU+TiKIT01+2020_C2/about	2020-2021
172.	Design of garment production	TiKIT02	Grigorieva Olga Vasilievna	http://open.atu.kz/courses/course-v1:ATU+TiKIT02+2021_C2/about	2020-2021
173.	Technological equipment for sewing production	TiKIT03	Zhaksybek Usenbekov	http://open.atu.kz/courses/course-v1:ATU+TiKIT03+2021_C2/about	2020-2021
Joint venture					
174.	Innovative educational technologies and didactic models	CIET	Serikkyzy M.S. Togabaeva G.Sh.	http://open.atu.kz/courses/course-v1:ATU+IS01+2019_IS/about	2019-2020
175.	Implementation of Massive Open Online Courses (MOOCs): principles, tools, practice	FDO01	Medvedkov E.B. Kalabina A.A. Serikkyzy M.S.	http://open.atu.kz/courses/course-v1:ATU+FDO01+2019_C2/about	2019-2020

Director of CIET E.B. Medvedkov