No. -CIET-03/3602 dated 06/21/2021

Vice-Rector for AQ
Baibolova L.K.
"21"06/2021

Report on the work of the Center for Innovative Educational Technologies
for 2020-2021 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 ATU carries out its activities in accordance with the law "On Education", SES, Decrees of the Government of the Republic of Kazakhstan, legal and regulatory acts of the Ministry of Education and Science of the Republic of Kazakhstan, the Concept of adapting the system of higher and postgraduate education to the digital generation, taking into account the specific conditions in Kazakhstan, orders of the rector of ATU, the HiEdTec project plan.

The staff of the Center for Innovative Educational Technologies is 4 people. (3 vacant place). Director of CIET - Doctor of Technical Sciences, Professor Medvedkov.

The CIET includes:

1. Department of e-learning (DE) - head of the department - vacancy, leading specialist of the DE Kuzin A.A., specialist of the DE Talasbayeva G.

2. Department for the development of digital educational resources - head of the department vacant position, programmer designer - vacancy, programmer animator Abdykhay A.T.

The position of the designer's programmer is performed (0.5 of the rate each by Kuzin A.A. and Abdykhai A.T.).

The main objectives of the CIET are:

- 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 ATU in the national, European and world educational space.

The main tasks of the CIET:

- implementation of innovative educational technologies in 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;
- provision of information and methodological support;
- organization of courses and seminars to support the innovative direction of the professional and personal development of teaching staff, undergraduates and students of ATU;
- 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 contribute to the equipment of lecture halls, and subsequently, laboratories, interactive presentation systems and laptops;
- present innovative educational technologies used in ATU to expert grHRDs, 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 2020-2021 academic year was carried out in accordance with the "Plan for the development, maintenance of the QMS of ATU JSC for 2020", approved by No. -QAM -17/67 dd. -2021 academic year", approved No. PR-2952 dated May 19, 2020.

The most significant achievements in the 2020-2021 academic year year:

- participation in the international project under the Erasmus + program "Modernization of higher education in Central Asia through new technologies (HiEdTec)";
- according to the results of a survey of teachers conducted in accordance with the HiEdTec project, 100% of 380 respondents from ATU, ENU and INEU gave high marks to the work of the CIET;
- according to the results of the competition of video materials on web courses among universities and colleges of Kazakhstan with the participation of Ukrainian universities, held in April-May 2021 by partner universities as part of the HiEdTec project during the forum of electronic educational resources, all three prizes were won by ATU teachers.

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

During the reporting period, CIET developed and approved one documented procedure in Kazakh and Russian languages, other documented procedures, regulations and job descriptions of employees (12 in total, including regulations on the procedure - 4, position of a structural unit - 1, job descriptions - 7) do not need to be adjusted (Table 1). The regulation on the Center for Innovative Educational Technologies was translated into English ATU-HRD-PSU-5.3-2019-53 and sent to the HiEdTec project coordinators.

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-CIET-RPP-7.5.1-2020-05	Regulations on the video lecture	08/12/2020	Not required
2	ATU-IBBTO-ITE-7.5.1-2020-05	Video daris turaly erezhe	08/12/2020	Not required
3	ATU-IBBTO-ITE-7.5.1-2019-01	Uzdik elektrody kurstyn competitions turaly erezhe	09/26/2019	Not required
4	ATU- CIET-RPP-7.5.1-2019-01	Regulations on the competition for the best electronic course	09/26/2019	Not required
5	ATU-IBBTO-ITE-7.5.1-2019-02	Kөpshilikke arnalғan ashhyk online kurstar turaly erezhe	09/26/2019	Not required
6	ATU-CIET-RPP-7.5.1-2019-02	Regulations on Massive Open Online Courses	09/26/2019	Not required
7	ATU-IBBTO-ITE-7.5.1-2019-03	Tsifrlyk bilim I take resourcestaryn azirleu turaly erezhe	09/26/2019	Not required
8	ATU-CIET-RPP-7.5.1-2019-03	Regulations on the development of digital educational resources	09/26/2019	Not required

9	ATU- IBBTO-ITE-7.5.1-2019-04	Uzdik tsiflyk bilim take resource contests turaly erezhe	09/26/2019	Not required
10	ATU- CIET-RPP-7.5.1-2019-04	Regulations on the competition for the best digital educational resource	09/26/2019	Not required
Position of the structural unit (PSU)				
11	ATU-KBB-KBE-5.3-2019-53	Innovativelyk bilim I take technology	09/26/2019	Not required
12	ATU-HRD-PSU-5.3-2019-53	Regulations on the Center for Innovative Educational Technologies	09/26/2019	Not required
Job descriptions (JD) of employees				
1	ATU-HRD-JD-5.3-2019-318	Job description of the director of the center of innovative educational technologies	09/26/2019	Not required
2	ATU-ҚBB-LN-5.3-2019-318	Innovativelyk bilim I take technology	09/26/2019	Not required
3	ATU-HRD-JD-5.3-2019-319	Job description of the head of the department for the development of digital educational resources	09/26/2019	Not required
4	ATU-ҚBB-LN-5.3-2019-319	Tsifrlyk bilim I take resourcestaryn azirleu bölimi bastygynyn lauazymdyk nuskaulygy	09/26/2019	Not required
5	ATU-HRD-JD-5.3-2019-320	Job description of the programmer of the animator of the department for the development of digital educational resources	09/26/2019	Not required
6	ATU-ҚBB-LN-5.3-2019-320	Figures bilim take resources	09/26/2019	Not required
7	ATU-HRD-JD-5.3-2019-321	Job description of a programmer designer of the department for the development of digital educational resources	09/26/2019	Not required
8	ATU-ҚBB-LN-5.3-2019-321	Figures bilim I take resourcestaryn azirleu bolimi programmer-designer lauazymdyk nuskaulygy	09/26/2019	Not required
9	ATU-HRD-JD-5.3-2019-288	Job description of the head of the e-learning department	09/26/2019	Not required
10	ATU-ҚBB-LN-5.3-2019-288	Electrons oқytu bөlimi bastygynyn lauazimdyk nүskaulygy	09/26/2019	Not required
11	ATU-HRD-JD-5.3-2019-289	Job description of the leading specialist of the e-learning department	09/26/2019	Not required
12	ATU-ҚBB-LN-5.3-2019-289	Electrodes oқytu bөlimi zhetekshi mamanynyn lauazymdyk nүskaulygy	09/26/2019	Not required
13	ATU-HRD-JD-5.3-2019-290	Job description of a specialist in the e-learning department	09/26/2019	Not required
14	ATU-ҚBB-LN-5.3-2019-290	Electrodes oқytu bөlimi mamanynyn lauazymdyk nүskaulygy	09/26/2019	Not required

