

MINISTRY OF EDUCATION AND SCIENCE OF THE REPUBLIC OF KAZAKHSTAN
NAO " Eurasian National University named after A.I. L.N. Gumilyov »



REPORT
about research work
Department of "Information Security"
(name of department)
for 2021

CONSIDERED
at a meeting of the Faculty Council / *at a meeting of the department*
Protocol № 5
" 25 " November 2021

Nur-Sultan - 2021

1. STAFF

1.1 Holders of awards, honorary titles (international, republican):

1) State awards:

Order of the Republic of Kazakhstan (Highest award of perfection of honors Order "Altyn Kyran" (order Gold Eagle), " Halyk kaharmany " (order National hero), "Kazakhstannyn Enbek Epi " (Labor Hero of Kazakhstan), "Otan" (Mother country order), "Barys" (Order Panther), "Dank" (order of glory), "Aibyn" (Order of virtue), "Parasat" (Order of nobility), "Kurmet ")

Satybaldina D. Zh., Candidate of Physical and Mathematical Sciences, PhD, Professor, State award, anniversary medal "30 years of Independence of Kazakhstan" 2021, Nur-Sultan, Kazakhstan

Medals of the Republic of Kazakhstan ("Erligi ushin" (order for courage), "Zhayyngyrlık erligi ears" (order for martial prowess), "Eren enbegi ushin" (order for labor perfection), "Shapagat" (order of Mercy))

Honorary titles of the Republic of Kazakhstan ("Kazakhstannyn enbek sinirgen kayratkeri")

2) Departmental awards: Breastplate «Y. Altynsarin», Breastplate «Gylymdy ladytuga sinirgen enbegi ushin», Breastplate «Bilim take isinin Kurmetti kyzmetkeri», Breastplate «Madeniet salasyn Uzdigi»

Satybaldina D. Zh., Candidate of Physical and Mathematical Sciences, PhD, Professor, Honorary Diploma of the Rector for his contribution to the development of the education and science system in honor of the 30th anniversary of the Independence of the Republic of Kazakhstan and the 25th anniversary of the ENU. L.N. Gumilev, 2021, Nur-Sultan, Kazakhstan

Satybaldina D. Zh., Candidate of Physical and Mathematical Sciences, PhD, Professor, Honorary Diploma of the Rector "For Contribution to the Development of University Science" in honor of April 12 - Day of Science Workers, 2021, Nur-Sultan, Kazakhstan

Aimicheva G.I., Honorary diploma of the rector "For contribution to the development of university science" in honor of April 12 - Day of Science Workers, 2021, Nur-Sultan, Kazakhstan

3) The best university lecturers

Satybaldina D. Zh., Candidate of Physical and Mathematical Sciences, PhD, Professor, Republican competition "The best lecturer of the university-2021", Nur-Sultan, Kazakhstan

4) Membership in Academies

5) Holders of international titles and diplomas

6) Diplomas of ministries and departments

Satybaldina D. Zh., Candidate of Physical and Mathematical Sciences, PhD, Professor, Certificate of Honor on behalf of the Minister of Education and Science of the Republic of Kazakhstan A. Aimagambetov, 2021, Nur-Sultan, Kazakhstan

7) Other

Kobzarev V.A., Medal "25th Anniversary of the Eurasian University" and a letter of thanks from the rector in honor of the 30th Independence of the Republic of Kazakhstan and the 25th anniversary of the ENU. L.N. Gumilyov, 2021, Nur-Sultan, Kazakhstan

Aimicheva G.I., Letter of thanks for the high KPI results in the 2020-2021 academic year and for the contribution to the strategic development of the university, 2021, Nur-Sultan, Kazakhstan

Urynbasarova A.Zh., Diploma of the 1st degree and medal «Үстаз - ылағатты" esim» for participation in the republican competition " Uzdik pedagogue - 2021", organized by the National Innovative Research Center "BILIM ORKENIETI" in honor of the 30th anniversary of Independence of Kazakhstan, 2021, Nur-Sultan, Kazakhstan

Tokkulieva A.K., Certificate of honor on behalf of the Rector of ENU E. Sydykov , 2021, Nur-Sultan, Kazakhstan

Kaiupov E.K., A letter of thanks for active participation in the Republican hackathon “Nur-Sultan is the center of digital transformation of Kazakhstan, dedicated to the 30th anniversary of the Independence of the Republic of Kazakhstan and the 25th anniversary of the ENU. L.N. Gumilyov, 2021, Nur-Sultan, Kazakhstan

Tashtai B.A., A letter of thanks for active participation in the Republican hackathon “Nur-Sultan is the center of digital transformation of Kazakhstan, dedicated to the 30th anniversary of the Independence of the Republic of Kazakhstan and the 25th anniversary of the ENU. L.N. Gumilyov" 2021, Nur-Sultan, Kazakhstan

Kanzhekeev A.S., A letter of thanks for active participation in the Republican hackathon “Nur-Sultan is the center of digital transformation of Kazakhstan, dedicated to the 30th anniversary of the Independence of the Republic of Kazakhstan and the 25th anniversary of the ENU. L.N. Gumilyov" 2021, Nur-Sultan, Kazakhstan

1.2 Received awards in the field of science, scientific scholarships (including "Bolashak") in the Republic of Kazakhstan

	FULL NAME, Science degree, position	Competition name, date and venue	Result
1	Nurusheva Asel Muratovna, PhD, acting Associate Professor of the Department of Information Security	Competition for the award of state scientific scholarships for young scientists, October 2021, Nur-Sultan, Kazakhstan	A state scientific scholarship for young scientists was awarded in accordance with the order of acting. Minister of Education and Science of the Republic of Kazakhstan dated December 23, 2021 No. 600.
<i>Total: 1</i>			

1.3 Science awards, scholarships, grants (ErasmusMundus , Tempus , DAAD, etc.) received abroad

No.	FULL NAME, science. degree, position	Competition name, date and venue	Result
1			
<i>Total:</i>			

1.4 Presence of scientific schools

2. MAIN RESULTS OF SCIENTIFIC ACTIVITIES OF THE STAFF

2.1. Main (significant) results of scientific activity

Lecturers of the department "Information Security" implement research activities in conjunction with the Research Institute "Information Security and Cryptology".

Research Institute "Information Security and Cryptology" has been operating since 2012 (<http://iisc.kz/>). The director of the institute is Seytkulov E.N., Ph.D., Associate Professor of the Department of Information Security.

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 protection of information;
6. Development of crypto-algorithms;
7. Software solutions.

To carry out its activities, the Research Institute "Information Security and Cryptology" has:

- "Cybershield : research and development of a cryptographic hashing algorithm", scientific supervisor Seitkulov E.N., ICRIAP grant, 2020-2022;
- "Cybershield : development of lightweight cryptographic systems and information security technologies for the Internet of things", scientific supervisor Seitkulov E.N., ICRIAP grant, 2020-2022
- "Research and development of methods and tools for generating S-boxes for symmetric cryptographic algorithms", scientific supervisor Seitkulov E.N., 2021-2023
- "Intelligent software and hardware system based on Raspberry Pi for testing network security with the generation of recommendations for decision-making "supervisor Ospanova A.B., competition for grant funding for scientific and (or) scientific and technical projects for 2021-2023 with a period of implementation of 12 months (MES RK).

