

MINISTRY OF EDUCATION AND SCIENCE OF THE REPUBLIC OF KAZAKHSTAN  
NJSC "Eurasian National University named after L.N. Gumilyov"

APPROVED  
Dean of the Faculty of Information  
technologies  
*Sh.Zh.*  
"01" 12 2023

REPORT  
about research work  
Department of Information Security  
(name of the department)  
for 2023

REVIEWED

at a meeting of the Faculty Council / *at a meeting of the department*

Protocol No *A*

"*30*" *11* 2023

Astana - 2023

## 1. STAFFING

### 1.1 Winners of awards, honorary titles (international, republican):

#### 1) State awards:

**Medals of the Republic of Kazakhstan** (“Erligi ushin”, “Zhouyngerlik erligi ushin”, “Eren enbegi ushin”, “Shapagat”)

**Honorary titles of the Republic of Kazakhstan** (“Kazakhstannyn enbek sinirgen kairatkeri”)

2) Departmental awards: Badge “Y. Altynsarin ”, the badge“ Kylymdy Damyta qa sirgen rygi yshin ”, the badge“ bilim bie isinin qrmetti kyzmetkeri ”, the badge“ salasynya yzdidigi ”

#### 3) The best university lecture

Aimicheva G.I. – title of Best University Lecture

#### 4) Membership in Academies

5) Holders of international titles and diplomas

6) Certificates from ministries and departments

#### **Certificate of honor**

Satybaldina D.Zh. - “Kurmet gramatasy” on behalf of the rector of ENU named after L.N. Gumilyov, 2023

Abduraimova B.K. - Қ Р FZHM ministerden kurmet gramatasy, 2023.

Nurusheva A.M. – grant funding for young scientists under the “Zhas Galym” project for 2023-2025

Tokkulieva A.K. - “Algys Khat” on behalf of the rector of ENU named after L.N. Gumilyov, 2023

### 1.2 Prizes received in the field of science, scientific scholarships (including “Bolashak”) in the Republic of Kazakhstan

	FULL NAME, uch. degree, position	Name of the competition, date and location	Result
1	Not available	-	-
<i>Total: -</i>			

### 1.3 Received awards in the field of science, scientific scholarships, grants (ErasmusMundus, Tempus, DAAD, etc.) abroad

No.	FULL NAME, uch. degree, position	Name of the competition, date and location	Result
1	Not available	-	-
<i>Total:-</i>			

### 1.4 Availability of scientific schools

## 2. MAIN RESULTS OF SCIENTIFIC ACTIVITIES OF STAFF

### 2.1. Main (significant) results of scientific activity

Teachers of the Department of Information Security carry out research activities together with the Research Institute of Information Security and Cryptology.

The Research Institute “Information Security and Cryptology” has been operating since 2012 ( <http://iisc.kz/> ). The director of the institute is Candidate of Physical and Mathematical Sciences, PhD, Associate Professor (Associate Professor), Professor of the Department of Information Security D.Zh. Satybaldina. (from October 2022)

Research and development activities of the institute are implemented in the following areas:

1. Security of information systems;
2. Coding and protection of information;
3. Applied cryptography;
4. Security in cloud computing;
5. Hardware information protection;
6. Development of crypto-algorithms;
7. Software solutions.

The Research Institute “Information Security and Cryptology” is implementing the following projects of grant and program-targeted funding of the Science Committee of the Ministry of Education and Science of the Republic of Kazakhstan:

- AP09258274 “Research and development of methods and means for generating S-boxes for symmetric cryptographic algorithms”, scientific supervisor - Seitkulov E.N., 2021-2023.
- AP14869013 “Research and development of a cryptographic system for backup storage of confidential data in secure servers”, scientific supervisor - Seitkulov E.N., 2022-2024.
- BR18574045 “ Development of methods, models and technologies to improve the level of cybersecurity of cellular communication networks in the Republic of Kazakhstan ”, PCF project, scientific supervisor - Seitkulov E.N., 2023-2024.
- AP19175746 “ Development of software tools for assessing cybersecurity risks of critical infrastructure systems”, grant funding for young scientists under the project “Zhas Alym ” for 2023-2025, supervisor - A.M. Nurusheva, postdoctoral research advisor - D.Zh. Satybaldina, 2023 -2025

The department is implementing the following projects of grant and program-targeted funding of the Science Committee of the Ministry of Education and Science of the Republic of Kazakhstan :

- AP14872171 “Development of models and algorithms for processing and transferring sensory data in the production of multitasking gas analytical systems”, scientific supervisor Satybaldina D.Zh., 2022-2024.
- AP13268857 “Development of a new wearable robotic exoskeleton for the rehabilitation of the ankle joint”, scientific supervisor - Postdoctoral student of the Department of Information Science Balbaev G.K., scientific advisor of the postdoctoral student - Seitkulov E.N.,

2022-2024.

- AP19680157 "Research and development of intelligent multi-sensor systems for monitoring the gas environment of storing vegetables and fruits", scientific supervisor: Seilov Sh.Zh., 2023-2025.

2.2 Scientific publications in international scientific publications Web of Science ( *provide a “screenshot” from the database* ):

No. p /p	FULL NAME. author(s) (indicate in English)	Publication title	Journal name, year, number, page, ISSN	journal impact factor
<i>Department</i>				
1.	Petrenko, V., Tebueva, F., Antonov, V., Sakolchik, A., <b>Satybaldina, D.</b>	Evaluation of the iterative method of task distribution in a swarm of unmanned aerial vehicles in a clustered field of targets	Journal of King Saud University - Computer and Information Sciences, 2023, 35(3), pp. 283–291. SJR – 0.971 (2021) , Indexed in Web of Science, Scopus: Q1, percentile according to CiteScore – 95. <b>DOI</b> 10.1016/j.jksuci.2023.02.022 <a href="https://www.webofscience.com/wos/woscc/full-record/WOS:000991207000001">https://www.webofscience.com/wos/woscc/full-record/WOS:000991207000001</a>	Journal Citation Indicator = 1.59 (2022) , Journal Impact Factor= 6.9 (2022)
2.	<b>Aliya Abdiraman</b> , Nikolaj Goranin , Simas Balevicius , <b>Assel Nurusheva</b> , Inga Tumasonienė	Application of Multicriteria Methods for Improvement of Information Security Metrics	Sustainability 2023, 15(10), 8114; Indexed in Web of Science: Q2, Scopus: Q1, <a href="https://doi.org/10.3390/su15108114">https://doi.org/10.3390/su15108114</a>	Journal Citation Indicator = 0.65 (2021) Journal Impact Factor = 3.889 (2021)
3.	Nazyrova, A., Milosz, M., Bekmanova, G., Omarbekova, A., Mukanova, A., & <b>Aimicheva</b> , G.	Analysis of the Consistency of Prerequisites and Learning Outcomes of Educational Program Courses by Using the Ontological Approach.	Applied Sciences, 13(4), 2661.	Q2, Journal Impact Factor =2.838(2021 )

4	Akanov A, <b>Sagindykov K.</b>	Providing Access Isolation to Information in the Database	International journal of Interactive Mobile Technologies, VOL. 17 NO. 14 (2023) , Scopus: Q2, <a href="https://doi.org/10.3991/ijim.v17i14.36073">https://doi.org/10.3991/ijim.v17i14.36073</a>	60% 314/792 Computer Science Applications
5	Zaytsev V., Fedorov, F.S., Goikhman, B., Maslennikov, A., Mashukov, V., Simonenko, N.P., Gabdullina D., Kovalenko O., Simonenko E.P., Kvitko P., Penkova P., <b>Satybaldina D., Seilov S.</b> , Dubinina T., Gorin D. & Nasibulin, A.G.	Rapid and accurate quality assessment method of recycled food plastics VOCs by electronic nose based on Al-doped zinc oxide	Journal of Cleaner Production. – 2023. – V. 418. – P. 138042. Indexed in Web of Science: Q1, Scopus: Q1 <a href="https://www.webofscience.com/wos/woscc/full-record/WOS:001049235800001">https://www.webofscience.com/wos/woscc/full-record/WOS:001049235800001</a>	Journal Citation Indicator = 1.53 (2022) , Journal Impact Factor= 11.1 (2022)
6	Momynkulov Z., Dosbayev Zh., Suliman A., Abduraimova B., Smailov N., Zhekambayeva M., Zhamangarin, D	Fast Detection and Classification of Dangerous Urban Sounds Using Deep Learning	Computers, Materials and Continued , Volume 75, 2023, pp. 2191 – 2208, DOI10.32604/cmc.2023.036205 ( <a href="#">Web of Science</a> ,Q2), (Scopus, percentile -79)	Journal Citation Indicator = 0.8 (2022) , Journal Impact Factor= 3.1 (2022)
<b>Total: 6</b>				

2.3 H-index according to the Web of Science database:

No. _	FULL NAME. uch. degree, position	h-index
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1	Satybaldina D.Zh., Ph.D., PhD, associate professor (associate professor)	3
2	Seitkulov E.N., Ph.D., Associate Professor, Acting professors	3
3	Shaikhanova A.K., PhD, associate professor , acting professors	2
4	Nurusheva A.M., PhD, acting associate professor	3
5	Ospanova A.B., Ph.D., Acting associate professor	2
6	Sagindykov K.M., Ph.D., Associate Professor	1
7	Seilov Sh.Zh., Ph.D., Doctor of Economics Professor	2
8	Tashatov N.N., Ph.D., Acting associate professor	1
9	Konyrkhanova A.A., PhD, acting associate professor	1
10	Shakhmetova G.B., master's degree, senior lecturer	1
11	Aimicheva G.I., master, senior lecturer	3
12	Akhmetova Zh.Zh., PhD, acting associate professor	2
13	Tashenova Zh.M., PhD, senior lecturer	1
14	Urynbasarova A.Zh., master, senior lecturer	1
15	Korzhaspaev A.E., master, senior lecturer	1
16	Isaynova A.N., master, senior lecturer	1
17	Tokkulieva A.K., master, senior lecturer	1
18	Bekeshova G.B., master, senior lecturer	1
19	Sisenov N.M., master, senior lecturer	1
20	Zharkimbekova A.T., PhD, senior lecturer	2

21	Tokseit D.K. PhD, senior lecturer	2
<b>Total: 21</b>		

2.4 Scientific publications in international scientific publications Scopus ( provide a “screenshot” from the database ):

No. p /p	FULL NAME. author(s) (indicate in English )	Publication title	Journal name, year, number, page, ISSN	impact factor (SJR)
<i>Department</i>				
1.	Tursyngalieva G, <b>Sagindykov K</b> <b>Konyrkhanova A</b> Niyazova R, Sydykova A	Modeling the dynamical ethnic processes in multinational society”, Journal of Modeling in Management	Journal of Modeling in Management, 2023, 18(1), pp 61-71, Scopus percentile -64, <a href="https://www.scopus.com/authid/detail.uri?authorId=57194623313">https://www.scopus.com/authid/detail.uri?authorId=57194623313</a>	0.465
2	Petrenko, V., Tebueva, F., Antonov, V., Sakolchik, A., <b>Satybaldina, D.</b>	Evaluation of the iterative method of task distribution in a swarm of unmanned aerial vehicles in a clustered field of targets	Journal of King Saud University - Computer and Information Sciences, 2023, 35(3), pp. 283–291. SJR – 0.921 (2022 ) , Indexed in Web of Science, Scopus: Q1, percentile according to CiteScore – 84. <b>DOI 10.1016/j.jksuci.2023.02.022</b> <a href="https://www.scopus.com/record/display.uri?eid=2-s2.0-85149772915&amp;origin=resultslist&amp;sort=plf-f">https://www.scopus.com/record/display.uri?eid=2-s2.0-85149772915&amp;origin=resultslist&amp;sort=plf-f</a>	0.924
3	<b>Aliya Abdiraman</b> , Nikolaj Goranin , Simas Balevicius , <b>Assel Nurusheva</b> , Inga Tumasonienė	Application of Multicriteria Methods for Improvement of Information Security Metrics	Sustainability 2023, 15(10), 8114; Indexed in Web of Science: Q2, Scopus: Q1, Scopus percentile -83, <a href="https://doi.org/10.3390/su15108114">https://doi.org/10.3390/su15108114</a>	0.664
4	Nazyrova, A., Milosz, M., Bekmanova, G., Omarbekova, A., Mukanova, A., & <b>Aimicheva</b> , G.	Analysis of the Consistency of Prerequisites and Learning Outcomes of Educational Program Courses by Using the Ontological Approach.	Applied Sciences, 13(4), 2661.	0.507
5	Muratbekov, M., <b>Muratbekov, M.</b> Altynbek, S.	Maximal regularity and two-sided estimates of the approximation numbers of the nonlinear Sturm–Liouville equation solutions with rapidly	Mathematical Methods in the Applied Sciences this link is disabled, 2023	0.628