Approved on 04.11.2020 by the rector of JSC ATU "Regulations on the Library of Digital Educational Resources" Portal of Digital Educational Resources ", implemented as part of the project" Modernization of higher education in Central Asia through new technologies (HiEdTec) ".

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

2. Consumer Orientation

The activities of the CIET are carried out in accordance with the "Concept for adapting the system of higher and postgraduate education to the digital generation, taking into account the specific conditions in Kazakhstan", developed and approved by the rector of the ATU. The document was prepared with the participation of the Center with the support of the European Commission within the framework of the Erasmus + project "Modernization of higher education in Central Asia through new technologies" (HiEdTec). The concept has been agreed with the Ministry of Education and Science of the Republic of Kazakhstan. Posted at https://atu.edu.kz/ciet/wp-content/uploads/2022/05/2._KAZAKHSTAN-CONCEPT-RU.pdf

The most important elements of innovative educational technologies are the developed CIET and the functioning online learning platform open.atu.kz and the dot.atu.kz platform, which hosts digital educational resources of ATU teaching staff, as well as a virtual library of web-courses of teaching staff of universities participating in the HiEdTec project.

The online learning platform open.atu.kz is based on EdX. The platform was created and maintained by the CIET staff, technical support is provided by the IT Department. Currently, it hosts **175** massive open online courses (at the end of the last academic year - **126** courses), which are used by the teaching staff of ATU in organizing blended learning and DLT training for everyone.

The dot.atu.kz platform (based on Moodle) is used to train only ATU students in accordance with the WC and the academic calendar of the university.

The moodle.atu.kz platform was created and maintained by CIET employees as part of the Erasmus + project "Modernization of higher education in Central Asia through new technologies." It is designed to ensure the interaction of universities that are part of the HiEdTec academic network. It also hosts a virtual library of web courses and DER developed by universities participating in the project. Since 2020, a section has been created for teaching staff courses of universities participating in the project to create an academic network of EMM-PMT JSC "ATU". The network includes 20 universities of Kazakhstan, which are members of this EMM-PMT. The project implementation period is 2 years, 2020 and 2021, the project manager is the director of the CIET E.B. Medvedkov.

At the end of the academic year, this platform hosted 2 ready-made ATU web courses and 1 ENU course, created according to the HiEdTec project plan. 3 more ATU courses have been loaded at various stages of readiness. According to the EMM-PMT project, 2 ready-made courses by Mikhailenko T.A. were loaded. from Narxoz University. Information about the courses is given in table 2.

Web courses and DER are freely available to everyone.

DERs are interactive presentations made using the Ispring licensed program. The DER catalog contains **1539** titles.

Table 2 - Web courses hosted in the virtual library on the moodle.atu.kz platform

№	Course name	Developer	University	Readiness degree
1.	Quality audit	Assoc. Prof., PhD Mira Serikkyzy	ATU	ready
2.	Art history	Senior Lecturer Gulvira Togabaeva	ATU	ready
3.	Organizational behavior	Assoc. Prof. Asiya Urkumbaeva	ATU	in developing
4.	Processes and apparatuses of food production	Professor, Doctor of Technical Sciences Evgeny Medvedkov	ATU	in developing
5.	Machinery and equipment for mechanical and mass transfer processes in the food industry	Senior Lecturer, PhD Dinara Tlevlessova	ATU	in developing
6.	Innovation management	Senior Lecturer, PhD Gulmira Abildinova	ENU	ready
7.	Business communications in the service industry	Senior Lecturer, Tatyana Mikhailenko	Narxoz	ready
8.	Introduction to the Tourism and Hospitality Industry	Senior Lecturer, Tatyana Mikhailenko	Narxoz	ready

The didactic system of IET (innovative educational technologies) includes: learning objectives, objects (students) and subjects (teachers) of learning, learning content, teaching methods and means, learning outcomes (correctional control subsystem). For its implementation, the educational platform open.atu.kz and dot.atu.kz on the global Internet are used.

Training on the open.atu.kz and dot.atu.kz platforms is carried out according to the scheme: video lectures + lecture notes, presentations (interactive presentations), materials for practical and laboratory work posted on the educational platform + base of control questions and tasks, testing + feedback connection with the teacher.

For distance learning, a catalog of digital educational technologies has been introduced and is being improvedhttp://moodle.atu.kz/, which allows access to digital educational resources (interactive presentations with a survey, video lectures, interactive simulators, animations, etc.).

An important role in the work of the CIET is played by educational work and the dissemination of best practices, training and professional development of teachers.

Outreach and dissemination of best practices 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 from partner universities were trained in digital educational and distance technologies.

Launched a platform to support the academic network HiEdTec and EMM-PMT http://moodle.atu.kz, which contains educational and methodological materials on DLT and a virtual library of digital educational resources. Developed according to the HiEdTec project and approved on 04.11. 2020 by the rector of ATU "Regulations on the virtual library "Portal of Digital Educational Resources". In the virtual library, 1539 DERs and two web courses (3 are under

development) of ATU teachers, one ENU course and two courses of Narxoz University are freely available.

Director of CIET Medvedkov E.B. and Dean of FDL Serikkyzy M.S. the following reports were made at the international and national levels:

1. At the meeting of the EMM-PMT on August 24, 2020 on the topic "On the methodological support of the educational process using distance technologies of higher and postgraduate education." Medvedkov E.B.