2.2 Scientific publications in international scientific publications Web of Science (*submit a "screenshot" from the database*):

No. p/n	FULL NAME. author(s) (indicate in English)	Publication title	Name of the journal, year, number, pages, ISSN	journal impact factor
<i>department</i>				

1.	Seilov , Sh Zh , Seilov , AA, Shyngisov , DS, Goikhman , V. Yu , Levakov , AK, Sokolov, NA, Zhursinbek , Y. Sh	The Concept of Building a Network of Digital Twins to Increase the Efficiency of Complex Telecommunication Systems	Show Web of Science ResearcherID number and ORCID (provided by Clarivate) COMPLEXITY Volume 2021 Article number 9480235 DOI10.1155/2021/9480235 Published on MAR 15 2021 Article document type	2.833, (Q2)
2.	Ospanov , RM, Seitkulov , YN, Sissenov , NM, Yergalieva , BB	An example of an internal function for the SPONGE scheme	VESTNIK SANKT-PETERBURGSKOGO UNIVERSITETA SERIYA 10 PRIKLADNAYA MATEMATIKA INFORMATIKA PROTSESSY UPRAVLENIYA Volume17 Issue 3 Page 287-293 DOI10.21638/11701/spbu10.2021.306 Published 2021	-
3	Satybaldina, DZ h ., Zolotarev VV, Ovechkin GV, Kzyz Sailau Zh	New concatenation schemes based on the multithreshold decoders of the convolutional self-orthogonal codes for Gaussian channels	EURASIAN JOURNAL OF MATHEMATICAL AND COMPUTER APPLICATIONS Volume 9, Issue 4, Page 51-62 DOI10.32523/2306-6172-2021-9-4-51-62 Published 2021 Document Type Article Accession Number WOS:000728178900004 ISSN 2306-6172	-
Total: 3				
<i>Total by faculty:</i>				

2.3 Hirsch index according to the Web of Science database:

No. p / p	FULL NAME. sci. degree, position	h- index
1	Satybaldina D.Zh., Ph.D., head of the department	3
2	Seilov Sh.Zh., Ph.D., Doctor of Economics, Professor	2

3	Nurusheva A.M., PhD, acting associate professor	2
4	Ospanova A. B., Ph.D., acting associate professor	1
5	Shakhmetova G.B. master	1
6	Aimicheva G.I. master	2
7	Santeeva S.A. master	2
8	Konyrkhanova A.A. associate professor	1
9	Seitkulov E.N.	2
total: 9		

2.4 Scientific publications in international scientific publications Scopus (*submit a "screenshot" from the database*):

No. p/n	FULL NAME. author(s) (indicate in English)	Publication title	Name of the journal, year, number, pages, ISSN	journal impact factor (SJR)
<i>department</i>				
1.	Satybaldina, D., Kalymova, G.	Deep learning based static hand gesture recognition	(2021) Indonesian Journal of Electrical Engineering and Computer Science, 21(1), pp. 398-405. https://www.scopus.com/inward/record.uri?eid=2-s2.0-85092638420&doi=10.11591%2fijeecs.v21.i1.pp398-405&partnerID=40&md5=0d4f94754509de07873b995561cf8bdf DOI: 10.11591/ijeecs.v21.i1.pp398-405	0.775
2	Satybaldina, DZ h ., Zolotarev VV, Ovechkin GV, Kyzy Sailau Zh	New c oncatenation schemes based on the multithreshold decoders of the convolutional self-orthogonal codes for Gaussian channels	EURASIAN JOURNAL OF MATHEMATICAL AND COMPUTER APPLICATIONS Volume 9, Issue 4, Page 51-62 DOI10.32523/2306-6172-2021-9-4-51-62	0.153

3	Kuznetsov , N.A. , Zolotarev , VV , Ovechkin , GV , Satybaldina, D.Zh . , Omirbaev , ED	Editorial retraction: Overview of polar codes problems from Optimization Error Correction Coding Theory technologies points of view	Contemporary Problemy Distancenogo Zondirovaniya Zemli iz Kosmosa (2020) 17:4 (9-26) DOI: 10.21046/2070-7401-2020-17-4-9-26	0.350
4	Seksembayeva , MA , Tashatov, NN , Ovechkin , G. , Satybaldina, D.Zh . , Seitkulov , YN	Study of the Principles of Error Correcting Code in A Multipath Communication Channel with Intersymbol Interference	Journal of Theoretical and Applied Information Technology this link is disabled , 2021, 99(18), p . 4387–4398	0.153
5	Tebueva , F. , Pavlov, A. , Satybaldina, D.	A method for planning the trajectory of a mobile robot in an unknown environment with obstacles	E3S Web of Conferences , 2021, 270, 01035	0.203
6	Shakhmetova , G., Saukhanova , Z., Udzir , N.I., Sharipbay, A., Saukhanov , N.	Application of pseudo-memory finite automata for information encryption	CEUR Workshop Proceedings. Vol. 2853, 2021, Pages 330-339 2nd International Workshop on Intelligent Information Technologies and Systems of Information Security, IntelliTSIS 2021; Khmelnytskyi ; Ukraine; 24 March 2021 - 26 March 2021. ISSN: 16130073. Scopus.	0.177
7.	Ospanov , RM, Seitkulov , YN, Sissenov , NM, Yergalieva , BB	Sponge Inner Function Example	Bulletin of St. Petersburg University. Applied Mathematics. Informatics. Management processes. 2021, Vol. 17. Issue . 3. - S. 287-293.	0.233
8.	Gulim Tursyngaliyeva , Kakim Sagindykov , Assem Konyrkhanova , Rozamgul Niyazova	Modeling the dynamic ethnic processes in a multinational society	Journal of Modeling in Management, 2021, ISSN: 1746-5664 https://www.emerald.com/insight/content/doi/10.1108/JM2-11-2020-0308/full/html	0.434
9.	Shakerkhan , KO , Meshechkin , VV , Sagindykov , KM , Konyrkhanova , AA , Abilmazhinov , ET	Development of an industrial-scale bioreactor in the context of a global pandemic	International Scientific and Practical Conference "Ensuring Sustainable Development in the Context of Agriculture, Green Energy, Ecology and Earth Science" (ESDCA 2021) IOP Conf. Series: Earth and Environmental Science 723(4) (2021) 042034 https://iopscience.iop.org/article/10.1088/1755-1315/723/4/042034/pdf (Web link to database https://www.scopus.com/sources.uri),	0.179

10.	Yerzhan N. Seitkulov , Seilkhan N. Boranbayev , Gulden B. Ulyukova , Banu B. Yergaliyeva , Dina Satybaldina	Methods for secure cloud processing of big data	https://www.scopus.com/sourceid/21100799500?origin=resultslist Indonesian Journal of Electrical Engineering and Computer Science Vol. 22, no. 3, June 2021, pp. 1650~1658 ISSN: 2502-4752, DOI: 10.11591/ijeecs.v22.i3.pp1650-1658	0.241
11.	Seksembayeva MA, Tashatov NN, Ovechkin GV, Satybaldina D.Zh ., Seitkulov YN	Channel estimation based on the fixed DVB-S2 system to transfer images	Turkish Journal of Computer and Mathematics Education Vol.12 No.10 (2021), 2015-2024	0.153
12.	D.Zh. _ Satybaldina, NS Glazyrina , KA Kalymova, VS Stepanov	Development of an algorithm for abnormal human behavior detection in intelligent video surveillance system	https://www.scopus.com/sourceid/19700200831?origin=resultslist IOP Conference Series: Materials Science and Engineering	0.198
13.	Seilov Sh. Zh., Goikhman V.Yu., Levakov A.K., Sokolov N.A.	Concept of Building a Network of Digital Twins to Increase the Efficiency of Complex Telecommunication Systems	Complexity , 2021, 9480235	0.447
14.	ZHULDYZ TASHENOVA, ELMIRA NURLYBAEVA, AMANDOS TULEGULOV, ZHANAT ABDUGULOVA	SQL-ATTACK RESEARCH AND PROTECTION	Journal of Theoretical and Applied Information Technology 15th October 2021. Vol.99. No 19 , 4536- 4545 R. Scopus 36 ISSN: 1992-8645 https://www.scopus.com/record/display.uri?eid=2-s2.0-85117463360&origin=resultslist&featureToggles=FEATURE_VIEW_PDF:1	0.153
15.	Boranbayev , A. , Boranbayev , S. , Seitkulov , Y. , Nurbekov , A.	Proposing Recommendations for Improving the Reliability and Security of Information Systems in Governmental Organizations in the Republic of Kazakhstan	Advances in Intelligent Systems and Computing, 2021, 1290, p . 854–868 https://www.scopus.com/authid/detail.uri?authorId=24280172200	0.184
16.	Ospanova , A. , Tuleuov , B. , Zharkimbekova , A. , Kusseпова , L. , Mangmuryyn , M.	Mobile Devices and Portable Classroom Based on Raspberry Pi Computers	12th National Conference with International Participation, ELECTRONICA 2021 - Proceedings, 2021, 9513685 https://www.scopus.com/authid/detail.uri?authorId=55933262200	-