		oscillating coefficients in L2(R)		
6	Muratbekov, M., Abylayeva, A., Muratbekov, M.	Estimates of singular numbers (s\$\$ s \$\$-numbers) and eigenvalues of a mixed elliptic-hyperbolic type operator with parabolic degeneration	Mathematical Methods in the Applied Sciences this link is disabled, 2023, 46(6), pp. 6368–6380	0.628
7	Naizagarayeva, A., Abdikirimova, G., <b>Shaikhanova, A.</b> , Glazyrina, N., Bekmagambetova, G., Mutovina, N., Yerzhan A., Tanirbergenov A.	Detection of heart pathology using deep learning methods	International Journal of Electrical and Computer Engineering (IJECE), Vol.13, No.6, 2023, pp. 6673~6680. Scopus percentile - 65 DOI: <a href="http://doi.org/10.11591/ijece.v13i6.pp6673-6680">http://doi.org/10.11591/ijece.v13i6.pp6673-6680</a>	0.325
8.	<b>Shaikhanova, A.</b> , Tleubayeva, A., Ospan, B., Darmenkyzy, N., Abu, M., Sultan A.	Machine Learning Expert System for Recognizing Emotions in Text “Umai Cloud Services”	2023 IEEE International Conference on Smart Information Systems and Technologies, Proceedings, 198 DOI: <a href="https://doi.org/10.1109/SIST58284.2023.10223554">10.1109/SIST58284.2023.10223554</a>	-
9.	Zaytsev V., Fedorov, F.S., Goikhman, B., Maslennikov, A., Mashukov, V., Simonenko, N.P., Gabdullina D., Kovalenko O., Simonenko E.P., Kvitko P., Penkova P., <b>Satybaldina D., Seilov S.</b> , Dubinina T., Gorin D. & Nasibulin, A. G.	Rapid and accurate quality assessment method of recycled food plastics VOCs by electronic nose based on Al-doped zinc oxide	Journal of Cleaner Production. – 2023. – V. 418. – P. 138042. Scopus percentile - 99% <a href="https://www.scopus.com/record/display.uri?eid=2-s2.0-85171627643&amp;origin=resultlist&amp;sort=plf-f">https://www.scopus.com/record/display.uri?eid=2-s2.0- 85171627643&amp;origin=resultlist&amp;sort=plf-f</a>	1.981
10	<b>Satybaldina, D.</b> , Baydeldinov, M., <b>Issainova, A.</b> , Alseitov O., <b>Konyrkhanova A., Akhmetova, Z., Seilov, S.</b>	Artificial Olfactory System for Distinguishing Oil-Contaminated Soils	WSEAS Transactions on Environment and Development, 2023, 19, pp. 951–960 Scopus percentile - 45% <a href="https://www.scopus.com/authid/detail.uri?authorId=57193740669#">https://www.scopus.com/authid/detail.uri?authorId=571937406 69#</a>	1.7
11	Nurbekova, Z., <b>Aimicheva, G.</b> ,	A Decision-Making Platform for Educational Content Assessment	International Journal of Engineering Pedagogy (iJEP), 13(7), pp. 4–23. <a href="https://doi.org/10.3991/ijep.v13i7.41689">https://doi.org/10.3991/ijep.v13i7.41689</a>	0.464



	Baigusheva, K., Sembayev, T., & Mukametkali, M.	Within a Stakeholder-Driven Digital Educational Ecosystem.	CiteScore Scopus (2022) - 81%	
12	Momynkulov Z., Dosbayev Zh., Suliman A., <b>Abduraimova B.</b> , Smailov N., Zhekambayeva M., Zhamangarin, D	Fast Detection and Classification of Dangerous Urban Sounds Using Deep Learning	Computers, Materials and Continued , Volume 75, 2023, pp. 2191 – 2208, DOI10.32604/cmc.2023.036205 ( <u>Web of Science</u> ,Q2), (Scopus, percentile -78)	0.525
13	N. Katayev, A. Altayeva, B. <b>Abduraimova</b> , N. Kurmanbekkyzy, Zh. Madibaiuly, B. Kulambayev	Development of a Framework for Classification of Impulsive Urban Sounds Using BiLSTM Network	(IJACSA) International Journal of Advanced Computer Science and Applications, Vol. 14, No. 11, 2023 Scopus (Q3)	0.9
14	Kadyrov, A., Ussenbayev, A., Kurenkeyeva, D. Kurenkey, B. Abdrakhmanov, S. <b>Tashatov, N.</b>	Principal component analysis in the epidemiology of diarrhea in calves	Indonesian Journal of Electrical Engineering and Computer ScienceOpen AccessVolume 30, Issue 3, Pages 1762 - 1770June 2023	0.272
15	Berik Tuleuov, <b>Ademi Ospanova</b> , Aizhan Shegetaeva, Akzhol Tussipkhanov	Lightweight Portable Environment for Building Visual Studio Projects (Solutions) and C/C++ Sources without Visual Studio	Proc. 14th National Conference with International Participation "Electronica 2023", June 1-3, 2023, Sofia, Bulgaria (accepted, to be published)	.-
16	Tasmagambetov O., <b>Seitkulov Y.</b> , Ospanov R., Yergaliyeva B.	Fault-tolerant backup storage system for confidential data in distributed servers	Telkomnika (Telecommunication Computing Electronics and Control)Open AccessVolume 21, Issue 5, Pages 1030 - 10382023	0.286
17	Nursultan Zhetenbayev., <b>Gani Balbayev.</b> , Algazy Zhauyt., Beibit Shingissov	"Design and Performance of the New Ankle Joint Exoskeleton"	International Journal of Mechanical Engineering and Robotics Research Vol. 12, No. 3, May 2023, pp. 151-158 . (Doi: 10.18178/ijmerr.12.3.151-158), <a href="http://www.ijmerr.com/list-222-1.html">http://www.ijmerr.com/list-222-1.html</a> ;	0.246
18	Nursultan Zhetenbayev., Marco Ceccarelli. , <b>Gani Balbayev</b>	"Design and Performance Analysis of Ankle Joint Exoskeleton",	New Trends in Medical and Service Robotics 2023 MESROB 2023, MMS 133, p . 152–159, 2023. <a href="https://doi.org/10.1007/978-3-031-32446-8_17">https://doi.org/10.1007/978-3-031-32446-8_17</a>	0.189
19	Z. Nursultan, M. Ceccarelli, <b>G. Balbayev</b>	"Design of an Exoskeleton for Rehabilitation Ankle Joint"	IFTtoMM International Symposium on Science of Mechanisms and Machines (SYROM), Mechanisms and	0.189

			Machine Science 127 <a href="https://doi.org/10.1007/978-3-031-25655-4_23">https://doi.org/10.1007/978-3-031-25655-4_23</a>	
20	Iskakov KT, Tokseit D., Boranbaev SA, Akhmetov I., Gelbukh I.	Computer Modeling Of The Outgoing GPR Signal	Computation y Sistemas. – 2023. – Vol. 27, No. 1 – pp.5-12	0.219
<i>Total: 20</i>				

### 2.5 H-index according to Scopus database:

No. p /p	FULL NAME. uch. degree, position	h-index
1.	Satybaldina D.Zh., Ph.D., Ph.D., associate. professor (associate professor)	5
2.	Seitkulov E.N., Ph.D., Associate Professor, Acting professors	9
3.	Shaikhanova A.K.PhD, associate professor , acting professors	4
4.	Nurusheva A.M., PhD, acting cent .	12
5.	Ospanova A.B., Ph.D., Acting Associate Professor	3
6.	Sagindykov K.M., Ph.D., Associate Professor	3
7.	Abduraimova B.K., Ph.D., senior lecturer	2
8.	Seilov Sh.Zh., Ph.D., Doctor of Economics Professor	2
9.	Tashatov N.N., Ph.D., Acting Associate Professor	5
10.	Konyrkhanova A.A., PhD, acting cent .	2
11.	Shakhmetova G.B., master's degree, senior lecturer	2
12.	Aimicheva G.I., master, senior lecturer	3
13.	Akhmetova Zh.Zh., PhD, acting cent .	3
14	Santeeva S.A., PhD , senior lecturer	2

15	Tashenova Zh.M., PhD, senior lecturer	1
16	Tokkulieva A.K., master, senior lecturer	2
17	Saukhanova Zh.S., Ph.D., Associate Professor	2
18	Urynbasarova A.Zh., master, senior lecturer	1
19	Korzhaspaev A.E., master, senior lecturer	1
20	Isaynova A.N., master, senior lecturer	1
21	Bekeshova G.B., master, senior lecturer	3
22	Sisenov N.M., master, senior lecturer	2
23	Zharkimbekova A.T., PhD, senior lecturer	3
24	Tokseit D.K., PhD , senior lecturer	2
<b>Total:24</b>		

2.6. *Publications in journals not included in the Web of Science and Scopus databases a) in foreign journals (RSCI, etc.)*

No. p /p	FULL NAME. author(s)	Publication title	Journal name, year, number, page, ISSN
<i>Department</i>			
1	Seidualy Ayan Kozhanazarovich, <b>Nurusheva</b> Asel Muratovna	The role of load testing in information security	"Student's Bulletin": scientific journal. – No. 16(255). Part 12., Moscow, Publishing house. "Internauka", 2023. – 72 p. – Electron . in version. oven publ. – <a href="https://studvestnik.ru/journal/stud/herald/255">https://studvestnik.ru/journal/stud/herald/255</a> ISSN 2686-9810 47-49
2	Seidualy Ayan Kozhanazarovich, <b>Nurusheva</b>	Development of a load testing method for a microservice	"Student's Bulletin": scientific

	Asel Muratovna	information system	journal. – No. 16(255). Part 12., Moscow, Publishing house. “Internauka”, 2023. – 72 p. – Electron . in version. oven publ. – <a href="https://studvestnik.ru/journal/stud/herald/255">https://studvestnik.ru/journal/stud/herald/255</a> ISSN 2686-9810 50-53
3	Zeinel Momyнкуlov, Zhandos Dosbayev, Azizah Suliman, <b>Bayan Abduraimov</b> a, Nurzhigit Smailov, Maigul Zhekambayeva, Dusmat Zhamangarin	Fast Detection and Classification of Dangerous Urban Sounds Using Deep Learning	Computers, Materials & Continua 2023, 75(1), 2191-2208
<b>Total: 3</b>			

*b) in journals of the Republic of Kazakhstan included in the list of the Committee for Education and Science of the Ministry of Education and Science of the Republic of Kazakhstan*

No. p /p	FULL NAME. author(s)	Publication title	Journal name, year, number, page, ISSN
<i>Department</i>			
1	K.O. Shakerkhan, A.Aden, N.K. Kurmangalieva, <b>K.M. Sagyndykov</b> , <b>A.A. Konyrkhanova</b>	Mathematical model of a computer program for controlling bioreactor processes	Bulletin of the Kazakh Academy of Transport and Communications named after M. Tynyshpayev, ISSN 1609-1817 (Print), ISSN No. 2790-5802(Online), No. 1(124)-2023, pp. 283-298
2	<b>Satybaldina D.</b> , Yakovlev V., Ergalieva B., Ospanov R., Amanzholova S.	Methods of cryptographic protection and authentication in cellular networks	KazATK Bulletin. – 2023. – No. 2 (125) – P. 302–314. ISSN 1609-1817 ISSN Online 2790-5802 <a href="https://vestnik.alt.edu.kz/index.php/journal/article/view/1138">https://vestnik.alt.edu.kz/index.php/journal/article/view/1138</a>
3	<b>Satybaldina, D.</b> , Kalymova , K. Sydykov, D.	Application of transfer learning of neural networks in image classification	Bulletin of KazNPU named after. Abay, series “Physical and Mathematical Sciences”. -2023.- No. 1 (81).- P.159-169. DOI: <a href="https://doi.org/10.51889/2022-4.1728-7901.335">https://doi.org/10.51889/2022-4.1728-7901.335</a> . <a href="https://bulletin-">https://bulletin-</a>

			<a href="http://phmath.kaznpu.kz/index.php/ped/article/view/1485">phmath.kaznpu.kz/index.php/ped/article/view/1485</a> ISSN – 1728-7901
4	<b>Satybaldina, D. , Isaynova, A. ,</b> Alseitov, O., Baideldinov, M., Seilov, Sh.	Creation of a gas analytical multisensory system of the “electronic nose” type and study of its performance for environmental monitoring tasks	KazATK Bulletin. – 2023. – No. 125(2). – pp. 315–323. <a href="https://doi.org/10.52167/1609-1817-2023-125-2-315-323">https://doi.org/10.52167/1609-1817-2023-125-2-315-323</a> ISSN 1609-1817 ISSN Online 2790-5802
5	<b>Satybaldina D.Zh. ,</b> Bisenbaeva <b>N.K., Seitkulov E.N.,</b> <b>Seksenbaeva A.K.</b>	Detecting and classifying network attacks using the Splunk Machine Learning Toolkit	Bulletin of ENU named after. L.N. Gumilyov. Series Mathematics. Computer science. Mechanics - 2023. - Vol. 142, no. 1. - P.21-34. <a href="https://bulmathmc.enu.kz/index.php/main/article/view/144">https://bulmathmc.enu.kz/index.php/main/article/view/144</a> ISSN 2616-7182 eISSN 2663-1326
6	Tasmagambetov , O., <b>Seitkulov, E. ,</b> Ospanov, R., Zhuzbaev, S., Ergalieva, B.	Analysis of the security model of the functioning of a fault-tolerant system for backup storage of confidential data .	Bulletin of KazATK-2023. - No. 125(2) - pp. 211–222. <a href="https://doi.org/10.52167/1609-1817-2023-125-2-211-222">https://doi.org/10.52167/1609-1817-2023-125-2-211-222</a> ISSN 1609-1817 ISSN Online 2790-5802
7	Moldamurat, Kh., Atanov, S., Taberkhan, R., <b>Kanzhekeev, A. ,</b> Musiralieva, Sh.	Development of a voice authentication system on a microcontroller and improvement of the protection method using artificial intelligence.	Bulletin of KazATK - 2023. - No. 125(2) - P.223–232. <a href="https://doi.org/10.52167/1609-1817-2023-125-2-223-232">https://doi.org/10.52167/1609-1817-2023-125-2-223-232</a> ISSN 1609-1817, ISSN Online 2790-5802
8	<b>Seitkulov, E., Tashatov, N. ,</b> Ergalieva, B., Tasmagambetov , O. , Ospanov, R.	Critical analysis of technological solutions in the field of cybersecurity of cellular networks.	KazATK Bulletin. -2023.- No. 124(1). -WITH. 222–229. <a href="https://doi.org/10.52167/1609-1817-2023-124-1-222-229">https://doi.org/10.52167/1609-1817-2023-124-1-222-229</a> ISSN 1609-1817, ISSN Online 2790-5802
9	Atanov, S., <b>Seitkulov, Y. ,</b> Balbayev, G., Zhuzbayev, S., Tulesheva, G.	Mathematical models of security attacks on mobile cellular systems	KazATK Bulletin. - 2023. - No. 124(1). - pp. 213–221. <a href="https://doi.org/10.52167/1609-1817-2023-124-1-213-221">https://doi.org/10.52167/1609-1817-2023-124-1-213-221</a> ISSN 1609-1817, ISSN Online 2790-5802