2. The second national seminar on modern educational technologies EduTechKG - 2021, 04/28/2021, KSTU. I. Razzakova (Bishkek, KR). Topic: "The role of the IOT ATU center in the era of digitalization." Medvedkov E.B.

3. The second national seminar on modern educational technologies EduTechKG - 2021, 04/28/2021, KSTU. I. Razzakova (Bishkek, KR). Topic: "Distance learning: solving problems of interaction between a teacher and a student in the learning process." Serikkyzy M.S.

4. Webinar "MOOC movement on the National Platform of Open Education of Kazakhstan", Almaty, National Academy of Sciences of the Higher School of Kazakhstan, 11/27/2020. Topic: "The human factor in the implementation of MOOCs in the educational process on the example of ATU". Medvedkov E.B.

5. At a meeting of EMM-PMT at SKU im. M. Auezov, May 21, 2021 on the topic: "Digital educational resources in distance learning."Serikkyzy M.S.

6. "Festival of Electronic Educational Resources", April 5, 2021 training on the topic "The use of digital educational resources and interactive methods in the educational process". Serikkyzy M.S.

This year, mainly by the CIET employees in the form of seminars, with the support of the administration and the leadership of faculties and departments, the following seminars were held for teaching staff and heads of departments of ATU:

1. "DLT as an additional resource for improving the quality in the educational process of the university." Separately for each faculty of ATU, 15-25.06.2020. Medvedkov E.B.

2. "Preparation for the new 2020-2021 academic year under quarantine conditions in the DOT mode." 08.08.2020 year. Medvedkov E.B.

3. "New requirements for the organization of the educational process in a pandemic and their compliance with the concept of the Ministry of Education and Science of modernization of higher education until 2025". 01/10/2021. Medvedkov E.B.

4. "Improving the educational process using the Moodle platform" 22-25.02. 2021. Serikkyzy M.S.

Teacher training is carried out trainers trained under the HiEdTec program with the organizational support of CIET and IPK on online and web courses and training seminars, courses on the development and application of MOOCs, DER in the educational process.

On the basis of the Institute for Advanced Studies were held by trainers Serikkyzy M.S., Togabayeva G.Sh., Zhaparkulova N.I., Kodar Z.M., Urkumbayeva A.R., trained under the program HiEdTech, courses:

1. 06/08-21/2020 "Innovative educational technologies and didactic models" (HiEdTec) for 72 hours.

2. 07-20.09.2020 "Innovative educational technologies and didactic models" (HiEdTec) for 72 hours.

3. 01-15.10.2020 "Innovative educational technologies and didactic models" (HiEdTec) for 72 hours.

4. January 11-22, 2021 "Innovative educational technologies and didactic models" (HiEdTec) for 72 hours.

5. 01-15.03.2021 "Innovative educational technologies and didactic models" (HiEdTec) for 72 hours.

6. 1-28.04.2021 Dean of FDL Serikkyzy M.S. conducted online training for ATU teachers according to the schedule separately for each department on the topic "Improving the educational process using the Moodle platform".

In total, in the academic year under the HiEdTec program from 07/01/2020 to 06/21/2021, 180 teachers from 14 EMM-PMT member universities were trained (Table 3).

Table 3 - The number of certificates issued by organizations according to HiEdTec courses from 07/01/2020 to 06/21/2021

№	Name of company	Number of certificates
1	JSC "ATU"	79
2	Ekibastuz Engineering and Technical Institute named after Academician K.I. Satpaeva	4
3	ZKATU them. Zhangir Khan	15
4	Kazakh National Agrarian University	4
5	Kazakh University of Technology and Business	28
6	Kazakh-American Free University	2
7	Karaganda University of Kazpotrebsoyuz	1
8	Kostanay Engineering and Economic University them. M. Dulatova	8
9	Kostanay Regional University	2
10	NAO "Kazakh Agrotechnical University them. S. Seifullina	10
11	Taraz Regional University named after M.Kh. Dulaty	1
12	University "Narxoz"	2
13	Shakarim University, Semey	4
14	SKSU named after M. Auezov	20
	Total	**180**

Based on the results of the courses, a survey was conducted of the teachers who passed them. The survey involved 380 respondents from different universities, who highly appreciated (about 95%) their quality and organization, noted that all expectations from the courses were justified and even exceeded, the acquired knowledge and skills are useful and are used in the educational process. The comments mainly boiled down to a reduction in the number of group, the division of students by language and degree of preparedness. The survey report is properly formatted and accepted by the project coordinators HiEdTec.

The CIET staff developed educational and methodological materials, incl. educational videos.

The teachers of ATU who completed the courses were given the developed by the program HiEdTec printed copies of the Guide to Innovative Educational Technologies (parts 1 and 2). 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 projecthttps://hiedtec.ecs.uni-ruse.bg/index.php?cmd=cmsPage&pid=38. Entry is also possible through the ATU website.

The following materials are posted on the university website in the CIET section, which were sent in electronic form to the heads of departments for distribution among teachers:

1. Instructions for teaching staff on working with Moodle on the platform dot.atu.kz integrated with Univer. 07.09.2020 year.

2. Video instructions.

3. Instructions for recording sound for a PowerPoint presentation

4. Regulations on the development of digital educational resources

5. Regulations on Massive Open Online Courses
6. Instructions for video lectures
7. Step by step guide to Ispring Suite
8. Video tutorial for recording audio for a PowerPoint presentation
9. How to create a youtube channeland etc.

Training using the CIET chat for heads of departments in WhatsApp is used. Teaching materials in the form of screenshots or short videos are sent to this chat, and the heads send them via chats for teachers of the departments. 5 short lessons were made on preparing and uploading materials to the dot.atu.kz (moodle) platform. The chat also contains links to useful online services.

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 wage supplement for the year.

MOOC and DER competitions are held.