17.	Ospanova , AB , Tuleuov , BI , Tokkuliyeva , AK , Kussepova , LT , Zharkimbekova , AT	Intelligent Mobile Hardware-Software Device for Automated Testing and Monitoring of Computer Networks Based on Raspberry Pi	Proceedings of the 2021 15th International Scientific-Technical Conference on Actual Problems of Electronic Instrument Engineering, APEIE 2021, 2021, p . 396–400 https://www.scopus.com/authid/detail.uri?authorId=55933262200	-
<i>Total: 17</i>				
<i>Total by faculty:</i>				

2.5 Hirsch index according to the Scopus database:

No. p/n	FULL NAME. sci. degree, position	h- index
1.	Satybaldina D.	5
2.	Nurusheva A.	12
3.	Seilov Sh Zh	2
4.	Seitkulov Y.	6
5.	Akhmetova Zh.Zh.	3
6.	Aimicheva G.I.	3
7.	Konyrkhanova A.A.	1
8.	Ospanova A.B.	2
9.	Sagindykov K.M.	2
10.	Tashenova Zh.M.	1
11.	Saukhanova Zh.S.	1
12.	Shakhmetova G.B.	1
13.	Ulyukova G.B.	1
15	Isainova A.N.	2
16	Santeeva S.A.	2
<i>Total: 16</i>		

2.6. Publications in journals not included in the Web of Science and Scopus databases

a) in foreign journals (RSCI, etc.)

No. p/n	FULL NAME. author (s)	Publication title	Name of the journal, year, number, pages, ISSN
<i>department</i>			
1	Ospanov R.M., Seitkulov E.N., Ergalieva B.B., Sisenov N.M.	An example internal function for a Sponge schema built using the AES Generic Design Methodology	Reports of BSUIR, 2021, Volume 19, No. 3, -S. 89-95.
<i>Total: 1</i>			
<i>Total by faculty:</i>			

b) in the journals of the Republic of Kazakhstan, included in the list of KKSON MES RK

No. p/n	FULL NAME. author (s)	Publication title	Name of the journal, year, number, pages, ISSN
<i>department</i>			
1	Satybaldina D.Zh., Isainova A.N.	Simulation modeling of a block binary multithreshold decoder in a binary symmetric communication channel	UNIVERSITY YEGBEKTERI • WORKS OF THE UNIVERSITY 2021. No. 2, page 163-168 , ISSN 2710-3382
2	Orazbaev B.B., Zhumadillaeva A.K., Dyusekeev K.A., Santeeva S.A., Xiao-Guang Yue	Development of mathematical models of gasoline reforming reactors of the lg-35-11/300-95 unit based on a systematic approach	Proceedings of the National Academy of Sciences of the Republic of Kazakhstan. Series of physico-mathematical. No. 5(339), 2021, p. 145-152 , ISSN 1991-346X, https://doi.org/10.32014/2020.2518-1726.95
3	Kintonova A.Zh., Umbetali E., Konyrkhanova A.A., Nazyrova A.	Online oқыtu web kosymshasyn jobalau men zhasau technologylary	BULLETIN of the National Engineering Academy of the Republic of Kazakhstan No. 1 (79), Almaty, 2021, ISSN 2709-4693, C.40-47
4	E.N. Seitkulov, R.M. Ospanov, B.B. Yergaliyeva	On cryptographic properties of s-boxes	<i>Bulletin of Satbayev University</i> , 143 (4), 2021 - C.96–103.
5	E.N. Seitkulov, R.M. Ospanov, B.B. Yergaliyeva	An example of a cryptographic hash function based on a modified Sponge scheme	Bulletin of KazNITU , No. 143 (1), 2021, - S. 247-259.

6	A.B. Ospanova , A.T. Zharkimbekova , L.T. Kusepova , A.K. Tokkulieva , M. Manmyryn	Computerlik jellylerds korgauga zhane monitoringileuge arnalgan bulk service	Bulletin of KazNITU , No. 3 2021, pp. 222-229. DOI: https://doi.org/10.51301/vest.su.2021.i3.29 https://vestnik.satbayev.university/index.php/journal/issue/view/58
7	Tashenova Zh.M ., Nurlybaeva E, Abdugulova Zh , Amanzholova Sh	ASSESSMENT OF THE SECURITY STATUS OF THE COMPANY'S DATA CENTER NETWORK INFRASTRUCTURE	«KR ҰҒА Хабарлары . Physics - Mathematics series ”, 6(340). 2021 f ., 81-91 b . ISSN 2518-1726 (Online), ISSN 1991-346X (Print)
<i>Total: 7</i>			

c) in journals of the Republic of Kazakhstan that are not included in the list of KKSON MES RK

No. p/n	FULL NAME. author (s)	Publication title	Name of the journal, year, number, pages, ISSN
<i>Department of Information Security</i>			
1.	Zhumadillaeva A.K., Orazbaev B.B., Tuleuov Zh.N., Orazbaeva K.N., Santeeva S.A.	Algorithm for solving a fuzzy decision-making problem for controlling the operating modes of a reforming unit	Bulletin of Toraigyrov University. 2021, No. 1, ISSN 2710-3420
2	Azieva N.T., Oralbekova Zh.O., Utegenov A.N.	Interpretation of georadar data according to the forecast of hidden local objects	Certificate of entering information into the State Register of Rights to Objects Protected by Copyright No. 21487 dated 11/08/2021
3	Nurlybaeva E.N., Tashenova Zh.M. , Amanzholova Sh.A., Satymbekov M.N.	Kurylymdyk elementterdin thermomechanical kuyin anyktau	KAZAKHSTAN - BRITIAN TECHNICAL UNIVERSITY KHABARSHYSY, Volume 18, Issue 3 April-June 2021, 69-75 b.
4	Nurlybaeva E.N., Tashenova Zh.M. , Amanzholova Sh.A., Satymbekov M.N.	Rod zhylu mechanics kuyin anyktaytyn bagdarlamalyk onimnin interfacein ondeu	KAZAKHSTAN - BRITIAN TECHNICAL UNIVERSITY KHABARSHYSY, Volume 18, Issue 3 April-June 2021, 56-69 b.
<i>Total: 4</i>			
<i>Total by faculty:</i>			