10	A. Shekerbek, G. Abdikerimova, Zh. Lamasheva, M. Baibulova, <b>A. Tokkulyeva</b>	Classification of x-ray images using the deep learning algorithm	News of the national academy of sciences, of the republic of kazakhstan physico-mathematical series ISSN 1991-346X Volume 1, Number 345 (2023), 204-227 <a href="https://doi.org/10.32014/2022.2518-1726.178">https://doi.org/10.32014/2022.2518-1726.178</a>
11	<b>Nurusheva A.M., Amrenov A.K.</b>	Use and analysis of next generation firewall to achieve security of information and communication infrastructure	BULLETIN of the National Engineering Academy of the Republic of Kazakhstan, No. 1, 2023, 77-84, ISSN 2709-4693
12	<b>Nurusheva, A. ., Safin, R., Amrenov, A., &amp; Satybaldina, D.</b>	Proposing a strategy for a new reality: zero trust methodology.	Vestnik KazATK, 2023, 127(4), 140-147. <a href="https://doi.org/10.52167/1609-1817-2023-127-4-140-147">https://doi.org/10.52167/1609-1817-2023-127-4-140-147</a>
13	Tazabekova, P. K., Nurbekova, Zh. K., <b>Aimicheva, G. I. ,</b> Naimanova, D. S.	A systematic review of research on the use of augmented reality technology in education.	Bulletin "Physical and Mathematical Sciences". – 2023. – T. 83. – No. 3.
14	A. E. Erulanova, S. S. Rustamov, I. M. Uvaliyeva, <b>A. K. Shaikhanova ,</b> S. A. Belginova	Mathematical support for dosing systems of dry bulk materials of medicines used in clinical and hematological syndromes	BULLETIN of the National Engineering Academy of the Republic of Kazakhstan, No. 4(90), 2023, ISSN 2709-4693
15	<b>Amrenov A.K., Nurusheva A.M.</b>	Survey and Analysis of computer emergency response team services.	Bulletin of the National Engineering Academy of the Republic of Kazakhstan, No. 2, 2023, p. 28-37, ISSN 2709-4707 (Online), ISSN 2709-4693 (Print)
16	<b>NN Tashatov,</b> ME Ashimova, GB Issayeva	Research and development methods of a software system for the integrated analysis of meteorological data	Vestnik KazATK - 2023. - No. 3 (126), pp. 292-305. ISSN No. 1609-1817 (Print), ISSN No. 2790-5802 (Online)
17	<b>G.B. Shakhmetova,</b> Sharipbay A.A. , Saukhanova <b>Zh.S.,</b> Barlybayev A. B.	Study of finite automates used in cryptography	Herald VKTU -2023- No. 4, pp. 427-435 ISSN: 1561-4212, E-ISSN: 2789-8210 (Online)

18	<b>Satybaldina, D., Seilov, Sh.,</b> Nurzhaubaev, A., Abildinov, D.	Research into automation of long-term storage processes of vegetables and fruits based on the use of artificial olfactory systems.	KazATK Bulletin, (2023). 128 (5), 176–188. <a href="https://doi.org/10.52167/1609-1817-2023-128-5-176-18">https://doi.org/10.52167/1609-1817-2023-128-5-176-18</a> ISSN No. 1609-1817 (Print), ISSN No. 2790-5802 (Online)
19	<b>Shaikhanova A.K.</b> , Tleubaeva A.O., Ospan B.B., Maukenov B.B.	Certificate of entry of information into the state register of rights to objects protected by copyright No. 37644 dated June 30, 2023. Type of copyright object: computer program. Name of the object - Real-time image recognition system for ensuring the safety of buildings and zones “UmAI” Date of creation of the object: 06/27/2023	
20	<b>Shaikhanova A.K.</b> , Poz I.V.	Certificate of entry of information into the state register of rights to objects protected by copyright No. 37617 dated June 29, 2023. Type of copyright object: computer program. Name of the object - Hardware and software complex for conducting a remote medical examination of a patient “Diagnostics at home” Date of creation of the object: 06/27/2023	
21	<b>Nurusheva A.M.</b> , Shəripbai A.Ə., Omarbekova A.S.	Certificate of entry of information into the state register of rights to objects protected by copyright No. 40293 dated November 8, 2023. Type of copyright object: computer program. Name of the object - Electronic textbook "Basic regulatory and legal aspects of information security." Object creation date : 11/7/2023	
22	<b>Saukhanova Zh.S.</b> , <b>Shakhmetova G.B.</b>	Type of copyright object : E EM-ge arnalgan bagdarlama Object name: Construction of inverse finite automata for primitives of the Finite Automata Model with Information Preservation (CAMSI) No. 37555 dated June 27, 2023	

23	<b>Satybaldina D. Zh.</b> , Sydykov D. M., <b>Isaynova A. N.</b>	Certificate of entry of information into the state register of rights to objects protected by copyright No. 37464 dated June 23, 2023. Type of copyright object: computer program. Object name: Neural network gas classifier for gas analytical multisensor system . Date of object creation: 06/09/2023	
24	Moldamurat H., <b>Seitkulov E. N.</b> , Atanov S. K., <b>Ergalieva B.B.</b> , Kyzyrkanov A.E.	Certificate of entry of information into the state register of rights to objects protected by copyright No. 34263 dated April 4, 2023. Type of copyright object: computer program. Object name: Seykestendiru zhane authenticationlaudisterin yyalay baylanys zhelilerinde authorizationlaudy modeldeu. Object creation date: 03/17/2023	
25	Mukatov A. T., Kalymova K. A., Glazyrina N. S., <b>Satybaldina D. Zh.</b>	Certificate of entry of information into the state register of rights to objects protected by copyright No. 40996 dated December 5, 2023. Type of copyright object: computer program. Object name: Application for implementing a human-machine interface based on gesture recognition. Object creation date: 11/15/2023	
<b>Total: 25</b>			

c) in journals of the Republic of Kazakhstan not included in the list of the Committee for Education and Science of the Ministry of Education and Science of the Republic of Kazakhstan

No. p /p	FULL NAME. author(s)	Publication title	Journal name, year, number, page, ISSN
<i>Department of Information Security</i>			
1.	<b>AK Shaikhanova, DS Kadyrov</b>	A Deep Dive into Cobalt Strike Tool	Shakarim University Bulletin. Series Technical Sciences, No. 4(12) 2023 ISSN 2788-7995
<i>Total:-1</i>			

2.7. Scientific publications in collections of conferences held in the Republic of Kazakhstan:



No.	FULL NAME. author(s)	Publication title	Title of the collection, year, page.
<i>Department</i>			
1	Tyulebaeva Umitey Ruslanovna, Isaynova Aliya Nasipovna	Researching information security threats in credit institutions using Miter Attack	XVIII International Scientific Conference “GYLYM JÁNE BILIM-2023”, April 12, 2023, pp . 776-780
2	Tolegen Aydynov, Olzhas Sabiev, and <b>Dina Satybaldina.</b>	Design and Implementation of an Electronic Voting System Using the IBM Blockchain Platform	International Conference on Electrical Facilities and informational technologies 2023 (ICEIC 2023) Proceedings, Almaty, Kazakhstan, August 22nd to 25th, 2023, p.164
3	Olzhas Alseitov, <b>Aliya Issainova, Dina Satybaldina, Assem Konyrkhanova</b>	Detection and Classification of the Volatile Organic Compounds from the Petroleum and Petroleum-Derived Products Using an Electronic Nose and Machine Learning Algorithms	International Conference on Electrical Facilities and informational technologies 2023 (ICEIC 2023) Proceedings, Almaty, Kazakhstan, August 22nd to 25th, 2023, p. 218-223
4	<b>Zharkimbekova Aizhan Temirzhanovna,</b> Turmaganbetova Shynar Kurmangaliyevna	Cyber au ipsizdikte zasandy intellekti koldana mukindikteri	International scientific and practical conference “Integration of science, education and production - the basis for the implementation of the Nation’s Plan” (Saginov Readings No. 15), Part 2, Karaganda, June 16-17, 2023, pp. 213-215
5	<b>Tashatov NN,</b> Bakhytov BA	Application of Nir Soft Utilities in Computer Forensics for Analysis and Recovery of Digital Evidence	International scientific and practical conference, October 26-27, 2023, Almaty
6	Adlet Smailov, <b>Saukhanova Zhanat</b>	Analysis of client-side and server-side attacks in the context of web applications	International Conference on Electrical Facilities and informational technologies 2023 (ICEIC 2023) Proceedings, Almaty, Kazakhstan, August 22nd to 25th, 2023, p. 150-153
<b>Total: 6</b>			

2.8. Scientific publications in scientific conferences, symposiums, seminars abroad:

No.	FULL NAME. author(s)	Publication title	Title of the collection, year, page.	A country
<i>Department of Information Security</i>				
1.	B. Tuleuov, <b>A. Ospanova</b> , A. Tussipkhanov, A. Shegetaeva	Lightweight Portable Environment for Building Visual Studio Projects (Solutions) and C/C++ Sources without Visual Studio	Proc. 14th National Conference with International Participation "Electronica 2023", June 1 - 2, 2023, Sofia, Bulgaria (accepted)	Bulgaria
2	Serikkazin A.E., Nurusheva A.M.	Unification of information security standards: a unified approach to increasing the cyber	Scientific forum: Technical and physical and mathematical sciences: collection. Art. based on	RF

		resilience of organizations	materials of the LXIII international. scientific - practical conf. — No. 4(63). - M., Ed. "MCNO", 2023.	
3	K. Syzdykbayev, <b>Shaikhanova</b> , V. Martsenyuk	<b>A.</b> Research and development of text information encryption algorithms based on chaotic sequences	XIII Międzynarodowa Konferencja Studentów oraz Doktorantów „Inżynier XXI wieku ” ( The 13th International Conference of Students and Doctoral Students "Engineer of the 21st Century"), 02.12.2023. Rr. 189-198. DOI: <a href="https://doi.org/10.53052/9788367652124.1">https://doi.org/10.53052/9788367652124.1</a>	Poland
4	A. Yessenbayeva, <b>Shaikhanova</b> , V. Martsenyuk	<b>A.</b> Study of modern principles and methods of image encryption based on chaotic sequences	XIII Międzynarodowa Konferencja Studentów oraz Doktorantów „Inżynier XXI wieku ” ( The 13th International Conference of Students and Doctoral Students "Engineer of the 21st Century"), 02.12.2023. Rr. 207-215. DOI: <a href="https://doi.org/10.53052/9788367652124.20">https://doi.org/10.53052/9788367652124.20</a>	Poland
5	Zh.T. Nyssanbayeva, <b>Tokseit</b>	<b>DK</b> An investigation of wazuh: an open-source security analytics platform for threat detection and response	INTERNATIONAL SCIENTIFIC AND PRACTICAL CONFERENCE “DIGITIZATION AND ARTIFICIAL INTELLIGENCE” dedicated to the “Twentieth anniversary of the study and development of natural, exact and mathematical sciences in the field of science and education (2020-2040)” November 20-21, 2023, pp.241-245	Tajikistan
6	<b>DK Tokseit</b> , AK Nurlybay	Researching information security incidents	INTERNATIONAL SCIENTIFIC AND PRACTICAL CONFERENCE “DIGITIZATION AND ARTIFICIAL INTELLIGENCE” dedicated to the “Twentieth anniversary of the study and development of natural, exact and mathematical sciences in the field of science and education (2020-2040)” November 20-21, 2023, pp.293-297	Tajikistan
7	Tazhikenova N. , <b>Tokseit D.</b>	Types of phishing attacks and protection methods	LXIX int. scientific - practical conf. No. 11(60). – Novosibirsk: SibAK, 2023. – P. 15-22.	RF

8	Askarbekkyzy A kbota, <b>Tashatov N.N.</b>	Issues of technical and physical and mathematical sciences in the light of modern research:	Materials of the LXIX International Scientific and Practical Conference, No. 11 (60), November 2023, Novosibirsk, p. 6-14	RF
9	Zhuldyz Sailau Kyzy, <b>Dina Satybaldina</b> , Gulmira Danenova, Makhabat Kokkoz, <b>Nurlan Tashatov</b>	Design of Majority Decoded Codes and Decoding Algorithm Based on Error Propagation Analysis	7th <sup>International</sup> Symposium on Innovative Approaches in Smart Technologies, 23-25 November 2023, Istanbul, Turkiye, s.	Türkiye
10	Altynbek Sharipbay, <b>Zhanat Saukhanova</b> , <b>Gulmira Shakhmetova</b> , Alibek Barlybayev	Development of reliable and effective methods of cryptography protection of information based on the finite automata theory	7th International <sup>Conference</sup> on Technology, Engineering and Science (IConTES ), November 16-19, 2023. Antalya, Turkey	Türkiye
<i>Total: 10</i>				