In January 2020-2021 academic year, the contest "The Best ATU Electronic Course" was held. Courses are hosted on the dot.atu.kz platform. The winners were:

1.1. Diploma of the 1st degree and a cash prize in the amount of fifty thousand tenge - Kirbetova Zhanar Sagatovna, Department of Economics and Management.

1.2. Diploma of the II degree and a cash prize in the amount of twenty-five thousand tenge - Zheldibayeva Ainur Amangeldinovna, Department of Food Safety and Quality.

1.3. Diploma of the III degree and a cash prize in the amount of twenty-five thousand tenge - Batikha Anafievna Espaeva, Department of State and Foreign Languages.

From April 2 to May 14, 2021, Toraigyrov University, INEU, ENU and ATU held the "Festival of Electronic Educational Resources", during which a competition for the best web courses was held. Universities, colleges and schools of Kazakhstan and Ukraine participated in the competition (http://festival.tou.edu.kz). The first 3 places were taken by our teachers:

1. Togabaeva Gulvira Shakenovna "History of Arts"
2. Matibayeva Ainur "Commodity science and expertise of food products"
3. Ainur Zheldybayeva

At the beginning of the academic year, the section participants prepared proposals for making additions to the regulatory documents of ATU (Academic policy of ATU, employment contract, qualification characteristics of teaching staff dated May 21, 2021), according to which the work of teachers in the preparation of digital educational resources and electronic courses is mandatory and is taken into account as educational and methodical.

2.1 Analysis of the MOOC development plan, DER for the 2020-2021 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 platformhttp://open.atu.kzAlmaty Technological University, the e-learning department hosts massive open online courses. In total, at the end of the academic year, it contains **175** MOOCs. AT Appendix 1 a list with links to MOOCs is provided. Online courses on the platform contain video-audio materials, interactive and test tasks, surveys, forums (chat), virtual laboratory work.

The number of downloaded MOOCs in the 2020-2021 academic year is **49**. In the context of departments and faculties, it is distributed as follows (Table 4).

Table 4 - Number of MOOCs uploaded to the ATU open.atu.kz platform in the 2020-2021 academic year

№	Faculty, department	Number of courses
	Faculty of food production	**21**
1	Department of Food Technology	5
2	Department "Technology of bakery products and processing industries"	2
3	Department of Food Safety and Quality	7
4	Department of Food Biotechnology	3
5	Department of "Chemistry, chemical technology and ecology"	4
	Faculty of Engineering and Information Technology	**3**
1	Department of Information Technology	3
2	Department" Higher Mathematics and Physics"	0
3	Department "Mechanization and automation of production processes"	0
4	Department of Vocational Training and Social Sciences	0
	Faculty of Economics and Business	**8**
1	Department of Economics and Management	3
2	Department of "Tourism and service"	1
3	Department of "Accounting and Finance"	4
	Faculty of light industry and design	**17**
1	Department of "Design"	10
2	Department "Technology of textile production"	2
3	Department of "Technology, design of products and goods"	3
4	Department "State and foreign languages"	2
	Total for ATU	**49**

Below is the dynamics of filling coursesopen.atu.kz platform, startingfrom the 2018-2019 academic year.

As follows from the figure, the increase in the number of MOOCs in the 2020-2021 academic year has slowed down. This is due to the fact that in connection with the pandemic and the transition to DLT, the university has placed emphasis on the creation of electronic courses for ATU students in accordance with the content of educational programs. For this, the dot.atu.kz platform (based on moodle) was purchased from KazNU, integrated with the previously installed LMS Platonus. The departments and teachers were assigned a plan for the development and implementation of courses by semesters. Teachers were trained to work with moodle and the platform, the methodology for developing and using electronic courses, training and reference materials, training videos were prepared and posted on the ATU website.
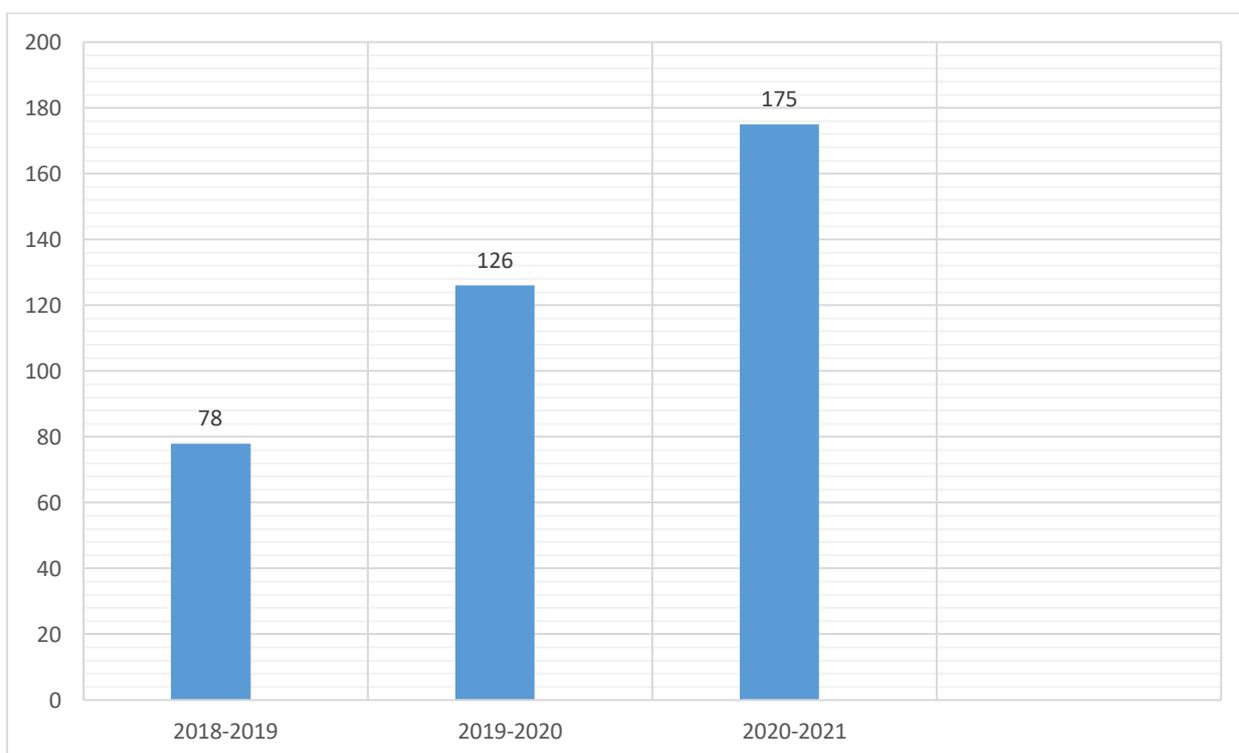
Figure 1 - Number of MOOCs on the open.atu.kz platform