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

No.	FULL NAME. author (s)	Publication title	Name of the collection, year, p.
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<i>department</i>			
1	Sisenov Nurbek Mahanbetuly , Ospanov Ruslan Maratovich, Ergalieva Banu Bakhytzhannovna , Zhetpisbayeva Ainur Tursynkanovna	Implementation of the Choice Function in the Modified Sponge Scheme for Designing Cryptographic Hash Functions	Collection of materials of the XVI International Scientific Conference of Students and Young Scientists "GYLYM JANE BILIM - 2021", Nur-Sultan, 2021, - P. 611-614.
2	Nurbek Sisenov , Ruslan Ospanov , Banu Yergaliyeva , Ainur Zhetpisbayeva	Implementation of the selection function in the modified Sponge cryptographic hash functions design scheme	Materials of the international scientific conference of students and young scientists "FARABI ALEMI", Almaty, Kazakhstan, April 6-8, 2021, - P. 82.
3	Banu Yergaliyeva , Kuandyk Niyazaliyev , Ruslan Ospanov , Gulden Ulyukova	On criteria and methods for generating optimal S-boxes	materials international scientific conference of students and young scientists "Farabi Alemi ". Almaty, Kazakhstan, April 6-8, 2021, - P. 84.
4	Ulyukova Gulden Bektemirovna , Ospanov Ruslan Maratovich, Ergalieva Banu Bakhytzhannovna , Niyazaliyev Kuandyk Altaiuly	On Criteria and Methods for Generating Optimal S- Boxes	Materials of the XVI International Scientific Conference of Students and Young Scientists "GYLYM JANE BILIM - 2021", Nur-Sultan, - P.620-623.
5	Shakerkhan K.O., Sagindykov K.M., Meshechkn V.V., Anibaev S.K., Abilmazhinov E.T., Konyrkhanova A.A.	Development of a horizontal type bioreactor for farmers in Kazakhstan , taking into account climatic and economic conditions and a mathematical model for process control	VI International Scientific and Practical Conference "Computer Science and Applied Mathematics", dedicated to the 30th anniversary of the Institute of Information and Computing Technologies, from September 29 - October 2, 2021, Almaty
6	Akhmetova Zhanar Zhumanovna	SQL injection shabuylary : anyktau zhane aldyn alu Adisteri	III INTERNATIONAL SCIENTIFIC AND PRACTICAL online CONFERENCE "Energy and resource saving technologies: experiences and prospects", 28-05-2021
7	Akhmetova Zhanar Zhumanovna	Commercial software kamtamsyz study karakshylygyndagy keru engineeringdan korganu	III INTERNATIONAL SCIENTIFIC AND PRACTICAL online CONFERENCE "Energy and resource saving technologies: experiences and prospects", 28-05-2021
8	Seksenbaeva Aisha Kurmanbekovna	SPLUNK kosymshasynyn komegimen AZh kauipsizdigin taldau	"Global Science and Innovation 2021: Central Asia", 18-02-2021

9	Seksenbaeva Aisha Kurmanbekovna	VPN Ortasyndagy Zamanai WIGEGUARD Hattamas	ISCIENCE.IN.UA "Actual scientific research in the modern world", 28-05-2021
<i>Total: 9</i>			
<i>Total by faculty:</i>			

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

No.	FULL NAME. author (s)	Publication title	Name of the collection, year, p.	The country
<i>Department of Information Security</i>				
1.	Aidiye Aidarbekov , Gulmira Shakhmetova and Kamshat Asmaganbetova	Informational Technologies in Film Production - How ICT shaping Media Industry	4th IEEE International Conference on Advanced Information and Communication Technologies (AICT), 2021.	Ukraine
2.	A. Ospanova , B. Tuleuov , A. Zharkimbekova , L. Kussepova , M. Mangmurnyn	Mobile Devices and Portable Classroom Based on Raspberry Pi Computers	Proc. 12th National Conference with International Participation "Electronica 2021", May 27 - 28, 2021, Sofia, Bulgaria, p. 62-65. DOI: 10.1109/ELECTRONICA52725.2021.9513685 ISBN:978-1-6654-4061-5 www.scopus.com/record/display.uri?eid=2-s2.0-85114128179&origin=resultlist	Bulgaria
3	A. Ospanova , B. Tuleuov , G. Karzhauova , L. Kussepova	Advanced Administration of Windows Based on Open Source Utilities	Proceedings of the World Congress on Engineering 2021, WCE 2021, July 7-9, 2021, London, UK, p. 118-121. ISBN: 978-988-14049-2-3	UK
4	Ademi B. Ospanova , Berik I. Tuleuov , Aizhan K. Tokkuliyeva , Lazzat T. Kussepova , Aizhan T. Zharkimbekova	Intelligent Mobile Hardware-software Device for Automated Testing and Monitoring of Computer Networks Based on Raspberry Pi	Proceedings of the 2021 IEEE 15th International Conference of Actual Problems of Electronic Instrument Engineering (APEIE), Nov. 20, 2021, Novosibirsk, Russia. to be published	Russia
5	Kayupov E., T. Toleubekov	"Robotics Zhane Circuitry Boyynsha kashyqytan bilim ber mymkindikteri »	Trends and prospects for the development of science and education in the context of globalization” halykaralyk gylymy- tazhirbielik internet conference. Ukraine 2021. Collection 73. 122-125 page	Ukraine

6	Ruslan M. Ospanov , Yerzhan N. Seitkulov , Ainur Zheptisbayeva	A Sponge-Based Cryptographic Hash Function with Set of Internal Functions	Proceeding of the III International Turkic World Congress on Science and Engineering, 14-15 June 2021, Niğde – Turkey, pp. 10-15.	Turkey
7	Banu B. Yergaliyeva , Ruslan M. Ospanov , Kuandyk A. Niyazaliyev , Nurlan N. Tashatov, Dina Zh . Satybaldina	About Choosing The Optimal S-Boxes //	Proceeding of the III International Turkic World Congress on Science and Engineering, June 2021, Niğde , Turkey. – pp. 16-19.	Turkey
8	Yerzhan Seitkulov , Ruslan Ospanov , Banu Yergaliyeva , Ainur Zhetpisbayeva	Implementation of the selection function in the modified sponge cryptographic hash functions design scheme	The 19th International Scientific Conference Information Technologies and Management 2021 April 22-23, 2021, ISMA, Riga, Latvia, - pp. 68-69.	Latvia
9	Yerzhan Seitkulov , Ruslan Ospanov , Banu Yergaliyeva , Kuandyk Niyazaliyev	On criteria and methods for generating optimal S-boxes	The 19th International Scientific Conference Information Technologies and Management 2021, April 22-23, Isma , Riga, Latvia, pp. 70-71.	Latvia
10	Saukhanova Janat Sergaziyeva	ORACLE DATABASE INFORMATION SECURITY THREATS AND POSSIBLE PROTECTION MEASURES	Engineering and information technologies, economics and management in industry. Collection of scientific articles on the results of the second international scientific conference, 20-01-2021.	Russia
11	Akhmetova Zhanar Zhumanovna	Kazirgi tandagy medicine қырылғалардың ақпараттық қауіпсіздігі	"Student Bulletin": scientific journal. - No. 12(157). Part 5. Moscow, Ed. " Internauka ", 28-05-2021	Moscow
12	Akhmetova Zhanar Zhumanovna	Pandemic kezindegi kashyktan zhymys zhasau : cyberқауіпсіздік маселелери	"Student Bulletin": scientific journal. – No. 5(150). Part 4. 28-05-2021	Moscow
<i>Total: 12</i>				
<i>Total by faculty:</i>				

2.9 Number of published monographs in the Republic of Kazakhstan (if available, 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 imprint of the publication, including UDC, ISBN / ISSN)

No.	FULL NAME. author (s)	Publication title	Name of publication (with indication of the city), number of p.l.	The presence of a neck is indicated MES RK or ISBN
In English. language				
1	Boranbayev SN, Nurusheva AM	Methods of ensuring the reliability and security of information systems (on English _ language)	Printing house FE « Bulatov A . Zh .», 2021, Nur-Sultan, 13 p . 1 .	ISBN 987-601-326-529-2
2	Akhmetova Zh. Zh.	MATHEMATICAL AND COMPUTER MODELS, METHODS AND ALGORITHMS FOR SOLVING THE TASKS OF THE NETWORK STRUCTURE (on English _ language)	Publishing house "Master PO", Nur-Sultan, 2021, Nur-Sultan, 13 p . 1 .	ISBN 978-601-326-526-1
<i>Total:2</i>				
Total: 2				

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

No.	Full name	Topic	Date and time (online)	Supervisor
November				
Week 1	kayrtai Daur Adakuly (2nd year undergraduate)	Jelilik traffic Baskaru adisterin taldau	3.11.2021 13.00 https://clck.ru/YWFqU	Saukhanova Janat Sergazievna , Ph.D. , Associate Professor
2 weeks	Zhumabekov Erzat Dauletuly (2nd year undergraduate)	Computerlik gelatin senimdiligini arttyru adisterin serteu	8.11.2021 15.00 https://clck.ru/YgMMU	Tashenova Zhuldyz Musagulovna , PhD, acting associate professor
	Asylkhan Akhan Mukhtaruly (undergraduate 2 course)	Improving methods for investigating information security incidents, taking into account the legal framework of the Republic of Kazakhstan		Kobzarev Vitaliy Anatolyevich, Ph.D., senior prep
	Zhanatova Asemgul Amantaevna (2nd year undergraduate)	Monitoring and security methods to keep the network healthy		Konyrkanov Asem Adilbekkyzy , PhD, acting associate professor
4 week	Karazhanov Meirlan Nurlanuly (2nd year undergraduate)	Development of proposals for improving the regulatory requirements for information security of Kazakhstan in relation to automated process control systems	11/22/2021 15.00 https://clck.ru/YgMMU	Nurusheva Asel Muratovna, PhD, acting associate professor