2.9 Number of published monographs in the Republic of Kazakhstan (if any, indicate the stamp of the Ministry of Education and Science of the Republic of Kazakhstan) (attach a copy of the title page; a copy of the page with the publication's imprint, including UDC, ISBN / ISSN)

No.	FULL NAME. author(s)	Publication title	Name of publication (indicating the city), number of pages .	The presence of a neck is indicated MES RK or ISBN
In English. language				
1				
<i>Total: not available</i>				

2.10 Organization and conduct of scientific events at the faculty/department :

No.	Full name	Subject	Date and time (online)	Supervisor
1	Aidynov T.A., 2nd year doctoral student	Research of methods and algorithms for organizing electronic voting based on cryptographic protocols and blockchain technology	02/07/2023 17:00	Scientific supervisor: Satybaldina D.Zh., PhD, professor
2	Amrenov A.K., 3rd year doctoral student	Development of a methodology and model for building processes for an information security incident response service	02/07/2023 18h.	Scientific supervisor: Nurusheva A.M., PhD, acting ass . n professor

3	Kasenova M.N., 2nd year doctoral student	Development and research of intelligent methods for detecting network attacks	07/14/2023 17:00	Scientific supervisor: Satybaldina D.Zh., PhD, professor
4	Mubarakov I.R., 2nd year doctoral student	Assessment of the maturity level of information security processes based on multi-criteria approaches	07/14/2023 18:00	Scientific supervisor: Nurusheva A.M., PhD, acting ass.p professor _
5	Abdiraman A. S., 3rd year doctoral student	Methods for assessing the level of information security of information and communication infrastructure objects	02/21/2023 17:00	Scientific supervisor: Nurusheva A.M., PhD, acting ass.p professor _
6	Baysultan A.B., 2nd year doctoral student	Methods and algorithms for identifying cyber attacks using multi-version machine learning systems	02/21/2023 18:00	Scientific supervisor: Akhmetova Zh.Zh., PhD, acting ass.p professor _
7	Ergalieva B.B., 2nd year doctoral student	Methods and algorithms for secure cloud processing and data storage	02/28/2023 17:00	Scientific supervisor: Satybaldina D.Zh., PhD, professor
8	Makatov E.K., 2nd year doctoral student	Research and development of a model and algorithm for the security of social networks based on cognitive technologies	02/28/2023 18:00	Scientific supervisor: Akhmetova Zh.Zh., PhD, acting ass.p professor _
9	Amrenov A.K., 3rd year doctoral student	Development of a methodology and model for building processes for an information security incident response service	03/07/2023 17:00	Scientific supervisor: Nurusheva A.M., PhD, acting ass.p professor _
10	Ulyukova G.B., 2nd year doctoral student	Methods and algorithms for heuristic static analysis of source code for recognizing malicious software	03/07/2023 18:00	Scientific supervisor: Shaikhanova A.K., PhD, professor
11	Akhmetov M.K., 2nd year doctoral student	Methods and algorithms for managing information security incidents	03/14/2023 17:00	Scientific supervisor: Tashatov N.A., Ph.D., Associate Professor
12	Oshakbay D.M., 2nd year doctoral student	Probabilistic models for designing critical systems resistant to cyber attacks	03/14/202 18:00	Scientific supervisor: Akhmetova Zh.Zh., PhD, acting ass.p professor _
13	Amrenov A.K., 3rd year doctoral student	Development of a methodology and model for building processes for an information security incident response service	March 28, 2023 17:00	Scientific supervisor: Nurusheva A.M.,

				PhD, acting ass.p professor _
14	Abdiraman A. S., 3rd year doctoral student	Methods for assessing the level of information security of information and communication infrastructure objects	March 28, 2023 18:00	Scientific supervisor: Nurusheva A.M., PhD, acting ass.p professor _
15	Tasmagambetov O.K., 2nd year doctoral student	Methods and principles of building a center for ensuring information security of government agencies	04/04/2023 17:00	Scientific supervisor: Seitkulov E.N., Ph.D. Professor
16	Ergalieva B.B., 2nd year doctoral student	Methods and algorithms for secure cloud processing and data storage	04/04/2023 18:00	Scientific supervisor: Satybaldina D.Zh., PhD, professor
17	Makatov E.K., 2nd year doctoral student	Research and development of a model and algorithm for the security of social networks based on cognitive technologies	04/11/2023 17:00	Scientific supervisor: Akhmetova Zh.Zh., PhD, acting ass.p professor _
18	Mubarakov I.R., 2nd year doctoral student	Assessment of the maturity level of information security processes based on multi-criteria approaches	04/11/2023 18:00	2nd year doctoral student Scientific supervisor: Nurusheva A.M., PhD, acting ass.p professor _
19	Ulyukova G.B., 2nd year doctoral student	Methods and algorithms for heuristic static analysis of source code for recognizing malicious software	04/18/2023 17:00	Scientific supervisor: Shaikhanova A.K., PhD, professor
20	Baysultan A.B., 2nd year doctoral student	Methods and algorithms for identifying cyber attacks using multi-version machine learning systems	04/18/2023 18:00	Scientific supervisor: Akhmetova Zh.Zh., PhD, acting ass.p professor _
21	Oshakbay D.M., 2nd year doctoral student	Probabilistic models for designing critical systems resistant to cyber attacks	04/25/2023 17:00	Scientific supervisor: Akhmetova Zh.Zh., PhD, acting ass.p professor _
22	Aidynov T.A., 2nd year doctoral student	Research of methods and algorithms for organizing electronic voting based on cryptographic protocols and blockchain technology	04/25/2023 18:00	Scientific supervisor: Satybaldina D.Zh., PhD, professor
23	Amrenov A.K., 3rd year doctoral student	Development of a methodology and model for building processes for an information security incident response service	05/02/2023 17:00	Scientific supervisor: Nurusheva A.M., PhD, acting ass.p professor _

24	Abdiraman A. S., 3rd year doctoral student	Methods for assessing the level of information security of information and communication infrastructure objects	05/02/2023 18:00	Scientific supervisor: Nurusheva A.M., PhD, acting ass.p professor _
25	Kasanova M.N., 2nd year doctoral student	Development and research of intelligent methods for detecting network attacks	05/16/2023, 17:00	Scientific supervisor: Satybalina D.Zh., PhD, professor
26	Akhmetov M.K., 2nd year doctoral student	Methods and algorithms for managing information security incidents	05/16/2023 18:00	Scientific supervisor: Tashatov N.A., Ph.D., Associate Professor

No.	Full name	Subject	Date and time (online)	Supervisor
<b>November</b>				
1 Week	Amanzholov Olzhas Maratuly (2nd year master's student , Kazakh )	DDoS-shabyuldaryn aniktau adisteri men kuraldaryn zertteu	04.11.2022 11.00 online <a href="https://clck.ru/ZAsbt">https://clck.ru/ZAsbt</a>	Tashenova Zhuldyz Musagulovna, PhD, acting cent .
	Armanova-Bekmuratova Asylytas Armankyzy (2nd year master's student , Russian )	AWS Public Cloud Security Monitoring		Shaikhanova Aigul Kayrulaevna, PhD, professor
	Askarbekkyzy A kbota (2nd year master's student , English )	Methodology of risk assessment and modern methods of risk management in large organizations		Tashatov Nurlan Narkenovich, Ph.D., Acting associate professor
	Asanov Adilbek Zhanbolatuly (2nd year master's student , Russian )	Study of the steganographic method of information security algorithm		Akhmetova Zhanar Zhumanovna, PhD, acting ass . n professor
	Barat Dana Dauletbekkyzy (2nd year master's student , Kazakh )	Zhelik infrakrylym k au ipsizdigin onailandir ushin SASE model zertteu		Akhmetova Zhanar Zhumanovna, PhD, acting ass . n professor
	Bakhytov Bigasyr Armanovich (2nd year master's student , Russian )	Forensic analysis of hard drives		Tashatov Nurlan Narkenovich, Ph.D., Acting associate professor
	B Ulanov Kaldyzhan Bauyrzhanuly (2nd year master's student , Kazakh )	Computer lik kylmystardy tergeuge arналган Open Source kuraldar		Ospanova Ademi Bekzhanovna Ph.D., Acting associate professor
2 week	Yesenbaev Bekzhan Suleymanuly (2nd year master's student , Kazakh )	Mail server osaldyktaryn anyktau tasilderi	11/11/2022 11.00 online <a href="https://clck.ru/ZAsbt">https://clck.ru/ZAsbt</a>	Sagindykov K akim Moldabekovich, Ph.D., Associate Professor
	Bekkalieva Kanziya Sagatovna (2nd year master's student , Russian )	Study of reliability problems in networks and information protection		Shaikhanova Aigul Kayrulaevna, PhD, professor
	Abdraman T olebi Bolatuly (2nd year master's student , Kazakh )	Zhelik shabyuldardan derekterdin ka au ipsizdigin kamtamasyz edudin keshendi tasili		Akhmetova Zhanar Zhumanovna, PhD, acting ass . n professor
	Bekmuratov Daniyar Amzeuly (2nd year master's student , Russian )	Cyber threat intelligence		Shaikhanova Aigul Kayrulaevna, PhD, professor

	Zhaksybekov Ilyas (2nd year master's student , Kazakh )	Memlekettik zhane memlekettik emes derekkorlardy cipherlau ushin қазіргі жағдайда Қ Р СТ 1073-2007 "Cryptographic devices for cryptography" standard standards		Ospanova Ademi Bekzhanovna Ph.D., Acting associate professor
	Enbek Bereke Alimuly (2nd year master's student , Russian )	Proactive search for threats in the corporate network		Shaikhanova Aigul Kayrulaevna, PhD, professor
	Zhanatov Temirlan Aslanuly (2nd year master's student , Kazakh )	Python programs		Sagindykov K akim Moldabekovich, Ph.D., Associate Professor
	Ermekov Erasyl Ermekuly (2nd year master's student , English )	Research of fraud management system in financial organizations		Tashatov Nurlan Narkenovich, Ph.D., Acting associate professor
3 week	Zhandarbekkyzy Marzhan (2nd year master's student , Kazakh )	asiporyndagy derbes derekterdi korgau zhuyesin zertteu	11/18/2022 11.00 online <a href="https://clck.ru/ZAsbt">https://clck.ru/ZAsbt</a>	Tashenova Zhuldyz Musagulovna, PhD, acting associate professor
	Kenesbek Zhasulan Ruslanuly (2nd year master's student , English )	Research of the information security operations center at QazCloud LLP		Tashatov Nurlan Narkenovich, Ph.D., Acting associate professor
	Zhumabay Abat Zhomartuly (2nd year master's student , Kazakh )	Web-resource paidalanushylardy authenticationlau ayasynda akparattyk kauipsizdikti kamtamasyz etu adistemegin azirleu		Tashatov Nurlan Narkenovich, Ph.D., Acting associate professor
	Zhumashev Sanzhar Maratkaliuly (2nd year master's student , Russian )	Research on methods for assessing the security of operating systems and eliminating vulnerabilities		Saukhanova Zhanat Sergazievna, Ph.D., Associate Professor
	Zhurtbaev Nurbolat Kuntureuly (2nd year master's student , Kazakhstan )	LTE standard mobile phones		Konyrkhanova Asem Adilbekkyzy, PhD , Acting Associate Professor
	Kadyrov Damir Serikovich (2nd year master's student , English )	Development of a prototype framework for command and control in Go		Shaikhanova Aigul Kayrulaevna, PhD, professor
	Isabaev Alibek Zhanakhmetuly (2nd year master's student , Kazakh )	Kazakhstan Republic son bankik salasynda akparattyk kauipsizdiktin shabyuldaryn anaktau zhane eskertu zhuyesin azizirleu zhane zertteu		Tashatov Nurlan Narkenovich, Ph.D., Acting associate professor
4 week	Islyambekova Laura Baurzhankyzy (2nd year master's student , Kazakh )	Ūkarattyk kauipsizdik incidentterin saykestendirudi zhaksartu zane olar ga zhauap aradistemegi	11/25/2022 11.00 online <a href="https://clck.ru/ZAsbt">https://clck.ru/ZAsbt</a>	Tashenova Zhuldyz Musagulovna, PhD, acting associate professor
	Kozhanazarov Zamir Alievich (2nd year master's student , English )	Modeling an information security attacker and approaches to countering their threats. Management of risks		Shaikhanova Aigul Kayrulaevna, PhD, professor
	Kabdesheva Madina Mukhtarovna (2nd year master's student , Kazakh )	Ūrturli erekshelikterdeg kassiporyndarda y akparattyk kauipsizdik auditinin adisteri		Ospanova Ademi Bekzhanovna Ph.D., Acting associate professor