Data on the number of downloaded courses and the implementation of the plan for their development are shown in Table 5.

Table 5 - The number of e-courses uploaded to the ATU dot.atu.kz platform in the 2020-2021 academic year

№	Faculty, department	Number of courses		
		plan	fact	Performance, %
Faculty of food production		**61**	**59**	**96.7**
1	Department of Food Technology	20	10	50
2	Department "Technology of bakery products and processing industries"	14	11	78.5
3	Department of Food Safety and Quality	10	14	140
4	Department of Food Biotechnology	11	11	100
5	Department of "Chemistry, chemical technology and ecology"	6	13	216.6
Faculty of Engineering and Information Technology		**35**	**44**	**125.7**
1	Department of Information Technology	22	13	59.0
2	Department "Higher Mathematics and Physics"	1	4	400
3	Department "Mechanization and automation of production processes"	5	2	40
4	Department of SRS ("Professional training and social sciences")	7	25	357.1
5	Department of Engineering Graphics and Applied Mechanics	0	0	-

		67	54	80.5
Faculty of Economics and Business		**67**	**54**	**80.5**
1	Department of Economics and Management	18	20	111.1
2	Department of "Tourism and service"	22	16	72.7
3	Department of "Accounting and Finance"	27	18	66.6
Faculty of light industry and design		**87**	**76**	**87.3**
1	Department of "Design"	14	24	171.4
2	Department "Technology of textile production"	50	6	12
3	Department of "Technology, design of products and goods"	20	15	75
4	Department "State and foreign languages"	3	31	1033.3
Total for ATU		**250**	**233**	**93.2**

The best indicators are in the departments of "State and foreign languages" (31 courses, plan 1033%), SRS (25, 357%), "Economics and Management" (20, 111.1%). The worst results are in the departments of "Engineering graphics and applied mechanics" (0, not even planned), "Mechanization and automation of production processes" (2.40%), "Technology of textile production" (6.12%).

Conclusions and suggestions for improving activities: Development plan electronic courses uploaded to the dot.atu.kz platform, completed by 93.2%. A total of 250 are planned for the 2020-2021 academic year, of which 233 have been completed.

Faculties and departments provided justifications and explanations for the non-fulfillment of the indicators of the MOOC development plan for the 2020-2021 academic year. From the explanations provided, it follows that despite the numerous activities carried out to clarify the policy in the field of education in the context of a pandemic and to train teachers, the latter were skeptical and many did not take in good faith the methods of teaching on DET recommended by the Ministry of Education and Science of the Republic of Kazakhstan and the university. This testifies to the low performance discipline of teachers and heads of departments who did not fulfill the course development plan. The second factor is the absence in ATU of normative documents approved by the rector and mandatory for implementation in the current academic year.

Corresponding adjustments to the ATU academic policy, qualification characteristics for teaching staff and employment contracts were made only at the end of the academic year and will be used starting from the 2021-2022 academic year. This, as expected, will improve performance discipline and fulfill the plan for the next academic year.

In the catalog of digital educational technologies on the platform http://moodle.atu.kz, the DER development department placed **1539** digital educational resources in the 2020-2021 academic year, which is more than 2.5 times higher than at the end of the last academic year (**964**). 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 and the implementation of the plan for their development in the 2020-2021 academic year is as follows (Table 6).

The Faculty of Light Industry and Design showed the best results, releasing 600 digital educational resources. The best indicators are in the departments of "Technology, design of products and goods" (287 DER, plan 261%), "Food Biotechnology" (234, 107.3%), "Design" (200, 370.3%). The departments of "Engineering Graphics and Applied Mechanics" have the worst results (13, 130%).

Table 6 - The number of DERs uploaded by ATU teaching staff in the 2020-2021 academic year to the moodle.atu.kz platform

№	Faculty, department	Number of DERs		
		plan	fact	performance, %
Faculty of food production		**398**	**513**	**128.8**
1	Department of Food Technology	42	82	195.2
2	Department "Technology of bakery products and processing industries"	18	31	172.2
3	Department of Food Safety and Quality	70	87	124.2
4	Department of Food Biotechnology	218	234	107.3
5	Department of "Chemistry, chemical technology and ecology"	50	79	158
Faculty of Engineering and Information Technology		**260**	**268**	**103**
1	Department of Information Technology	116	76	65.5
2	Department "Higher Mathematics and Physics"	16	20	125
3	Department "Mechanization and automation of production processes"	51	46	90.1
4	Department of Vocational Training and Social Sciences	67	113	168.6
5	Department of Engineering Graphics and Applied Mechanics	10	13	130
Faculty of Economics and Business		**51**	**158**	**309.8**
1	Department of Economics and Management	22	101	459
2	Department of "Tourism and service"	13	31	238.4
3	Department of "Accounting and Finance"	16	26	162.5
Faculty of light industry and design		**256**	**600**	**234.3**
1	Department of "Design"	54	200	370.3
2	Department "Technology of textile production"	37	36	97.2
3	Department of "Technology, design of products and goods"	110	287	261
4	Department "State and foreign languages"	55	77	140
Total for ATU		**965**	**1539**	**159.4**

Conclusions and suggestions for improving activities: The DER development plan was completed by 159.4%. A total of **965** DERs were planned, 1539 were developed and implemented in the educational process. This picture indicates that teachers have mastered the DER production technology and appreciated the use of DERs in the educational process.