	Eskhozhin Daniyar Kairatovich (2nd year undergraduate)	Methodology for the formation of the hierarchy of trust to the results of identification and authentication of access subjects		Sagindykov Kakim Moldabekovich , Candidate of Physical and Mathematical Sciences, Associate Professor
	Tungishbaev Talgat Kairatovich (2nd year undergraduate)	Kasiporynny gelatin qyrylgylardyñ қауіпсіздігін және ақайлыққа төзімділігін Zabbix zhuyesi арқылы бақылау		Saukhanova Janat Sergazievna , Ph.D. , Associate Professor
December				
Week 1	Alemkyzy ИҢКәр (undergraduate 2 course)	visualizations akparatta korgau ushin koldanuy	4.12.2021 15.00 https://clck.ru/ZAsbt	Seksenbaeva Aisha Kurmanbekovna , Ph.D. , associate professor
	kaiyr Adil Erboluly (undergraduate 2 course)	Analysis of information security risks of enterprise operating systems		Nurusheva Asel Muratovna, PhD, acting associate professor
	Tleugaliev Yerlan Utegenovich (2nd year undergraduate)	Optimization of the corporate network monitoring system for security		Seytkulov Yerzhan Nurakhanuly , Candidate of Physical and Mathematical Sciences, acting associate professor
2 weeks	Anuarbekov Tamerlan Bauyrzhanuly (2nd year undergraduate)	Development of multithreaded algorithms in Golang	11.12.2021 15.00 https://clck.ru/ZAsbt	Satybaldina Dina Zhagiparovna , Ph.D., acting professors
	Tazabekov Alisher Azamatyly (2nd year undergraduate)	Operational zhuielerge ruqsatsyz kirudi anyktau adisterin sertteu		Konyrkhanov Asem Adilbekkyzy , PhD, acting associate professor
	Ermek Sanjar Aidosuly (2nd year undergraduate)	Methods and means of cryptanalysis of block ciphers		Seksenbaeva Aisha Kurmanbekovna , Ph.D. , associate professor
3 week	Zhumatai sherkhan Sabituly (undergraduate 2 course)	Java Tilinin қауіпсіздік қырғалдарын Web -kosymshalardy Kuruda koldanu	12/18/2021 15.00 https://clck.ru/ZAsbt	Saukhanova Janat Sergazievna , F- M.G.K ., Associate Professor
	Aralov Nursultan Maksatuly (undergraduate 2nd year)	Network traffic monitoring and analysis tools		Sagindykov Kakim Moldabekovich , Ph.D., Associate Professor
	Ismailova Gulmira Erlanovna (undergraduate 2 course)	Protecting information using logical files		Seksenbaeva Aisha Kurmanbekovna , Ph.D. , associate professor
4 week	Abdiraman Aliya (doctoral student, 2nd year)	Assessment of the level of information security of information and communication infrastructure	25.12.2021 15.00 https://clck.ru/ZAsbt	Nurusheva Asel Muratovna, PhD, acting associate professor
	Amrenov Askhat (doctoral student, 2nd year)	Development of a methodology and model for building processes of the Information Security Incident Response Service		Nurusheva Asel Muratovna, PhD, acting associate professor

	Beisekeyev Dosmurat Maratovich (2nd year undergraduate)	Composite authentication of users of information systems		Sagindykov Kakim Moldabekovich , Candidate of Physical and Mathematical Sciences, Associate Professor
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2.10.1 International conferences

No.	Name	the date of the	Number of participants/incl. foreign
1	International Scientific and Practical Conference "Digital Transformation of Kazakhstan: Goals, Objectives and Key Success Factors"	, 2021 Nur- Sultan, Organized on the initiative of the Eurasian National University named after L. N. Gumilyov	

Total: 1

2.10.2 Republican conferences

No.	Name	the date of the	Number of participants/incl. foreign
1			

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
one			

Total:

2.10.5 Scientific round tables

No.	Name	the date of the	Number of participants/incl. foreign

one			
Total:			

3. RESEARCH WORK OF STUDENTS

3.4 The number of scientific publications of students in the collections of conferences held in the Republic of Kazakhstan

No.	FULL NAME. author (s)	Publication title	Name of the collection, year, p.
<i>department</i>			
1.	Kali Aitkhanym Erikkyzy , Nurgalikyzy Marzhan, Kusepova Lyazzat Tungyshpaevna Scientific adviser: Ospanova A.B.	Kazirgi temptations Bulttyk esepteuler standardtarery servicemen _	XVI International Scientific Conference "GYLYM JÁNE BILIM - 2021", dedicated to the 25th anniversary of the ENU. L.N. Gumilyov, 04/12/2021. Nur-Sultan, Kazakhstan. - pp. 575-579
2	Gabitova Albina Bauyrzhankyzy , Scientific adviser: Sagindykov K.M.	Bulttyk esepteulerdegi қауіпсіздік charalary	XVI International Scientific Conference "GYLYM JÁNE BILIM - 2021", dedicated to the 25th anniversary of the ENU. L.N. Gumilyov, 04/12/2021. Nur-Sultan, Kazakhstan - pp 537-540
3	Muhamadiev Madiyar Galeluli Scientific adviser: Sagindykov K.M.	Computerlik incidents tergeude digital forensics framework koldanu	XVI International Scientific Conference "GYLYM JÁNE BILIM - 2021", dedicated to the 25th anniversary of the ENU. L.N. Gumilyov, 04/12/2021. Nur-Sultan, Kazakhstan - pp 592-594
4	Rakhymzhanova Ainur galimkyzy Scientific adviser: Sagindykov K.M.	Web -kosymshalardyn osaldygyн anyқтау zhane zhoyu қырaldary	XVI International Scientific Conference "GYLYM JÁNE BILIM - 2021", dedicated to the 25th anniversary of the ENU. L.N. Gumilyov, 04/12/2021. Nur-Sultan, Kazakhstan - 597-600

5	<p>Seidulla Kymbat Darkhankyzy</p> <p>Scientific adviser: Sagindykov K.M.</p>	"C++ tilindegi programmerdyn osaldyqtary »	<p>XVI International Scientific Conference "GYLYM JÁNE BILIM - 2021", dedicated to the 25th anniversary of the ENU. L.N. Gumilyov, 04/12/2021. Nur-Sultan, Kazakhstan - pp 609-611</p>
6	<p>Myrzakul Zhansaya Nurmatullakyzy</p> <p>Scientific adviser: Razakhova B.Sh.</p>	Tutynushy - serverlik Web technologylar	<p>Republican student scientific online conference "The contribution of youth science to the implementation of the Strategy "Kazakhstan-2050", dedicated to the 30th anniversary of the independence of the Republic of Kazakhstan. April 8-9 , 2021 KarTU , Karaganda</p>
7	<p>Myrzakul Zhansaya Nurmatullakyzy</p> <p>Scientific adviser: Razakhova B.Sh.</p>	Symsyz jellyler wife olarga kosyludyn kauipsizdigi	<p>«YDF-2021 Zhastar digital forums” atta 2 shi Halykaralyk student gylm practice conference . International Journal of Information and Communication Technology, March 2021. pp. 147-153</p> <p>ISSN 2708-2040</p>
8	<p>Myrzakul Zhansaya Nurmatullakyzy</p> <p>Scientific adviser: Tokkulieva A.K.</p>	Akyldy uy qyrylylarynyñ cyberkauipsizdigi	<p>«YDF-2021 Zhastar digital forums” atta 2 shi Halykaralyk student gylm practice conference . International Journal of Information and Communication Technology, March 2021. pp. 141-147</p> <p>ISSN 2708-2040</p>