	Kudaibergenov Bibars Yerikuly (2nd year master's student , Russian )	Study of processes for ensuring information security and quality of functioning of the subsystem "IT Service Management" of the user support system in RB Partners IT-Audit LLP		Seilov Shakhraman Zhursinbekovich, Ph.D., professor
	Karimova Danagul Bauyrzhanovna (2nd year master's student , Kazakh )	Programming qamtamanyn osaldygyn taldau kuraldaryn zertteu		Saukhanova Zhanat Sergazievna, Ph.D., Associate Professor
	Muratbaev Zhanasyl Erlanovich (2nd year master's student , Russian )	Study of existing algorithms for assessing the effectiveness of information security systems in LTE networks		Tashatov Nurlan Narkenovich, Ph.D., Acting associate professor
	Nurlybay Asel K anat kyzy (2nd year master's student , English )	Researching incident prevention in an enterprise		Tokseit Dinara Kuandykkyzy , PhD , Art . teacher
<b>December</b>				
1 Week	Konusova Perizat (2nd year master's student , Kazakh )	B ulttyk qizmetterdin cyberkauipsizdik shabuylardy men kauipterin zertteu	02.12.2022 11.00 online <a href="https://clck.ru/ZAsbt">https://clck.ru/ZAsbt</a>	Akhmetova Zhanar Zhumanovna, PhD, acting ass . n professor
	Nysanbaeva Zhanerke Turmanovna (2nd year master's student , English )	Investigation of creating a platform for information security operations center		Tokseit Dinara Kuandykkyzy , PhD , Art . teacher
	Kairat Dinara Kairatkyzy (2nd year master's student , Kazakh )	Equipment for telecommunications and equipment for the tector and system		Abduraimova Bayan Kuandykovna, Ph.D., acting associate professor
	Sabiev Olzhas Nurlanuly (2nd year master's student , Russian )	Application of Blockchain technology in the development of secure information systems		Satybaldina Dina Zhagiparovna Ph.D., professor
	Kaldanova Gulden Sauletkyzy (2nd year master's student , Kazakh )	Apparatus of zhasyrudyn steganography k sheshimin zertteu zhane zhetildiru		Shaikhanova Aigul Kayrulaevna, PhD, professor
	Sagindykov Kanat Tlembekovich (2nd year master's student , Russian )	Research and development of hardware simulator for penetration testing (Pentesting)		Shaikhanova Aigul Kayrulaevna, PhD, professor
	Kaldybay Anat Muratbekuly (2nd year master's student , Kazakh )	Numbers kurylgylardy criminalistics saraptamalauda qoldanylatyn kuraldardy zertteu		Sagindykov Akim Moldabekovich, Ph.D., Associate Professor
2 week	Kambar Nurtileu Seytkazyuly (2nd year master's student , Kazakhstan )	Computer hardware virus	09.12.2022 11.00 online <a href="https://clck.ru/ZAsbt">https://clck.ru/ZAsbt</a>	Abduraimova Bayan Kuandykovna, Ph.D., and about. associate professor
	Smailov Adlet Zeinollaevich (2nd year master's student , Russian )	Research of client-side and server-side attacks in the context of a web application		Saukhanova Zhanat Sergazievna, Ph.D., Associate Professor
	Mugaz Kainur Kayrbekuly (2nd year master's student , Kazakh )	Take - Grant Models of non-computers and computers		Sagindykov Akim Moldabekovich, Ph.D., Associate Professor



	Sultanov Ramazan Ruslanuly (2nd year master's student , Russian )	Research on the use of Linux OS capabilities in forensics		Saukhanova Zhanat Sergazievna, Ph.D., Associate Professor
	Myrzabekov Temirlan Bekenuly (2nd year master's student , Kazakh )	Oracle directory basis		Sagindykov Akim Moldabekovich, Ph.D., Associate Professor
	Temirbaev Murat Dilbarkhanovich (2nd year master's student , Russian )	Study of processes for ensuring information security and quality of functioning of the 1C accounting information system in Kaz IT LLP		Seilov Shakhmaran Zhursinbekovich, Ph.D. , professor
	Nabatov Nurlan Raimuly (2nd year master's student , Kazakh )	Internet zatarynyn "kызmet korsetuden bas tartu" taratylgan zhelilik shabuylardan qorgau adisteri men algorithmderin zertteu		Konyrkhanova Asem Adilbekkyzy, PhD , Acting Associate Professor
3 week	Nur Gali Ainur Kenzhebekkyzy (2nd year master's student , Kazakh )	Zheke derekterdi aшыk sымсыз кіru нүктелери (Wi-fi) аркылы zhiber kezinde korgauda zertteu	1 December 6 , 2022 11.00 online ( <a href="https://clck.ru/ZAsbt">https://clck.ru/ZAsbt</a> )	Akhmetova Zhanar Zhumanovna, PhD, acting ass . n professor
	Temirzhanuly Temirlan (2nd year master's student , Russian )	Research on methods for detecting traces of malicious code in memory dumps		Saukhanova Zhanat Sergazievna, Ph.D., Associate Professor
	Orazimbetova Aidana Zhandoskyzy (2nd year master's student , Kazakh )	Beyne akparattyn kauipsizdigin qamtamasyz this ušin tytastykta buz kaupinen mathematikalыk model de karastir		Tashatov Nurlan Narkenovich, Ph.D., Acting associate professor
	Abdulhay Nazerke Khamzakyzy (2nd year master's student , Kazakh )	The computer is responsible for the discretionary model of the algorithm based on the model.		Sagindykov K akim Moldabekovich, Ph.D., Associate Professor
	Omirzak Dinmuhamed Sabyruly (2nd year master's student , English )	Leak detection in an organization's information system		Abduraimova Bayan Kuandykovna, Ph.D., and about. associate professor
	Abdilmanov Nursultan (2nd year master's student , Russian )	Research on the use of finite state machines in cryptography		Saukhanova Zhanat Sergazievna, Ph.D., Associate Professor
	Rahmatulla Orken Mustafauly (2nd year master's student , English )	Automation of railway enterprises		Muratbekov Madi Musakhanovich, Ph.D., Associate Professor
4 week	Sanat Khan Olzhas (2nd year master's student , Kazakh )	Aynalymdary akparatty taldau negizinde yyimnyn derekterin korgaudy baskar adisteri	12/23/2022 11.00 online ( <a href="https://clck.ru/ZAsbt">https://clck.ru/ZAsbt</a> )	Abduraimova Bayan Kuandykovna, Ph.D., and about. associate professor
	Abdikhaniev Imangali Amanzholovich (2nd year master's student , Russian )	Study of the Threat Hunting Process for Rapid Response to Cybersecurity Incidents		Akhmetova Zhanar Zhumanovna, PhD, acting ass . n professor

	Saparkul Bekdana Mukhamedzhankyzy (2nd year master's student , Kazakh )	Mobiles paidalanushylardyn vpn sessionarynyn agyp ketuinen qorgau kuraldaryn zertteu zhane azirleu		Tashenova Zhuldyz Musagulovna, PhD, acting associate professor
	Abdurakhman D Aulet Bekmurzauly (2nd year master's student , Kazakh )	Web portal arkyly orta mektepterdegi cyberbullying boyinsha bilimder basesyn baskaru zhane suyemeldeu		Sharipbay Altynbek Amiruly, Doctor of Technical Sciences, Professor
	Sarsembayev Nurbol Zhalgasovich (2nd year master's student , Kazakh )	Zheke mekemenin akparattyk kauipsizdigin qamtamasyz estudi akparattyk kauipsizdik sasatyn yymdastyru		Sagindykov Akim Moldabekovich, Ph.D., Associate Professor
	Abdreev Amir Armanovich (2nd year master's student , Russian )	Research on penetration testing methods for containers and containerization environments		Tokseit Dinara Kuandykkyzy , PhD , Art . teacher
	Slyamkhanova A kerke Ruslankyzy (2nd year master's student , Kazakh )	Computer		Sagindykov Akim Moldabekovich, Ph.D., Associate Professor
5 week	Talgat Aydin Erdenuly (2nd year master's student , English )	Automation of business processes in an enterprise	December 30 , 2022 11.00 online <a href="https://clck.ru/ZAsbt">https://clck.ru/ZAsbt</a>	Tashatov Nurlan Narkenovich, Ph.D., Acting associate professor
	Absamatov Aral Umirzakuly (2nd year master's student , English )	Cyberbullying knowledge base		Sharipbay Altynbek Amiruly, Doctor of Technical Sciences, Professor
	Tazhikenova Nurzhanar Kabykenkyzy (2nd year master's student , English )	Research on the implementation of phishing attacks and methods of protection against them		Tokseit Dinara Kuandykkyzy , PhD , Art . teacher
	Shashubay Ulan Asylbekuly (2nd year master's student , Kazakh )	Windows and Unix files can be downloaded		Ospanova Ademi Bekzhanovna Ph.D., Acting associate professor
	Turmetov Adilet Ismailovich (2nd year master's student , Kazakh )	Kasiporynda akapparattyk qauipsizdikti qamtamasyz etudin kashendi zhuyesin yimdistir		Abduraimova Bayan Kuandykovna, t.g. To.
	Aitbek Damir Lesbekuly, 2nd year master's student, Kazakh )	Aleumettik jellyarde paidalanushylardyn kupijalygyyn baskar adisterin zertteu		Konyrkhanova Asem Adilbekkyzy, PhD , Acting Associate Professor
	Hamza Bakseyit Sakenuly (2nd year master's student , Kazakh )	Computer zhelilerdegi osaldyktar men shabuylardy baskar arkyly anyktau zane areket etu		Ospanova Ademi Bekzhanovna Ph.D., Acting associate professor

No.	Full name of PhD doctoral student	Seminar date and time	Full name of the domestic leader
1.	Ospanov Ruslan Maratovich	05.10.2023, 18h.	Satybaldina D.Zh., professor, PhD ; Seitkulov E.N., professor , Ph.D.
2.	Syzdykbaev Kuanysh Serikuly	05.10.2023, 19h.	Shaikhanova A.K., professor, PhD
3.	Aydynov T olegen Aydin uly	10/12/2023, 6 p.m.	Satybaldina D.Zh., professor, PhD

4.	Bakyt Mahabbat Askhatkyzy	10/12/2023, 1 9 hours.	Konyrkhanova A.A. , acting associate professor, PhD; Moldamurat Khuralai, Ph.D., Associate Professor
5.	Kusainov Alnur Ramashevich	10/19/2023, 6 p.m.	Nurusheva A.M., acting associate professor, PhD
6.	Sa gadat Nurmammed Berikuly	10.19.2023, 19h.	Tashatov N.A., Associate Professor, Ph.D.
7.	Musa Askhar Shukiruly	October 26, 2023, 6 p.m.	Satybaldina D.Zh., professor, PhD
8.	Ergalieva Banu Bakhytzhonovna	October 26, 2023, 6 p.m.	Satybaldina D.Zh., professor, PhD
9.	Makatov Er Khan Kairzhanovich	02.11.2023, 18h.	Akhmetova Zh.Zh., acting associate professor, PhD
10.	Tasmagambetov Olzhas Kaharmanovich	02.11.2023, 1 8 hours.	Seitkulov E.N., professor , Ph.D.
11.	Ulyukova Gulden Bektemirovna	0 9.11.2023 , 1 8 hours.	Shaikhanova A.K., professor, PhD
12.	Akhmetov Murat Kuanyshovich	09.11.2023, 19h.	Tashatov N.A., Associate Professor, Ph.D.
13.	Oshaqbay Dana Maksatkyzy	November 16, 2023, 6 p.m.	Akhmetova Zh.Zh., acting associate professor, PhD
14.	Nurzhanov Aslan Begaydaruly	November 16, 2023, 7 p.m.	Sharipbay A.A., Doctor of Technical Sciences, Professor
15.	Yesenbaeva Arailym Lemisovna	November 23, 2023, 6 p.m.	Shaikhanova A.K., professor, PhD
16.	Tleuberdin Saken Tokatovich	November 23, 2023, 7 p.m.	Seitkulov E.N., professor , Ph.D.
17.	Azimkhan Amir Auezkhanuly	30 , 2023, 1 8 hours	Satybaldina D.Zh., professor, PhD
18.	Kasenova Mereilim Nurlanovna	30.11.2023, 1 9 hours	Satybaldina D.Zh., professor, PhD
19.	Baysultan Almas Bulatuly	07.1 2.2023 , 1 8 hours .	Akhmetova Zh.Zh., acting associate professor , PhD
20.	Nurzhaubaev Akniet Alibievich	07.12.2023, 1 9 hours.	Seilov Sh.Zh., Ph.D., professor

#### 2.10.1 International conferences

No.	Name	the date of the	Number of participants/incl. foreign
1	Not available	-	-
<i>Total:</i> -			

#### 2.10.2 Republican conferences

No.	Name	the date of the	Number of participants/incl. foreign
1	Not available	-	-
Total: -			

2.10.3 International scientific forums, symposiums, seminars

2.10.4 Summer (winter, spring) schools

No.	Name	the date of the	Number of participants/incl. foreign
1	Not available	-	-
Total:-			

2.10.5 Scientific round tables

No.	Name	the date of the	Number of participants/incl. foreign
1	Not available	-	-
Total: -			

2.11 Participation in the work of the editorial board of journals included in the Web of Science and Scopus databases

No.	Full name, academician degree, position	Magazine name	Period
1	Not available	-	-
Total: -			