However, some of the heads and teachers mentioned above have not yet been actively involved in this process, so the CIET, the leadership of the ATU will have to continue explanatory work and work to motivate the teaching staff, improve performance discipline for the next academic year.

3. Technological renewal and digitalization

In the project's boundaries, "Modernization of higher education in Central Asia through new technologies (HiEdTec)"lecture rooms are being modernized. The Guide to Innovative Teaching Methods was developed and distributed to teachers in two parts in Russian and English. One copy of the manual in Russian and English was transferred to the ATU Scientific Library.

The largest global online education platform Coursera has approved CIET's application to join the Coursera for Campus project during the coronavirus pandemic. This made it possible for students, undergraduates, doctoral students of the university to study online courses from the best universities in the world for free with a certificate.

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. Information on the number of records available is given in Appendix 2.

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 (Figure 2).

Figure 2 - Video Recording Studio

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.

To improve teaching technologies for full-time students, 17 lecture rooms are equipped with interactive presentation systems, including interactive whiteboards, personal computers or laptops, and there are also classrooms for practical classes with easily moved furniture that allows you to quickly transform seating arrangements for teamwork and project work. with digital support. During 2020 and 2021, additional equipment for interactive classrooms with ultra-short-throw projectors was purchased, which, after installation, will bring their total number to 42 (Figure 3).

The university has a library with a large digitized fund of educational and scientific literature, which is constantly growing through the receipt of publications of our teachers and scientists in pdf format, as well as the digitization of existing paper publications.

To create the DER, the university purchased the licensed program "ISpring", which is installed on computers in the CIET and is available for teachers to work with. The free version of this program is widely used by teachers.

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

Figure 3 - Interactive classes

During the implementation of the project "Modernization of higher education in Central Asia through new technologies", the following works were carried out:

- Purchased multimedia equipment (interactive whiteboards, interactive projectors, monoblocks and tablets, speakers, etc.) for a total of 42 classrooms;
- Increased Internet bandwidth up to 1 Gb / s;
- Additional server equipment was put into operation for the uninterrupted operation of the educational resources of the university.
- 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 hosts 2 out of 5 planned ready-made web courses for ATU teachers and 3 are in the process of completion, as well as 3 web courses for teachers from ENU (1 -HiEdTec) and NARKHOZ University (2 - EMM-PMT).
- The number of electronic courses on the open.atu.kz platform has been increased to **175**, on the new platform dot.atu.kz - **233**. Within 2 years, it is planned to provide 80% of disciplines with electronic courses.
- The number of DERs developed this academic year on the moodle.atu.kz platform is 1539, over the next 2 years all disciplines will be fully provided with the necessary set of DERs.
- All teachers were trained in the development of DER and e-learning courses. CIET distributed 100 sets (parts 1 and 2) of the Guide to Innovative Educational Technologies to the teachers who took the courses.
- Reports were prepared and submitted based on the results of a survey of teachers from partner universities on the quality of courses for trainers and teachers, as well as CIET.
- Director of CIET Medvedkov E.B. and head Uvakasova L.T. took part in the preparation of the report and participated in the interim monitoring of the Erasmus office in Kazakhstan, held at the ENU on September 30, 2021 in Nur-Sultan.

In the next academic year, it is planned to continue work on completing interactive classes. To do this, the deans, together with the heads of departments, need to determine the required number of classes and select audiences for their equipment.

Based on the results of the work of the CIET for the entire period of its existence, a survey of teachers was conducted in the Google service in April-May 2021. Questionnaire developed by European project partners HiEdTec. The survey involved 98 respondents from ATU, who highly appreciated (about 95%) the quality of the work of the CIET, noted that the consultations and support of teachers are at a high level, the knowledge and skills gained are useful and are used in the educational process. The survey report is properly formatted and accepted by the project coordinators HiEdTec.

With the spread of digital and distance learning technologies, it is important to provide consultations and technical support to teachers. In connection with the quarantine introduced in the 2020-2021 academic year, 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 and etc.). Face-to-face individual consultations were held by appointment in compliance with sanitary requirements. All educational and methodological documentation is posted on the website of ATU and CIET https://atu.edu.kz/ciet/?page_id=170.

To provide DLT, it was decided to use a platform based on moodle http://dot.atu.kz, integrated with LMS Univer, for placement of educational materials in the form of electronic courses. Specialists of the e-learning department organized the creation by ATU teachers of open online courses in the MOOC format, and filmed video materials and lectures (Figure 2), developed a methodology for using information resources for IET, and also constantly master and maintain in operation software, information and technical means of CIET.

For the work of teachers who develop electronic, 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 platformhttp://moodle.atu.kz.

The CIET staff monitors the implementation of the MOOC development plan, the DER. At the beginning of the academic year, the CIET staff carried out preparatory work, which includes: documentation, regulations, instructions for the development of MOOCs, DERs, as well as the time for consultations for the 2020-2021 academic year were posted on the site.

Training and consultations are held with teachers on 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, What Sapp, Skype, Team Viewer etc. .d.

An analysis of the acts of introducing innovative teaching methods showed that in ATU over the past 3 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 - a formula, an algorithm for compiling text: C - C / C - PR - T., discussion, on-line tests, construction of syncwine; 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.

Social networks are used in the educational process, mainly Instagram. Started equipping the common areas of the university with interactive information screens.

For teaching staff ATU CIET developed and posted on the websitehttps://ciet.atu.kz/instructions and recommendations for the creation of MOOCs and DERs.

An electronic course is created for one discipline and includes all the necessary teaching materials in accordance with the form F.CIET-7.5.1-2019-02-01. The course is divided according to the academic calendar into 15 weeks. Each week contains video lectures, lectures in text format, lecture presentations (interactive presentations are welcome), materials for practical exercises,

control tasks for independent work, tests for self-examination. If provided by the program, virtual laboratory work. Additional materials: videos, animations, links to Internet sources, etc.