9	GA Karzhauova , LT Kussepova , RB Makhanbet Scientific adviser: Osanova A.B.	Advanced administration of windows operating systems based on open source utilities	Collection of works of the XVI int. scientific conf . stud. and young. uch. "ǴYLYM JÁNE BILIM - 2021", 2021, 509-513 . ISBN 978-601- 337-539-7
<i>Total:9</i>			
<i>Total by faculty:</i>			

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

No.	FULL NAME. author (s)	Publication title	Collection title, year, number, pages, ISSN	The country
1	Oralbaev E A. Kudubaeva S.A.	BOTNET ASSOCIATION. FORCING WITH THE HELP OF A BOTNET.	publishing house "Society of Science and Creativity" "Issues of productive interaction in the process of knowledge exchange" (Russia, Kazan, February 26, 2021), ISBN 978-5-6044999-7-9 UDC 001.1 BBK 72, p. 322	Russia
2	Oralbaev E A. Kudubaeva S.A.	DDOS ATTACK DETECTION BOTNETS IN NETWORKS IOT ACCESS / DETECTION OF BOTNET DDOS ATTACKS IN IOT ACCESS NETWORKS	publishing house "International Center for Scientific Cooperation "Science and Education" "Actual issues of modern science and education" (Russia, Penza 05.05.2021), ISBN 978-5-00159-834-3 UDC 001.1 LBC 60, p. 190	Russia
3	Sailaukhanov E. E.	Risk Management Methods	Collection of scientific papers "Knowledge exchange in the educational process" Materials of the International Scientific and Practical Events Society for Science and Creativity (Kazan) for March 2021. ISBN 978-5-6044999-8-6 UDC 001.1 BBK 72	Russia

4	Sailaukhanov E. E.	Object-oriented data storage	Scientific and Practical Research ISSN 2541-9528	Russia
5	Myrzakul Zhansaya Nurmatullakyzy Scientific adviser: Razakhova B.Sh.	Ensuring information security of networks	Collection of articles based on the materials of the international scientific and methodological conference "Young Researcher Challenges and Prospects". 2021 - 203 p.	Moscow
<i>Total: 5</i>				
<i>Total by faculty:</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	departme nt	group number, course	Date of receipt of the award, diploma; indicate the prize	Name conferences	Location	Mob.tel .	Email	Link to the organizer's website
1	Mahanbet Ruslan	IS	SIB-41,	04/12/2021, 1st place	XVI International Scientific Conference "ǴYLYM JÁNE BILIM-2021", dedicated to the 25th anniversary of the ENU. L.N. Gumilyov	ENU them. L.N. Gumilyov			https://enu.kz/ru/nauka/sborniki-konferentsiy/

2	Myrzakul Zhansaya Nurmatullakyyzy Gylymi zhetekshi : Razakhova B.Sh.	IS	SIB-27,	March 31, 2021 3rd place	«YDF-2021 Zhastar digitly forums " atty _ _ _ _ student	JSC "International University of Information Technologies"	87059547600	zhansaya.myrzakul@mail.ru	https://iitu.edu.kz/kk/events/molodejny-cifrovoi-forum-ydf-2021-kk/
3	Myrzakul Zhansaya Gylymi zhetekshi : Razakhova B.Sh.	IS	SIB-27	April 8-9, 2021 3rd place	Republican student scientific online conference "The contribution of youth science to the implementation of the Strategy" Kazakhstan - 2050 "dedicated to the 30th anniversary of the independence of the Republic of Kazakhstan"	KarTU , Karaganda, Kazakhstan	87059547600	zhansaya.myrzakul@mail.ru	https://www.kstu.kz/257926/

4	Myrzakul Zhansaya Supervisor: Tokkulieva A.K.	IS	SIB-27	March 11-12, 2021 2nd place	XXIV Republican scientific conference of students " Mangilik el zhastary-Tauelsizdik " capili »	South Kazakhstan University named after M. Auezov	87059547600	zhansaya.myrzakul@mail.ru	https://bilimdinews.kz/?p=141131
5	Tabergenov Aibek	IS	SIB-34, 3 course	October 28-29, 2021 3rd place	Republican Hackathon “Mr. Nur-Sultan is the center of digital transformation of Kazakhstan”, dedicated to the 30th anniversary of the Independence of the Republic of Kazakhstan and the 25th anniversary of the ENU. L.N. Gumilyov in the section “Network security”	ENU them. L.N. Gumilyov, Nur-Sultan. Kazakhstan	87776777759	aibek_t@mail.ru	https://fit.enu.kz/
6	Duysenova Raushangul Nurbolatkyzy	IS	SIB-37, 3rd course	7.12.2021 “Uzdik zhas galym - 2021”	“ Bilim orkenieti " Ulttyk innovation sertteu ortalygy uymlastyrgan	Nur-Sultan	87085429285	Duisenova2809@mail.ru	https://www.instagram.com/p/CXQ1jXztVhC/?utm_medium=copy_link

7	Baqbergen Dinmuhammed Kairatuly	IS	SIB-12, 1 course	12.12.2021 2nd place	“ Tauelsiz eldin urpagymyn ”	ENU them. L.N. Gumilyov , Nur-Sultan. Kazakhstan	87477365589	kbakhbergonov@mail.ru	https://fit.enu.kz/
8	Bekmuratov Daniyar	IS	NIB - 42	19.03.21, Diploma 3rd place	CTF competition from JSC "State Technical Service"	Nur-Sultan, Kazakhstan			
9	Bekmuratov Daniyar	IS	NIB - 42	04/17/21, 2nd place	"Beeline & ISSP Cyber Security"	Nur-Sultan, Kazakhstan			https://beeline.kz/ru/hr/cybersecurity
10	Adilkhan Anuar	IS	SIB 37	04/17/21, 3rd place	"Beeline & ISSP Cyber Security"	Nur-Sultan, Kazakhstan			https://beeline.kz/ru/hr/cybersecurity
<i>Total: 10</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	departme nt	group number , course	Date of receipt of the award, diploma; indicate the prize	Name conferences	Location	Mob.tel .	Email	Link to the organizer's website
1	Adilkhan Zhasulan Scientific adviser: Seksenbayev A.K.		NIB	April 19-23, 2021 3rd place	International conference of students and young scientists "Informatics. Maths. Automation"	Sumy State University (SG), Sumy, Ukraine			https://cnti.sumdu.edu.ua/en/conferences/
2	Myrzakul Zhansaya , Scientific adviser: Tokkulieva A.K.	IS	NIB- 27	Diploma 1st place 03/01/2021	All-Russian Olympiad for students on the subject "Information technologies in professional activity"	Moscow			

3	Usen Diaz		SIB-42	Diploma for the 1st place from 11/30/2021	III All-Russian Scientific Conference (with the invitation of foreign scientists) "FISP-2021: Fundamental problems of information security in the context of digital transformation / Fundamental problems of information security in the context of digital transformation »				
4	Bekbolatova Diana	IS	B058-6306-21-05	2021 Diploma of the 1st degree	International essay competition in Russian for schoolchildren and students "My native land"				

Total: 4

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

No.	FULL NAME. student	department	group number, course	Date of receipt of the award, diploma; indicate the prize	Name conferences	Location	Mob.tel .	Email	Link to the organizer's website
1									
Total:									

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	The results of the work of the SNO in accordance with the work plan
1.			