2.12 Participation in the work of the editorial board of journals not included in the ThomsonReuters, Scopus databases

No . p /p	Full name , academic degree, position	Magazine name	Period
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1	Satybaldina D.Zh., Ph.D., PhD, associate professor ( associate professor), head of department	Scientific-analytical journal "Bulletin of St. Petersburg University of the State Fire Service of the Ministry of Emergency Situations of Russia", impact factor RSCI = 0.197	2022
2	Seilov Sh.Zh., Ph.D., Doctor of Economics, Professor	INFORMATION TELECOMMUNICATIONS NETWORKS, OWNER OF BROADCAST AND TELECOMMUNICATIONS CONSULT LLP	Published since December 2000. Published 6 times a year, 2022.
3	Akhmetova Zh.Zh. PhD, acting cent .	INFORMATION TELECOMMUNICATIONS NETWORKS, OWNER OF BROADCAST AND TELECOMMUNICATIONS CONSULT LLP	Published since December 2000. Published 6 times a year, 2022.
4	Nurusheva A.M. PhD, acting cent .	Scientific Journal of Astana IT University, Establishers: LLP "Astana IT University"	Published since 2020. Published 4 times a year, 2022.
<i>Total: 4</i>			

## 1. STUDENTS' RESEARCH

### 3.4 Number of scientific publications of students in collections of conferences held in the Republic of Kazakhstan

No.	FULL NAME. author(s)	Publication title	Title of the collection, year, page.
<i>Department</i>			
1.	Abaeva Aruzhan Ruslankyzy	Buly onimdermen zhmys isteu kezindegi y yimdards n akaparattyk zhuyelerinin kauipsizdigin bagalau	XVIII International Scientific Conference "GYLYM JANE BILIM-2023", April 12, 2023
2	Duysenova Raushangul Nurbolatkyzy	Smart house where you need it and how to use it	XVIII International Scientific Conference "GYLYM JANE BILIM-2023", April 12, 2023
3	Erzhanova Erke Erzhankyzy	Web accounts authorization	XVIII International Scientific Conference "GYLYM JANE BILIM-2023", April 12,

			2023
4	Yesenpulov Aibek Bekzatuly	WebSocket protocols taldau zane ondagy osaldyktar	XVIII International Scientific Conference “GYLYM JÁNE BILIM-2023”, April 12, 2023
5	Isabai Temirlan B akytbekuly	Bolts koimadagi kauipsizdik: baltags derekter men koldanbalardy kalay kauipsiz sak tau ga boladas	XVIII International Scientific Conference “GYLYM JÁNE BILIM-2023”, April 12, 2023
6	Tyulebaeva Umitey Ruslanovna	Researching information security threats in credit institutions using Miter Attack	XVIII International Scientific Conference “GYLYM JÁNE BILIM-2023”, April 12, 2023
7	Kuzembay Sholpanay B aqytbekkyzy Kurgumbaev Adlet Muratkanovich	Cryptographical qiltterdi ulester protocols salystyrmala zertteu	XVIII International Scientific Conference “GYLYM JÁNE BILIM-2023”, April 12, 2023
<i>Total: 7</i>			

### 3.5 Number of scientific publications of students in collections of conferences abroad

No.	FULL NAME. author(s)	Publication title	Collection name, year, number, page, ISSN	A country
1	-	-	-	-
<i>Total: -</i>				

### 3.6 List of students who received prizes (I, II, III) in various competitions, exhibitions, conferences in the Republic of Kazakhstan (*submit supporting documents in electronic form*):

No.	FULL NAME. student	Department	No. of groups, course	Date of receipt of the award, certificate; indicate the prize place	Name conferences	Location	Mob.t ate .	Email	Link to website organizer
1	Raikul Sayat	IS	SIB 45	3rd place	Republican research competition	ENU			<a href="https://enu.kz/ru/nauka/nirs/">https://enu.kz/ru/nauka/nirs/</a>

2	Kuralbek Gulnaz	IS	SIB 35	Diploma 2nd degree	Best Student 2023	the city of A mill. OD “Bobek”				
3	Rakutin Alexander Ivanovich	IS	SIB-12	Diploma 3rd place	ICPC 2023-2024, Northern Eurasia Finals	Astana				<a href="https://drive.google.com/file/d/1Z1PKsYCko3onzKJJckxScweKdKUDun6o/view?usp=sharing">https://drive.google.com/file/d/1Z1PKsYCko3onzKJJckxScweKdKUDun6o/view?usp=sharing</a>
4	Shagabudinov Alexey Konstantinovich	IS	SIB-22	Diploma 3rd place	ICPC 2023-2024, Northern Eurasia Finals	Astana				<a href="https://drive.google.com/file/d/1Z1PKsYCko3onzKJJckxScweKdKUDun6o/view?usp=sharing">https://drive.google.com/file/d/1Z1PKsYCko3onzKJJckxScweKdKUDun6o/view?usp=sharing</a>
<i>Total: 4</i>										

3.7 List of students who received prizes (I, II, III) in various competitions, exhibitions, conferences in the CIS (*submit supporting documents in electronic form*):

No.	FULL NAME. student	Department	Group number, course	Date of receipt of the award, certificate; indicate the prize place	Name conferences	Location	Mob. t ate .	Email	Link to the organizer's website
1	Not available	-	-	-	-	-	-	-	-
<i>Total: -</i>									

3.8 List of students who received prizes (I, II, III) in various competitions, exhibitions, conferences abroad (except the CIS ) (*submit supporting documents in electronic form*):

No.	FULL NAME. student	Department	Group number, course	Date of receipt of the award, certificate; indicate the prize place	Name conferences	Location	Mob. t ate .	Email	Link to the organizer's website
1	Not available	-	-	-	-	-	-	-	-
<i>Total:-</i>									

3.9. Information about the work of the student scientific society

No.	Chairman of the SSS faculty (course, specialty)	Curator from among the teaching staff	Results of the work of the aided navigation system in accordance with the work plan
1.	Not available	-	-

### 3.10 Information about the work of student clubs

No.	Name of the student group	Number of participants	Achievements
1	"ALGORITHMIC AND PROGRAMMING" Supervisor: Ph.D. Ospanova A. B.	5 students	Participate in the preparation of a project for a competition of student works, and also prepare articles for a conference based on the results of the work
2	"CRYPTOGRAPHY" Head: Art. teacher Ospanov R. M.	25 students	Three students entered the master's program in information security. Three work for the company.
3	"CYBERSPORT" Head: teacher Tashtai. B.	15 students	-
4	ENU CyberSec	6 students	Participate in preparing students to participate in CTF competitions.

## MASTER'S RESEARCH STUDENTS

### 4.1 Number of scientific publications of master's students in scientific journals *included in the Web of Science databases* ( provide a "screenshot" from the database)

No. p/p	FULL NAME. author(s)	Publication title	Journal name, year, number, page, ISSN
<i>Department</i>			
1	Not available	-	-
<i>Total: -</i>			



4.2 Number of scientific publications of master's students in scientific journals included in the Scopus database ( *provide a "screenshot" from the database* )

No. p/p	FULL NAME. author(s) (indicate in English)	Publication title	Journal name, year, number, page, ISSN	journal impact factor (SJR)
1	Satybaldina, D. , Baydeldinov, M., Issainova, A., <b>Alseitov O.</b> , Konyrkhanova A., Akhmetova, Z., Seilov, S.	Artificial Olfactory System for Distinguishing Oil-Contaminated Soils	WSEAS Transactions on Environment and Development , 2023, 19, P. 951–960, Scopus percentile - 45% <a href="https://www.scopus.com/authid/detail.uri?authorId=57193740669#">https://www.scopus.com/authid/detail.uri?authorId=57193740669#</a>	SJR=1.7
<b>Total: 1</b>				

4.3 Number of scientific publications by undergraduates in scientific journals *not included in the Web of Science* and Scopus databases:

a) *in foreign journals (RSCI, etc.)*

No.	FULL NAME. author(s)	Publication title	Journal name, year, number, page, ISSN
1	<b>Seidualy</b> Ayan Kozhanazarovich, Nurusheva Asel Muratovna	ROLE OF LOAD TESTING IN INFORMATION SECURITY	"Student's Bulletin": scientific journal. – No. 16(255). Part 12., Moscow, Publishing house. “Internauka”, 2023. – 72 p. – Electron . in version. oven publ. – <a href="https://studvestnik.ru/journal/stud/herald/255">https://studvestnik.ru/journal/stud/herald/255</a> ISSN 2686-9810 pp. 47-49
2	<b>Seidualy</b> Ayan Kozhanazarovich, Nurusheva Asel Muratovna	DEVELOPMENT OF A METHOD FOR LOAD TESTING OF A MICROSERVICE INFORMATION SYSTEM	"Student's Bulletin": scientific journal. – No. 16(255). Part 12., Moscow, Publishing house. “Internauka”, 2023. – 72 p. – Electron . in version. oven publ. – <a href="https://studvestnik.ru/journal/stud/herald/255">https://studvestnik.ru/journal/stud/herald/255</a> ISSN 2686-9810 pp. 50-53
3	<b>Kadyrov D.S.</b> , Shaikhanova	A Deep Dive into Cobalt Strike Tool	Shakarim University Bulletin. Technical science. No.

	A.K.		4(12)2023. ISSN 2788-7995
<i>Total: 3</i>			

*c) in journals of the Republic of Kazakhstan included in the list of the Committee for Education and Science of the Ministry of Education and Science of the Republic of Kazakhstan*

No. p /p	FULL NAME. author(s)	Publication title	Journal name, year, number, page, ISSN
1	Satybaldina, D., Kalymova , K. and <b>Sydykov, D.</b> 2023.	Application of transfer learning of neural networks in image classification	Bulletin of KazNPU named after. Abay, series “Physical and Mathematical Sciences”. -2023.- No. 1 (81).- P.159-169. DOI: <a href="https://doi.org/10.51889/2022-4.1728-7901.335">https://doi.org/10.51889/2022-4.1728-7901.335</a> . <a href="https://bulletin-phmath.kaznpu.kz/index.php/ped/article/view/1485">https://bulletin-phmath.kaznpu.kz/index.php/ped/article/view/1485</a> ISSN – 1728-7901
2	Satybaldina, D., Isaynova, A., <b>Alseitov, O.</b> , Baideldinov, M., Seilov, Sh.	Creation of a gas analytical multisensory system of the “electronic nose” type and study of its performance for environmental monitoring tasks	KazATK Bulletin. – 2023. – No. 125(2). – pp. 315–323. <a href="https://doi.org/10.52167/1609-1817-2023-125-2-315-323">https://doi.org/10.52167/1609-1817-2023-125-2-315-323</a> ISSN 1609-1817 ISSN Online 2790-5802
3	Satybaldina D.Zh., Sydykov D.M. Isaynova A.N.	Neural network gas classifier for gas analytical multisensor system	Certificate of entry of information into the state register of rights protected by copyright No. 37464 dated June 23, 2023
4	N.T. Zhetenbaev., G.K. Balbaev., A.Sh. Rysbeck	"Powered Ankle Exoskeletons: Modern Configurations and Control Mechanisms",	KazATK Bulletin No. 4 (127), 2023, 262-275 pp. (DOI10.52167/1609-1817-2023-127-4-262-275) <a href="https://vestnik.alt.edu.kz/index.php/journal/article/view/1372">https://vestnik.alt.edu.kz/index.php/journal/article/view/1372</a>
5	Aidarova A. A.	Programming qamtama osaldyktar negizinde eksplottar tudyratyn cyberk au ipterdi anaktau adistemeleri	Certificate of entry of information into the state register of rights protected by copyright No. 36347 dated May 29, 2023
<i>Total: 5</i>			

#### 4.4 Number of scientific publications of master's students in collections of conferences held in the Republic of Kazakhstan:

No.	FULL NAME. author(s)	Publication title	Journal name, year, number, page, ISSN
<i>Department</i>			
1.	Mu ham Adiev Madiyar Galeluly	A survey on static malware analysis and detection methods	XVIII International Scientific Conference “GYLYM JÁNE BILIM-2023”, April 12, 2023
2.	Nu r galikyzy Marzhan	How to use the equipment	XVIII International Scientific Conference “GYLYM JÁNE BILIM-2023”, April 12, 2023
3.	Mukanova Aikun Sabitkyzy	Formal methods for verifying software systems using the example of the Frama-C language	XVIII International Scientific Conference “GYLYM JÁNE BILIM-2023”, April 12, 2023
4.	Alseitov Olzhas Aidosovich	Programming of the program	XVIII International Scientific Conference “GYLYM JÁNE BILIM-2023”, April 12, 2023
5.	Alseitov Olzhas Aidosovich, Sydykov Daniyar Maratovich	Study of the performance of a gas analytical multisensor system when varying the concentrations of model analytes	XVIII International Scientific Conference “GYLYM JÁNE BILIM-2023”, April 12, 2023
6.	Barat Dana Dauletbekkyzy gylymi zhetekshisi – Zh. Akhmetova	Zhelik ka au ipsizdiktia kamtamasyz here SASE model n m k i n d i c t e r s	XVIII International Scientific Conference “GYLYM JÁNE BILIM-2023”, April 12, 2023
7.	Boranbai Zhandos Asylkhanuly	Using vulnerable Docker containers in the process of training bachelors in information security	XVIII International Scientific Conference “GYLYM JÁNE BILIM-2023”, April 12, 2023
8.	Gabitova Albina Bauyrzhankyzy.	Computer incidental zertteu tasilderi	XVIII International Scientific Conference “GYLYM JÁNE BILIM-2023”, April 12, 2023
9.	Zhaksybek Dias Meirbekuly	Program packaging as a method of protecting malware	XVIII International Scientific Conference “GYLYM JÁNE BILIM-2023”, April 12, 2023
10.	Zhaksygalı Farabi Bolatuly	Research of digital forensics in information security incidents	XVIII International Scientific Conference “GYLYM JÁNE BILIM-2023”, April 12, 2023
11.	Zhumashev Sanzhar Maratkaliuly	Security and elimination of operating system vulnerabilities	XVIII International Scientific Conference “GYLYM JÁNE BILIM-2023”, April 12, 2023
12.	Karimzhanov Amir Nurzhanovich	The impact of Deep Fake technology on education and approaches to their detection	XVIII International Scientific Conference “GYLYM JÁNE BILIM-2023”, April 12, 2023
13.	Kuzembay Sholpanay B aqytbekkyzy Kurgumbaev Adlet Muratkanovich	Cryptographical qiltterdi ulester protocols salystyrmala zertteu	XVIII International Scientific Conference “GYLYM JÁNE BILIM-2023”, April 12, 2023
14.	Magzumov Alikhan Maratuly	Ve b- kosymshalardyn negizgi tanymal osaldyktaryn zertteu	XVIII International Scientific Conference “GYLYM JÁNE BILIM-2023”, April 12, 2023