There may also be tasks for working on the material of the module, which are later subject to evaluation by the teacher, and sessions of interactive communication between the teacher and a group of students in the forum mode.

Requirements for the course: high-quality, bright and memorable design of materials. It is also necessary to accompany the course with a teacher: online lectures, consultations, alerts (reminders), etc.

MOOC materials should be visual, understandable, unambiguous and presented in a way that facilitates understanding of the logic of the functioning of the course as a whole and its individual parts, in order to provide users with the ability to communicate interactively.

Quarantine education also provides for online classes: lectures, practical and seminars, laboratory with remote access using the computers of the department and the TeamViewer program. Classes are held according to the approved schedule using Zoom.

4.   Functioning of the QMS

The effectiveness of internal audits. In total, according to the schedule of internal audits on 10/05/2020, 1 audit was carried out according to the plan on the basis of Order 122-AHZ dated 09/23/2020 "On conducting an internal audit of the ATU QMS".

During the audit, no violations were identified, and there were no recommendations for improvement.

There were no audits according to the schedule of external audits.

4.1   Information on the implementation of the action plan to improve the QMS for 2020-2021 academic year

Date of approval of the CIET plan 05/20/2020 / ATU QMS plan 01/13/2020
How many points are included in the CIET plan / QMS plan ATU 24/14 CIET,
Of them completed: 23/12
failed: 1/2.

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

Analysis of the results: the action plan for the development and maintenance of the ATU QMS was completed by 91.1%, except for the items indicated in the table above. For other items all planned activities in terms of QMS ATU, CIET were completed in full and on time.

Suggestions for improvement: no

Analysis of the documented information developed by the CIET that ensures the functioning of the QMS for the 2020-2021 academic year.

№	An identification number	Title of the document	Approval date	Date of change
1	2	3	4	5
Provisions on the procedure for action (RPA)				
1	ATU-CIET-RPP-7.5.1-2020-05	Regulations on the video lecture	20.08.2020	Not required
2	ATU-IBBTO-ITE-7.5.1-2020-05	Videodaris turaly erezhe	20.08.2020	Not required

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

5. Conclusions and proposals on the work of the CIET in the 2020-2021 academic year

In general, for the reporting 2020-2021 academic year, the CIET team carried out work aimed at optimizing and improving the educational process using innovative educational technologies.

Created during the academic year, approved and used 2 new internal regulations and the regulation on the virtual library of digital educational resources, made under the HiEdTec program in Russian and English.

Teachers were trained to create and use EC, DER, conduct online classes, use modern digital technologies and didactic models in the educational process. The process of development and placement of MOOCs and DERs on educational portals and in the virtual library was supported throughout the academic year.

In the current academic year, in order to encourage teachers to create electronic lectures and video materials, digital educational resources and electronic courses, changes were made to the regulatory documents of the ATU regarding the improvement of the digital qualification of teaching staff and the provision of the educational process with digital resources: academic policy, qualification characteristics and a standard employment contract.

A MOOC competition was held at ATU and participation in the republican competition of electronic courses for ATU teachers, who became its winners, was organized.

Work has been carried out to create and introduce modern means and methods of IET into the educational process. During the academic year, **49** MOOCs of the university's leading teachers were mounted on the open.atu.kz platform and **233** - on the dot.atu.kz platform. Placed for the academic year **1539** DER in the catalog on the moodle.atu.kz platform.

The implementation of the HiEdTec project plan was ensured, 3 reports were written on the evaluation of courses of trainers and teachers and the activities of the CIET. A report has been prepared and preventive monitoring of the Erasmus + Kazakhstan office has been completed. The director of the CIET made reports at conferences and seminars of the republican and international level on the project and the use of the CIET;

In the virtual library of the HiEdTec project on the moodle.atu.kz platform, more than **1539** DERs and two web courses (3 are under development) of ATU teachers, one ENU course and two Narxoz University courses are freely available.

According to the results of a survey of teachers conducted in accordance with the HiEdTec project, 100% of 380 respondents from ATU, ENU and INEU gave high marks to the work of the CIET.

SWOT-ANALYSIS

S(strength) - strengths	**W**(weakness) - weaknesses
➢ Availability of qualified staff ➢ Video recording studio ➢ Equipped with the necessary equipment and software ➢ Security with regulatory documents	➢ Not fully staffed ➢ The need to update the online course platform annually due to new network requirements
O (opportunity) - favorable opportunities	**T (threat) - anxiety, obstacles**
➢ Management support ➢ Teaching teaching staff innovative technologies for creating and using DER, web courses ➢ Availability of an educational portal for hosting the DER and the creation of a virtual library ➢ 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 ➢ Creation of an academic network of partner universities EMM-PMT ➢ Participation in the implementation of the HiEdTec project of the Erasmus + program	➢ Service failures, 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 ➢ Weak performance discipline and high teaching load of teaching staff ➢ The work of teaching staff in remote mode

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;
➢ Measures 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;
➢ Provideddevelopment and implementation of innovative educational technologies in the educational process;
➢ A platform for online courses and an electronic catalog of digital educational resources have been developed.
➢ The process of functioning of the platform of online courses and the virtual library of digital educational resources is controlled;

➢ Installed software for organizing the development of online courses and digital educational resources;

Suggestions for correcting deficiencies:
➢ Organization of a sociological survey "Application of innovative teaching methods";
➢ Conducting a survey to study the satisfaction of the teaching staff with the activities of the CIET;
➢ Conducting a survey to study the satisfaction of students of the DER and IET teachers;
➢ Development of an action plan based on the results of surveys;
➢ Amendments to the ATU regulations (academic policy, teaching staff job descriptions, teaching staff contracts), regulating the duties of teachers in the development of web courses and DER;
➢ Modernization and improvement of ATU educational platforms (moodle.atu.kz, dot.atu.kz and open.atu.kz);
➢ Conducting MOOC and DER competitions for teachers with a cash prize fund;
➢ Organization of regular courses and seminars for teaching staff on DLT and ICT;
➢ Promotion of ATU e-courses on the National platform moocs.kz;
➢ Control and adherence to the schedule for the development of MOOCs, DER.
➢ Participate in national and international events related to innovative educational technologies, increasing the awareness and image of ATU;
➢ Develop measures to improve the interaction between teaching staff and students on the online course platform;
➢ Improve the online training program (webinars, etc.) for the development of digital educational resources in order to additionally attract students from enterprises, organizations and institutions on the principle of "lifelong learning";
➢ Continue work on completing interactive classes;
➢ Ensuring implementation of the HiEdTec project plan.