3.10 Information about the work of student circles

No .	Name of the student circle	Number of participants	Achievements
1	"ALGORITHMS AND PROGRAMMING" Head: Ph.D. Ospanova A. B.	2	
2	"CRYPTOGRAPHS" Leader: Art. teacher Ospanov R. M.	10	Three projects were implemented, but did not participate in the competition
3	"ESPORTS" Head: teacher T. B.	25	Diploma participation in hackathon com dip
4	Cisco Head: Tokkulieva A.K.	45	Certificates 45

4. RESEARCH WORK OF MASTER STUDENTS

4.1 The number of scientific publications of undergraduates in scientific journals *included in the Web of Science database (submit a "screenshot" from the database)*

No. p/n	FULL NAME. author (s)	Publication title	Name of the journal, year, number, pages, ISSN
<i>department</i>			
1	Seilov , Sh Zh , Seilov , AA, Shyngisov , DS, Goikhman , V. Yu , Levakov , AK, Sokolov, NA, Zhursinbek , Y. Sh	The Concept of Building a Network of Digital Twins to Increase the Efficiency of Complex Telecommunication Systems	Show Web of Science ResearcherID number and ORCID (provided by Clarivate) COMPLEXITY Volume 2021 Article number 9480235 DOI10.1155/2021/9480235 Published on MAR 15 2021 Article document type
<i>Total: 1</i>			
<i>Total by faculty:</i>			

4.2 The number of scientific publications of undergraduates in scientific journals included in the Scopus database (*submit a "screenshot" from the database*)

No. p/n	FULL NAME. author(s) (indicate in English)	Publication title	Name of the journal, year, number, pages, ISSN	journal impact factor (SJR)
1	Seilov , Sh Zh , Seilov , AA, Shyngisov , DS, Goikhman , V. Yu , Levakov , AK, Sokolov, NA, Zhursinbek , Y. Sh	The Concept of Building a Network of Digital Twins to Increase the Efficiency of Complex Telecommunication Systems	Complexity , 2021, 2021, 9480235	0.447
Total: 1				

4.3 The number of scientific publications of undergraduates in scientific journals that *are not included in the Web of Science and Scopus* databases:

a) in foreign journals (RSCI, etc.)

No. p/n	FULL NAME. author (s)	Publication title	Name of the journal, year, number, pages, ISSN
1	Aydynov Tolegen Aydynuly	Traffic monitoring system “ALARM”	" Internauka " gylym magazines, No. 11, 2021, Maskeu , 68-70 better, ISSN-2687-0142
2	Aydynov Tolegen Aydynuly	Data protection in the traffic monitoring system “ALARM”	"Young Scientist" halykaralyk gylymi journals, No. 13, 2021, Maskeu , 21-24 better, ISSN-2072-0297
3	Kerim Akerke	« Zhalpyga kolzhetimdi jellyler boyinsha web servicerge kolzhetimdilikti köp degali bakylaumen esepteu Keshenin architectures »	CCVII INTERNATIONAL SCIENTIFIC AND PRACTICAL CONFERENCE "Young Researcher: Challenge and Prospects" - Moscow, 2021. ISBN 2415-8771, C. 347-353
4	Kerim Akerke	« Bagdarlamalardyn köp degali ereksheliklerine negizdelgen monitoring zhane testileu »	CCVII INTERNATIONAL SCIENTIFIC AND PRACTICAL CONFERENCE "Young Researcher: Challenge and Prospects" - Moscow, 2021. ISBN 2415-8771, C. 354-361
5	Erdenov Adil	Zhana karu jarysy . quantum computerden kalay korganuga bolades	Young Researcher: Challenges and Prospects: Sat. Art. Based on the materials of the CCVII International Scientific and Practical Conference "Young Researcher: Challenges and Prospects". - No. 12(207). - M., Ed. " Internauka ", 2021, p. 341
6	Erdenov Adil	Cryptographic negizgi adisteri , maseleleri zhane kazirgi tendencies	Young Researcher: Challenges and Prospects: Sat. Art. Based on the materials of the CCVII International Scientific and Practical Conference "Young Researcher: Challenges and Prospects". - No. 12(207). - M., Ed. " Internauka ", 2021, p. 334
7	Zhanatova Asemgul Amantaevna	Monitoring and security methods to keep the network healthy	Achievement of science and education, No. 7(79), 2021, scientific and methodological journal https://scientifictext.ru , ISSN 2413-2071, Scientific Publications Publishing House, pp.29-34

8	Zhumabekov Dauletuly	Erzat	Computerlik gelatin senimdiligini artirish uchun talap etilgan jelly kapsulning dengeyini jozaratuvchi adisterin sertteu	" Internauka " gylym magazines, No. 46(191), 2021, Maskeu .
<i>Total: 8</i>				
<i>Total by faculty:</i>				

c) in the journals of the Republic of Kazakhstan, included in the list of KKSON MES RK

No. p/n	FULL NAME. author (s)	Publication title	Name of the journal, year, number, pages, ISSN
1			
<i>Total:</i>			
<i>Total by faculty:</i>			

4.4 The number of scientific publications of undergraduates in the collections of conferences held in the Republic of Kazakhstan:

No.	FULL NAME. author (s)	Publication title	Name of the journal, year, number, pages, ISSN
<i>department</i>			
1.	GA Karzhauova , LT Kusseпова , RB Makhanbet	Advanced Administration of Windows Operating Systems Based on Open Source Utilities	Proceedings of the XVI International Scientific Conference "GYLYM JÁNE BILIM - 2021", dedicated to the 25th anniversary of the ENU. L.N. Gumilyov, 04/12/2021. Nur-Sultan, Kazakhstan - pp 509-513
2.	N. Mombay	Android қырылғылары Negizinde zhasalgan computer geliler men koldanbalardyn қауіпсіздігін талдауға арналған көппрофилді device	Collection of works of the XVI int. scientific conf . stud. and young. uch. "GYLYM JÁNE BILIM - 2021", 2021, 587-591
3.	Kumargaliyev Eldar Gabituly	4G LTE mobile gellerindegi akparattyk қауіпсіздікті qamtamasyz etu adisterin sertteu	"Global Science and Innovation 2021: Central Asia", No. 1(12). series "technical sciences" - Nur-Sultan, 2021. - P. 3-7
4.	Kerim Birzhan Galymzhanuly	Cryptographic taldau maselelerinde Kazakh tilin statistics taldau	"Energy and resource saving technologies: experiences and prospects" III International scientific and practical online conference - Kyzylorda, 2021. - P. 345-350
5.	Zhamisheva Nuray Mazhitkyzy	RESEARCH AND ANALYSIS OF WEB-RESOURCE PROTECTION AGAINST ATTACKS	Proceedings of the XVI International Scientific Conference "GYLYM JÁNE BILIM - 2021", dedicated to the 25th anniversary of the ENU. L.N. Gumilyov, 04/12/2021. Nur-Sultan, Kazakhstan - pp 516-520

6.	Adilgazina Akmaral Erkinbekkyzy	WEB SITES OF KAUIPSIZDIGI: SQL INJECTIONS	Proceedings of the XVI International Scientific Conference "GYLYM JÁNE BILIM - 2021", dedicated to the 25th anniversary of the ENU. L.N. Gumilyov, 04/12/2021. Nur-Sultan, Kazakhstan - pp 524-527
8.	Bilal Turar Bakhytzhanuly	SPAMMEN K-RESUDIN TIIMDI ADDISTERIMEN STRATEGIES	Proceedings of the XVI International Scientific Conference "GYLYM JÁNE BILIM - 2021", dedicated to the 25th anniversary of the ENU. L.N. Gumilyov, 04/12/2021. Nur-Sultan, Kazakhstan - pp 532-536
9.	Galikhanov Symbat Tolegenkyzy	AQPARATTYK ZHYELERDE DERBES DEREKTERDI KORGAU	Proceedings of the XVI International Scientific Conference "GYLYM JÁNE BILIM - 2021", dedicated to the 25th anniversary of the ENU. L.N. Gumilyov, 04/12/2021. Nur-Sultan, Kazakhstan - pp 541-544
10.	Kulmakhan Abdilgazizuly Darkhan	JAVA PLATFORM CRYPTOGRAPHYLYK KYZMETTERDI ZHETKIZUSHI PROVIDERLERMEN ZHYMYS	Proceedings of the XVI International Scientific Conference "GYLYM JÁNE BILIM - 2021", dedicated to the 25th anniversary of the ENU. L.N. Gumilyov, 04/12/2021. Nur-Sultan, Kazakhstan - pp 579-583
11	Sultan A. A.	ZIYANDY PROGRAMMALYK KAMTAMANY PRACTICAL TALDAU	Proceedings of the XVI International Scientific Conference "GYLYM JÁNE BILIM - 2021", dedicated to the 25th anniversary of the ENU. L.N. Gumilyov, 04/12/2021. Nur-Sultan, Kazakhstan - pp 614-618