15	Manatbek Əbi l kayyr kabibekuly	SIEM zhuyelerin taldau zhane olardy kauipsizdik salasynda koldanu. zhedel akparat zhane kauipsizdik ortalyktara	XVIII International Scientific Conference “GYLYM JÁNE BILIM-2023”, April 12, 2023
16	Salimova Danagul B akytzhankyzy	algorithm in the locker	XVIII International Scientific Conference “GYLYM JÁNE BILIM-2023”, April 12, 2023
17	Tolegen Aydynov, <b>Olzhas Sabiev</b> , and Dina Satybaldina	Design and Implementation of an Electronic Voting System Using the IBM Blockchain Platform	International Conference on Electrical Facilities and informational technologies 2023 (ICEIC 2023) Proceedings, Almaty, Kazakhstan, August 22nd to 25th, 2023, p.164
18	<b>Olzhas Alseitov</b> , Aliya Issainova, Dina Satybaldina, Assem Konyrkhanova	Detection and Classification of the Volatile Organic Compounds from the Petroleum and Petroleum-Derived Products Using an Electronic Nose and Machine Learning Algorithms	International Conference on Electrical Facilities and informational technologies 2023 (ICEIC 2023) Proceedings, Almaty, Kazakhstan, August 22nd to 25th, 2023, p. 218-223
19	<b>Adlet Smailov</b> , Saukhanova Zhanat	Analysis of client-side and server-side attacks in the context of web applications	International Conference on Electrical Facilities and informational technologies 2023 (ICEIC 2023) Proceedings, Almaty, Kazakhstan, August 22nd to 25th, 2023, p. 150-153

Total: 19

#### 4.5 Number of scientific publications by undergraduates in collections of conferences held abroad

No.	FULL NAME. author(s)	Publication title	Journal name, year, number, page, ISSN	A country
Department				
1	<b>Serikkazin</b> A.E., Nurusheva A.M.	Unification of information security standards: a unified approach to increasing the cyber resilience of organizations	Scientific forum: Technical and physical and mathematical sciences: collection. Art. based on materials of the LXIII international. scientific - practical conf. — No. 4(63). - M., Ed. "MCNO", 2023.	RF
2	<b>Tazhikenova N.</b> , Tokseit D.	Questions of technical and physical and mathematical sciences in the light of modern research: collection. Art. by mother _	LXIX int. scientific - practical conf. No. 11(60). – Novosibirsk: SibAK, 2023. – P. 15-22.	RF

Total:2

#### 4.6 List of undergraduates who received prizes (I, II, III) in various competitions, exhibitions, conferences in the Republic of Kazakhstan (*submit supporting documents in electronic form*):

No.	FULL NAME. master's student	Department	No. of groups, course	Date of receipt of the award, certificate;	Name conferences	Location	Mob.t ate .	Email	Link to the organizer's website
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				<b>indicate the prize place</b>					
1	Boranbai Zhandos Asylkhanuly	IS	2nd year	04/12/2023, Diploma 1 Place	XVIII International Scientific Conference “GYLYM JÁNE BILIM-2023”, April 12, 2023	ENU named after L.N. Gumilyov, Astana, Kazakhstan			
2	Alseitov Olzhas Aidosovich, Sydykov Daniyar Maratovich (joint report)	IS	1st year 2nd year	04/12/2023, Diploma 1 Place	XVIII International Scientific Conference “GYLYM JÁNE BILIM-2023”, April 12, 2023	ENU named after L.N. Gumilyov, Astana, Kazakhstan			
3	Kuttymbek Daniyar Asetuly, member of the national team of the Department of Information Security	IS	1st year	December 12-13, 2023, Diploma 3 Place	International Collegiate Programming Contest (ICPC), international student team competition in sports programming, Northeast Region finals	Astana ITU, Astana, Kazakhstan			
Total:3									

4.7 List of undergraduates who received prizes (I, II, III) in various competitions, exhibitions, conferences in the CIS (*submit supporting documents in electronic form*):

No.	FULL NAME. master's student	Department	Group number, course	Date of receipt of the award, certificate; indicate the prize place	Name conferences	Location	Mob.t ate .	Email	Link to the organizer's website
1	Kadyrov Damir Serikovich	IS	1 course	04/22/2023 1 place	STF - information security competition "KODEBAY GAMES"	Moscow			
<i>Total: 1</i>									

## 5. DOCTORAL RESEARCH

the Web of Science database ( *provide a "screenshot" from the database* )

No. p /p	FULL NAME. author(s) (indicate in English)	Publication title	Journal name, year, number, page, ISSN
1.	<b>Aliya Abdiraman</b> , Nikolaj Goranin , Simas Balevicius , Assel Nurusheva , Inga Tumasonienė	Application of Multicriteria Methods for Improvement of Information Security Metrics	Sustainability 2023, 15(10), 8114; Indexed in Web of Science: Q2, Scopus: Q1, <a href="https://doi.org/10.3390/su15108114">https://doi.org/10.3390/su15108114</a>
<i>Total: 1</i>			

5.2 Number of scientific publications by doctoral students in scientific journals included in the Scopus database ( *provide a "screenshot" from the database* )

No. p /p	FULL NAME. author(s) (indicate in English)	Publication title	Journal name, year, number, page, ISSN	journal impact factor
1	<b>Aliya Abdiraman</b> , Nikolaj Goranin , Simas Balevicius , Assel Nurusheva , Inga Tumasonienė	Application of Multicriteria Methods for Improvement of Information Security Metrics	Sustainability 2023, 15(10), 8114; Indexed in Web of Science: Q2, Scopus: Q1, <a href="https://doi.org/10.3390/su15108114">https://doi.org/10.3390/su15108114</a>	percentil e 83

2	<b>Tasmagambetov, O.</b> , Seitkulov, Y., <b>Ospanov, R., Yergaliyeva, B.</b>	Fault-tolerant backup storage system for confidential data in distributed servers	Telkommnika (Telecommunication Computing Electronics and Control) , 2023, 21(5), p . 1030–1038, Scopus: Q2, <b>percentile 56</b> <a href="https://www.scopus.com/record/display.uri?eid=2-s2.0-85169042723&amp;origin=resultslist&amp;sort=plf-f">https://www.scopus.com/record/display.uri?eid=2-s2.0-85169042723&amp;origin=resultslist&amp;sort=plf-f</a>	SJR=0.2 86
<i>Total:</i>		2		

5.3 Number of scientific publications by doctoral students in scientific journals *not included in the Thomson Reuters and Scopus databases:*

*a) in foreign journals (RSCI, etc.)*

No.	FULL NAME. author(s)	Publication title	Journal name, year, number, page, ISSN
<i>Department</i>			
1	Not available	-	-
<i>Total: -</i>			

*b) in journals of the Republic of Kazakhstan included in the list of the Committee for Education and Science of the Ministry of Education and Science of the Republic of Kazakhstan*

No.	FULL NAME. author(s)	Publication title	Journal name, year, number, page, ISSN
<i>Department</i>			
1	Satybaldina D., Yakovlev V., <b>Ergalieva B., Ospanov R.</b> , Amanzholova S.	Methods of cryptographic protection and authentication in cellular networks	KazATK Bulletin. – 2023. – No. 2 (125) – P. 302–314. ISSN 1609-1817 ISSN Online 2790-5802 / <a href="https://vestnik.alt.edu.kz/index.php/journal/article/view/1138">https://vestnik.alt.edu.kz/index.php/journal/article/view/1138</a>
2	<b>Tasmagambetov , O.</b> , Seitkulov, E., <b>Ospanov, R.</b> , Zhuzbaev, S., & Ergalieva, B.	Analysis of the security model of the functioning of a fault-tolerant system for backup storage of confidential data .	Bulletin of KazATK-2023. - No. 125(2) - pp. 211–222. <a href="https://doi.org/10.52167/1609-1817-2023-125-2-211-222">https://doi.org/10.52167/1609-1817-2023-125-2-211-222</a> ISSN 1609-1817 ISSN Online 2790-5802
3	Seitkulov, E., Tashatov, N., <b>Ergalieva, B.</b> ,	Critical analysis of technological	KazATK Bulletin. -2023.- No. 124(1). -WITH.

	<b>Tasmagambetov , O. , Ospanov, R.</b>	solutions in the field of cybersecurity of cellular networks.	222–229 . <a href="https://doi.org/10.52167/1609-1817-2023-124-1-222-229">https://doi.org/10.52167/1609-1817-2023-124-1-222-229</a> ISSN 1609-1817 ISSN Online 2790-5802
4	Nurusheva A.M., <b>Amrenov A.K.</b>	Use and analysis of next generation firewall to achieve security of information and communication infrastructure	BULLETIN of the National Engineering Academy of the Republic of Kazakhstan, No. 1, 2023, 77-84, ISSN 2709–4693
5	<b>Ospanov R.M.</b> , Seitkulov E.N., Sisenov N.M.	Software implementation of the cryptographic hash function “ТАҒБА”	Certificate of entry of information into the state register of rights protected by copyright No. 28399 dated August 22, 2022
6	MOLDAMURAT KHURALAY, Seitkulov Erzhan Nurakhanovich, Atanov Sabyrzhan Kubeisinovich, <b>Ergalieva Banu Bakytzhanovna</b> , Kyzyrkanov Abzal Ermekbayuly	Saikestendiru zhane authenticationlaudisterin yyaly baylanys jellyrinde authorizationlaudy modeldeu	Certificate of entry of information into the state register of rights protected by copyright No. 34263 dated April 4, 2023
7	Satybaldina, D., Seilov, Sh., <b>Nurzhaubaev, A.</b> , Abildinov, D.	Research into automation of long-term storage processes of vegetables and fruits based on the use of artificial olfactory systems.	<i>KazATK Bulletin</i> , (2023). 128 (5), 176–188. <a href="https://doi.org/10.52167/1609-1817-2023-128-5-176-18">https://doi.org/10.52167/1609-1817-2023-128-5-176-18</a>
<i>Total:7</i>			

*c) in journals of the Republic of Kazakhstan not included in the list of the Committee for Education and Science of the Ministry of Education and Science of the Republic of Kazakhstan*

No.	FULL NAME. author(s)	Publication title	Journal name, year, number, page, ISSN
<i>Department</i>			
1	Not available	-	-
<i>Total: -</i>			

5.4 Number of scientific publications by doctoral students in conference proceedings in the Republic of Kazakhstan



No.	FULL NAME. author(s)	Publication title	Journal name, year, number, page, ISSN
<i>Department</i>			
1	Ospanov Ruslan Maratovich	Distributed registry technologies in the military sphere	XVIII International Scientific Conference “GYLYM JÁNE BILIM-2023”, April 12, 2023
<i>Total:1</i>			

#### 5.5 Number of scientific publications by doctoral students in proceedings of conferences held abroad

No.	FULL NAME. author(s)	Publication title	Journal name, year, number, page, ISSN	A country
<i>Department</i>				
1	B. Tuleuov, A. Ospanova, A. <b>Tussipkhanov</b> , A. Shegetaeva	Lightweight Portable Environment for Building Visual Studio Projects (Solutions) and C/C++ Sources without Visual Studio	Proc. 14th National Conference with International Participation "Electronica 2023", June 1 - 2, 2023, Sofia, Bulgaria (accepted)	Bulgaria
2	B. Tuleuov, A. Ospanova, A. <b>Tussipkhanov</b> , A. <b>Shegetaeva</b>	Lightweight Portable Environment for Building Visual Studio Projects (Solutions) and C/C++ Sources without Visual Studio	Proc. 14th National Conference with International Participation "Electronica 2023", June 1 - 2, 2023, Sofia, Bulgaria (accepted)	Bulgaria
3	<b>K. Syzdykbayev</b> , A. Shaikhanova, V. Martsenyuk	Research and development of text information encryption algorithms based on chaotic sequences	XIII Międzynarodowa Konferencja Studentów oraz Doktorantów „Inżynier XXI wieku ” ( The 13th International Conference of Students and Doctoral Students "Engineer of the 21st Century"), 02.12.2023. Rr. 189-198. DOI: <a href="https://doi.org/10.53052/9788367652124.1">https://doi.org/10.53052/9788367652124.1</a>	Poland
4	<b>A. Yessenbayeva</b> , A. Shaikhanova, V. Martsenyuk	Study of modern principles and methods of image encryption based on chaotic sequences	XIII Międzynarodowa Konferencja Studentów oraz Doktorantów „Inżynier XXI wieku ” ( The 13th International Conference of Students and Doctoral Students "Engineer of the 21st Century"), 02.12.2023. Rr. 207-215. DOI: <a href="https://doi.org/10.53052/9788367652124.20">https://doi.org/10.53052/9788367652124.20</a>	Poland