Director of CIET E.B. Medvedkov 21/06/2021

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 tamaқtanuyna arnalғan 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.	Sүt zhәne sүt 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+TTP06+2020_C2/about	2019-2020
7.	Et zhane balyқ өnerkәsibi kәsiporyndaryndағy technochemistry baқylau 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 zhүyesi 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	Izembaeva 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 Tүmaikyzy	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 Rakhyshovich	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 қauipsizdigi negizderi	BiKPP	Asilova Gulzhan Mukhangalievna	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 Mukhangalievna	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 Baibatyrovna	http://open.atu.kz/courses/course-v1:ATU+BKiPP09+2019_C2/about	2019-2020
65.	Tagam onimderinin қauipsizdigi	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	Urkumbaeva Asiya Rakhimzhanovna	http://open.atu.kz/courses/course-v1:ATU+EiM01+2018_C2/about	2018-2019
78.	Kasiporyn economics	EiM02	Abutalipova Zhuldyz Abaққyzy	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 қызмет korsetu salasyndagy zharnama	TiSO05	Tokbergenova Ulzhalgas Abdugapparovna	http://open.atu.kz/courses/course-v1:ATU+TiSO05+2019_C2/about	2018-2019
98.	Meymankhana zhane meyramkhana 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 үy biznesindegi kәsipkerlik қyzmet 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.	Karzhylyk 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	Makisheva 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	Kalieva 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 zhǝne koldanbaly mechanics	IGiPM02	Akimkhanova Aigerim Anarbekovna Mazhieva Elba Myrzakhmetovna Akyngaziev Zhamesh Akyngazievich	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.	Тамақ өндірісінің протестері мен 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 Mүtashқyzy	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 Zhaksybaevich	http://open.atu.kz/courses/course-v1:ATU+IT01+2019_C2/about	2018-2019
138.	Koldanbaly esepterdi 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 Derekter	IT10	Talpakova Balzhan auezkhankyzy, 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 sən 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 Aқnүr Muқtybaykyzy	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 onerkәsip bүyimdarynyn 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 Mөldir Әbilmazhinқyzy	http://open.atu.kz/courses/course-v1:ATU+D08+2021_C2/about	2020-2021
Department "State and foreign languages"					
166.	Russian language (level A2)	GiIYA01	Mizanbekov Serik Kospievich	http://open.atu.kz/courses/course-v1:ATU+GiIYA01+2018_C2/about	2018-2019
167.	Basic English Language A1-A2 ATU	GiIYA02	Ainur Abdullayeva	http://open.atu.kz/courses/course-v1:ATU+GiIYA02+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 buyimdaryn 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

Information on uploading video of online classes of teaching staff on YouTube channel in 2020-2021 academic year

Department	Link	Number of videos
Faculty of "Design, technology of textiles and clothing"		
"State and foreign languages"	https://www.youtube.com/channel/UCrlW0VagTz5sRqbgqvjhSHw	492
"Design"	Not available on tech. reasons	-
"Technology of designing products and goods"	https://www.youtube.com/channel/UCEGrtuVf6j0obZOhVBgDwZQ	111
"Technology of textile production"	https://www.youtube.com/channel/UCfF-KPL7xh22wYDnJt8e-AA	81
Total Faculty of "Design, technology of textiles and clothing"		**684**
Faculty of Engineering and Information Technologies		
"Higher Mathematics and Physics"	https://www.youtube.com/channel/UcleufydAN5u_BSV1S_xaotA	287
"Engineering Graphics and Applied Mechanics"	https://www.youtube.com/channel/UCNBIZf-foNkGtA0IZ6rwV8A	78
"Information Technology"	https://www.youtube.com/channel/UCmISUJ9s4A_lxxpSjYH74pw	548
"Mechanization and automation of production processes"	https://www.youtube.com/channel/UCwEZepKddSZJSPn13Jn_Wrw	200
"Socio-humanitarian disciplines"	https://www.youtube.com/channel/UCqQFlZMIcE5ItuPD1HBW2Eg	536
Total Faculty of Engineering and Information Technologies		**1649**
Faculty of Food Production		
"Food Safety and Quality"	https://www.youtube.com/channel/UCSszb05s3sqSNKazAjPMu4Q	231
"Food Biotechnology"	https://www.youtube.com/channel/UcvUpW0CcsIhnIVfe98yGeSg	388
"Food Technology"	https://www.youtube.com/channel/UCeLYAtwuExX07G-RS9L08Sw	438
"Technology of bakery products and processing industries"	https://www.youtube.com/channel/UClOJDfMQET_0uYKnAmgBX1Q	70
"Chemistry, Chemical Technology and Ecology"	https://www.youtube.com/channel/UCBLtJ9_Q_8743KwnziB7Agg	232
Total Faculty of Food Production		**1359**
Faculty of Economics and Business		
"Accounting and Finance"	https://www.youtube.com/channel/UCVFUDpgwZG0e0Dmu8dWdSOw	333
"Tourism and service"	https://www.youtube.com/channel/UchNyiOl5-NWEeFDW1qgCrCA	76
"Economics and Management"	https://www.youtube.com/channel/UCtVWVxafVWDfWQC4tgcE0-w	297
TotalFaculty of Economics and Business		**706**
Total ATU		**4398**

Director of CIET E.B. Medvedkov 21/06/2021