Total:4

5.6 List of doctoral students who received prizes (I, II, III) in various competitions, exhibitions, conferences in the Republic of Kazakhstan ( *submit supporting documents in electronic form*):

No.	FULL NAME. doctoral student	Department	No. of groups, course	Date of receipt of the award, certificate; indicate the prize place	Name conferences	Location	Mob.t ate .	Email	Link to the organizer's website
1	Not available								
<i>Total:-</i>									

5.7 List of doctoral students who received prizes (I, II, III) in various competitions, exhibitions, conferences in the CIS (*submit supporting documents in electronic form*):

No.	FULL NAME. doctoral student	Department	No. of groups, course	Date of receipt of the award, certificate; indicate the prize place	Name conferences	Location	Mob.t ate .	Email	Link to the organizer's website
1	<i>Not available</i>								
<i>Total: -</i>									

5.8 List of doctoral students who received prizes (I, II, III) in various competitions, exhibitions, conferences abroad (except the CIS ) ( *submit supporting documents in electronic form*):

No.	FULL NAME. doctoral student	Department	Group number, course	Date of receipt of the award, certificate; indicate the prize place	Name conferences	Location	Mob.t ate .	Email	Link to the organizer's website
1	Not available	-	-	-	-	-	-	-	-
<i>Total:-</i>									

## 6. INTERNATIONAL SCIENTIFIC COOPERATION

In the 2022-2023 academic year, the following joint educational programs are being implemented at the Department of Information Security:

### 6.1 Availability of concluded international agreements on scientific and technical cooperation with universities and research centers for the reporting year

No.	Organization (universities, research centers, etc.)	A country	Title of the document	date of signing	Validity	Implementation progress
1	North Caucasus Federal University, 04/10/01 “Mathematical and software for information security”, master’s degree (OP 7M06306 “Information Security Systems” (ENU), master’s degree)	<i>Russia</i>	Agreement No. 127 M dated August 26, 2020 on the creation of a joint educational program with the possibility of obtaining two diplomas between the North Caucasus Federal University and ENU named after. L. N. Gumileva	08/26/2020	09.29.2024	Number of students under SOP in 2021-2022. From ENU - 4 master's students From NCFU - 4 master's students
2	Federal State Educational Institution of Higher Education “National Research Nuclear University “MEPhI”, 10.04.01 Information Security EP “Ensuring information security and continuity of operation of information processing objects”, master's degree (OP 7M06306 “Information Security Systems” (ENU), master’s degree)	<i>Russia</i>	Additional agreement No. 10.04.01-ENU-1 dated 09.11.2020 to the Agreement on joint educational programs dated 08.13.2019 between the Federal State Educational Institution of Higher Education "National Research Nuclear University "MEPhI" and ENU	09/11/2020	05/20/2023	From ENU - 10 master's students
<i>Total: 2</i>						

6.2 Invited foreign professors to participate in scientific events (conferences, summer schools)

No .	FULL NAME. visiting professor	Organization/country of visiting professor	Name of scientific event	Periods of stay	Brief information
1	Abdul Razak	PhD Doctor of New York University (USA)	Taught courses: “ Computer Network Security-2” for 7M06306 Information Security Systems , “Design of an information security management system” for 8D06306 Information security systems	2nd semester 202 2 -202 3 years	Gave lectures, conducted practical training. and laboratory Bachelor's degree . to the department (total 90 hours), preparing an article jointly. with doctoral students of the department
2	Bishwajeet Kumar Pandey	PhD, Doctor of Jain University (India)	“Digital signal processing” for 6B06306 Information security systems , “Malicious code detection technologies” for 7M06306 Information security systems	2nd semester 2022-2023	Gave lectures, conducted practical training. and laboratory Bachelor's degree . to the pulpit (total 90 hours)
3	Boltaev Sherzot Tuilibaevich	PhD, Associate Professor at the National University named after M. Ulugbek, December 2022	scientific seminar for master's and doctoral students	1st semester 2022-2023	spent scientific seminars : "Introduction to Cryptographic protocols", "UzDSt 1105:2009 cryptographic algorithm"
4	Anarkulov Maksad	PhD, Associate Professor , Fergana	scientific seminar for	2nd semester	conducted a

	Karimberdievich	State University	master's and doctoral students	2022-2023	scientific seminar on the topic: "Areas of application of artificial intelligence"
5	.Rakhimov Kuvvatali Ortikovich	PhD, Associate Professor , Fergana State University	scientific seminar for master's and doctoral students	2nd semester 2022-2023	conducted a scientific seminar on the topic: "Possibilities of Python libraries for machine learning and data analysis"
6	Bishwajeet Kumar Pandey	PhD, Doctor of Jain University (India)	"Security of software components of information systems" for 6B06306 Information security systems , "Malicious code detection technologies" for 7M06306 Information security systems	03.11.2023-03.12.2023 2023-2024 G .	Gave lectures, conducted practical training. and laboratory Bachelor's degree . and master's student. departments (total 90 hours), conducted a scientific seminar
6	Nikolay Goranin	Vilnius Technical University named after Prince Gediminas	Scientific guidance	2022-2023	Consultations were held with the doctoral student on the topic of the dissertation, together with the

					doctoral students' supervisors
7	Petr Popov	City, University of London	Scientific guidance	2022-2023	Consultations were held with the doctoral student on the topic of the dissertation, together with the doctoral students' supervisors
8	WillianDimitrov	University of Library Studies and Information Technologies Computer Science	Scientific guidance	2022-2023	Consultations were held with the doctoral student on the topic of the dissertation, together with the doctoral students' supervisors
9	Kurbatsky Alexander Nikolaevich	Belarusian State University	Scientific guidance	2022-2023	Consultations were held with the doctoral student on the topic of the dissertation, together with the doctoral students' supervisors
10	Tebuova Fariza Bilyalovna	North Caucasus Federal University	Scientific guidance	2022-2023	Consultations were

					held with the doctoral student on the topic of the dissertation, together with the doctoral students' supervisors
11	Sukhomlin Vladimir Alexandrovich	Moscow State University named after L. Omonosov	Scientific guidance	2022-2023	Consultations were held with the doctoral student on the topic of the dissertation, together with the doctoral students' supervisors
12	Goykhman Vadim Yurievich	St. Petersburg State University of Telecommunications	Scientific guidance	2022-2023	Consultations were held with the doctoral student on the topic of the dissertation, together with the doctoral students' supervisors
13	Kopytov Vladimir Vyacheslavovich	North Caucasus Federal University	Scientific guidance	2022-2023	Consultations were held with the doctoral student on the topic of the dissertation,

					together with the doctoral students' supervisors
14	Petrenko Vyacheslav Ivanovich	North Caucasus Federal University	Scientific guidance	2022-2023	Consultations were held with the doctoral student on the topic of the dissertation, together with the doctoral students' supervisors
15	Mohamed Othman	Professor, University of Putra, Malaysia	Scientific guidance	2022-2023	Consultations were held with the doctoral student on the topic of the dissertation, together with the doctoral students' supervisors
16	Francesco Sica	PhD, Associate Professor, Florida Atlantic University, USA	Scientific guidance	2022-2023	Consultations were held with the doctoral student on the topic of the dissertation, together with the doctoral students' supervisors



17	Vasyl Martsenyuk	Professor, DSc, PhD, University of Bielsko-Biala, Poland	Scientific guidance	2022-2023	Consultations were held with the doctoral student on the topic of the dissertation, together with the doctoral students' supervisors
18	Chenis Antanas Ionovich	Ph.D., Professor, Vilnius Technical University named after Prince Gediminas (Vilnius, Lithuania)	Scientific guidance	2022-2023	Consultations were held with the doctoral student on the topic of the dissertation, together with the doctoral students' supervisors
19	Eshref Adali	PhD, Istanbul Technical University , Turkey	Scientific guidance	2022-2023	were held with the doctoral student on the topic of the dissertation, together with the doctoral students' supervisors
20	Yurkov Nikolay Kondratievich	Doctor of Technical Sciences, Professor of Penza State University (Penza, Russia)	Scientific guidance	2022-2023	Consultations were held with the doctoral student on the topic of the dissertation,

					together with the doctoral students' supervisors
21	Chenis Antanas Ionovich	physics and mathematics Gylymdaryn candidates, professor, Gediminas Gediminas Technical University, Lithuania	Scientific guidance	2022-2023	Consultations were held with the doctoral student on the topic of the dissertation, together with the doctoral students' supervisors
<i>Total: 21</i>					

The department actively and closely cooperates with foreign partners and is constantly expanding its external contacts

#### 7. ANALYSIS OF R& D of the Department of Information Security (results of the work of the faculties/department, comparison with last year)

No.	Indicators	Previous 2022	Reporting 2023
1.	Scientific publications in international scientific publications Web of Science :	3	6
2.	Scientific publications in international scientific journals Scopus:	20	20
3.	<i>Publications in journals not included in the Web of Science and Scopus databases</i> <i>a) in foreign journals (RSCI, etc.)</i> <i>b) in journals of the Republic of Kazakhstan included in the list of the Committee for Education and Science of the Ministry of Education and Science of the Republic of Kazakhstan</i> <i>c ) in journals of the Republic of Kazakhstan not included in the list of the Committee for Education and Science of the Ministry of Education and Science of the Republic of Kazakhstan</i>	3 7 -	3 25 1
4.	Scientific publications in collections of conferences held in the Republic of Kazakhstan:	2	6
5.	Scientific publications in scientific conferences, symposiums, seminars abroad:	3	10


6.	Organization and holding of scientific events at the faculty/department: International conferences	-	-
7.	Participation in the work of the editorial board of journals not included in the Thomson Reuters, Scopus databases	3	4
8.	List of STUDENTS who received prizes (I, II, III) in various competitions, exhibitions, conferences in the Republic of Kazakhstan	15	4
9.	List of STUDENTS who received prizes (I, II, III) in various competitions, exhibitions, conferences in the CIS	-	-
10.	Number of scientific publications by STUDENTS in scientific journals, <b>total</b> Number of scientific publications by students in collections of conferences held in the Republic of Kazakhstan Number of scientific publications by students in collections of conferences abroad	12 12 -	7 7 -
eleven n.	Number of scientific publications by MASTER STUDENTS in scientific journals <i>included in the Web of Science</i> and Scopus databases:	- -	- <b>1</b>
12.	Number of scientific publications by MASTER STUDENTS in scientific journals <i>not included in the Web of Science</i> and Scopus databases: <i>a) in foreign journals (RSCI, etc.)</i> <i>V) in journals of the Republic of Kazakhstan included in the list of the Committee for Education and Science of the Ministry of Education and Science of the Republic of Kazakhstan</i>	5 -	3 5
13.	<i>in journals of the Republic of Kazakhstan not included in the list of the Committee for Education and Science of the Ministry of Education and Science of the Republic of Kazakhstan</i>	-	-
14.	Number of scientific publications by MASTER STUDENTS in collections of conferences held in the Republic of Kazakhstan:	15	19
15.	Number of scientific publications by MASTER STUDENTS in collections of conferences held abroad	1	2
16.	List of MAGISTRATES who received prizes (I, II, III) in various competitions, exhibitions, conferences in the Republic of Kazakhstan	2	3
17.	List of MASTER STUDENTS who received prizes (I, II, III) in various competitions, exhibitions, conferences in the CIS and abroad	2	1
18.	Number of scientific publications of DOCTORAL students in scientific journals <i>included in the Web of Science</i> and Scopus databases:	2 6	1 2

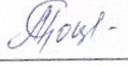
19.	Number of scientific publications of DOCTORAL students in scientific journals <i>not included in the Web of Science and Scopus databases:</i> <i>a) in foreign journals (RSCI, etc.)</i> <i>b) in journals of the Republic of Kazakhstan included in the list of the Committee for Education and Science of the Ministry of Education and Science of the Republic of Kazakhstan</i> <i>c) in journals of the Republic of Kazakhstan not included in the list of the Committee for Education and Science of the Ministry of Education and Science of the Republic of Kazakhstan</i>	- 4 -	- 7 -
20.	Number of scientific publications by doctoral students in conference proceedings in the Republic of Kazakhstan.	1	1
21.	Number of scientific publications by doctoral students in proceedings of conferences held abroad.	1	4
22.	List of DOCTORAL STUDENTS who received prizes (I, II, III) in various competitions, exhibitions, conferences in the Republic of Kazakhstan	2	-
23.	List of DOCTORAL STUDENTS who received prizes (I, II, III) in various competitions, exhibitions, conferences in the CIS and abroad	1	-

**8. PROSPECTS FOR THE DEVELOPMENT OF SCIENTIFIC ACTIVITY** (problems, ways of developing research and proposals for further improvement of scientific activity).

Overall, calendar year 2023 performance is an improvement on many measures compared to 2022 performance.

Next year, the department plans to improve the participation of teaching staff and students of the department in competitions for grant funding of projects; continue work on the participation of students, undergraduates and doctoral students in scientific conferences, olympiads and competitions; carry out work to improve the quality of student publications, to publish research results in publications indexed by Scopus and WoS; continue work on the participation of teaching staff in events held by the faculty and the university.

Responsible for research work of the IS department  Shakhmetova G.B.

Agreed  
 Head of the Department of Information Security  Konyrkhanova A.A.