Total: 11

Total by faculty:

4.5 The number of scientific publications of undergraduates in the collections of conferences held abroad

No.	FULL NAME. author (s)	Publication title	Name of the journal, year, number, pages, ISSN	The country
department				
1	A. Ospanova , B. Tuleuov , G. Karzhauova , L. Kussepova	Advanced Administration of Windows Based on Open Source Utilities	Proceedings of the World Congress on Engineering 2021, WCE 2021, July 7-9, 2021, London, UK, p. 118-121. ISBN: 978-988-14049-2-3	UK
2	Kymargaliyev Eldar Fabituly , 2 course	Preventing desynchronization attacks in 4G LTE networks using a dual authentication scheme	XXXIV International Scientific and Practical Conference " EurasiaScience - 2020" - Moscow, 2020. - P. 70-74	Russia

3	Sagadat N., 2nd year Scientific adviser: Nurusheva A.M.	Assessment of the security level information and communication infrastructure of the enterprise	Young Researcher: Challenges and Prospects: Sat. Art. Based on the materials of the CCXII International Scientific and Practical Conference "Young Researcher: Challenges and Prospects". - No. 17(212). - M., Ed. " Internauka ", 2021.	Russia
4	Tungishbaev Talgat	«КӨІПОРЫННЫҒ ZHELELIK ҚҰРЫЛҒЫЛАРДЫҒ ҚАУІПСІЗДІГІН ZHANE АКАУЛЫҚҚЫ ТӨЗІМДІЛІГІН ZABBIX ZHYYESI ARKYLY BAKYLAU»	CCXI International Scientific and Practical Conference "Young Researcher: Challenges and Prospects" - No. 17(212). - M., Ed. " Internauka ", 2021.	Russia

Total:4

Total by faculty:

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. undergraduate	department	No. of groups, course	Date of receipt of the award diploma; indicate the prize	Name conferences	Location	Mob.tel	Email	Link to the organizer's website
1	Nurzhaubaev A.A. Zhursinbek E.Sh. Talgatova N.T.	IS	7M06 306-2 course	Diploma degree 1	Republican competition of research in natural, technical, social, humanitarian and economic sciences in the universities of the Republic of Kazakhstan as part of the celebration of the 25th anniversary of the ENU. L.N. Gumilyov	ENU them. L.N. Gumilyov, Nur-Sultan. Kazakhstan			https://fit.enu.kz/

2	Nurzhaubaev Akniet , Zhursinbek Yerden , Talgatova Nazgul	IS	7M06 306-2 course	Diploma 1 degree	Republican competition for the best research work among undergraduates of universities of the Republic of Kazakhstan in 2021	ENU them. L.N. Gumilyo v , Nur- Sultan. Kazakhst an			
3	Nurzhaubaev Akniet , Zhursinbek Yerden , Talgatova Nazgul Supervisor: Seilov Sh.Zh., Satybaldina D.Zh.	IS	M09 5- 6306 -20- 02	Diploma of MES RK I degree 2021	Republican research competition. Topic of scientific work: "Educational and laboratory complex "IT Alem Security" for the study of network attacks and methods of protection against them"	ENU them. L.N. Gumilyo v , Nur- Sultan. Kazakhst an			
4	Mombai N. Scientific adviser: Ospanova A.B.	IS	MTIB- 1, 2 course	April, 2021, 2nd degree diploma	Republican competition for the best research work among undergraduates of universities of the Republic of Kazakhstan in 2021.	AUES is the base universi ty of the 2nd stage of the competi tion	+7747 239055 2		https://fit.enu.kz/
5	Mombai N.	IS	MTIB- 1, 2 course	Diploma of the Ministry of I degree 04/16/2021	Republican research competition. Topic of scientific work: " Zamanai cryptography esepterdi Azirleu қыraldaryn sertteu »				

6	Bakbergenkyzy A.	IS	7M06 306-1 course	October, 2021 Diploma 1 degree	Republican Hackathon “Nur-Sultan - the center of digital transformation of Kazakhstan”, dedicated to the 30th anniversary of the Independence of the Republic of Kazakhstan and the 25th anniversary of the ENU. L.N. Gumilyov in the section “Network security”	ENU them. L.N. Gumilyov, Nur- Sultan. Kazakhstan	+7(771) 126-38- 84	bakbergenkyzy96@mail.ru	https://fit.enu.kz/
7	Bimbetov Samat Temirbaevich	IS	7M06 306-1 course	October, 2021 Diploma 2 degree	Republican Hackathon “Mr. Nur-Sultan is the center of digital transformation of Kazakhstan”, dedicated to the 30th anniversary of the Independence of the Republic of Kazakhstan and the 25th anniversary of the ENU. L.N. Gumilyov in the section “Network security”	ENU them. L.N. Gumilyov, Nur- Sultan. Kazakhstan	+7(708) 275-04- 48	alekelab@gmail.com	https://fit.enu.kz/
8	Мұқанов Мерей	IS	M095 - 6306- 21-01	Diploma 2nd place	The national final of the “Huawei ICT Competition 2021” at the Huawei ICT Academy.				
<i>Total:8</i>									

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. undergraduate	department	group number, course	Date of receipt of the award, diploma; indicate the prize	Name conferences	Location	Mob.tel .	Email	Link to the organizer's website
1	Nurzhaubaev Akniet	IS	M095-6306-20-02	2nd place	Final of the International Olympiad HUAWEI ICT COMPETITION 2019–2020 among 39 countries of the world				
2	Mombai N.	IS	MTIB-1, 2 course	03/03/2021, 1st place	International Competition of scientific works and creative projects of students and undergraduates on the use of ICT	KU them. E. A. Buketova			
3	Bubeneeva Dana Klyshbaevna	IS	7M06111	Diploma 1st place 01/20/2021	All-Russian Olympiad for students "Time of Knowledge" on the subject "Fundamentals of Information Security"				
<i>Total: 3</i>									

5. RESEARCH WORK OF DOCTORAL STUDENTS

5.1 Web of Science database (submit a “screenshot” from the database)

No. p/n	FULL NAME. author(s) (indicate in English)	Publication title	Name of the journal, year, number, pages, ISSN
1.	Ospanov , RM, Seitkulov , YN, Sissenov , NM, Yergalieva , BB	An example of an internal function for the SPONGE scheme	VESTNIK SANKT-PETERBURGSKOGO UNIVERSITETA SERIYA 10 PRIKLADNAYA MATEMATIKA INFORMATIKA PROTSESSY UPRAVLENIYA Volume17 Issue 3 Page 287-293 DOI10.21638/11701/spbu10.2021.306 Published 2021 Article document type

Total: 1

Total by faculty:

5.2 The number of scientific publications of doctoral students in scientific journals included in the Scopus database (submit a “screenshot” from the database)

No. p/n	FULL NAME. author(s) (indicate in English)	Publication title	Name of the journal, year, number, pages, ISSN	journal impact factor
1	Seitkulov , YN , Boranbayev , SN , Ulyukova , GB , Yergaliyeva , BB , Satybaldina, D.	Methods for secure cloud processing of big data	Indonesian Journal of Electrical Engineering and Computer Science , 2021, 22(3), p . 1650–1658	0.241
2	Ospanov , RM, Seitkulov , YN, Sissenov , NM, Yergalieva , BB	Sponge Inner Function Example	Bulletin of St. Petersburg University. Applied Mathematics. Informatics. Management processes. 2021, Vol. 17. Issue . 3. - S. 287-293.	0.233
3	Yerzhan N. Seitkulov , Seilkhan N. Boranbayev , Gulden B. Ulyukova , Banu B. Yergaliyeva , Dina Satybaldina	Methods for secure cloud processing of big data	https://www.scopus.com/sourceid/21100799500?origin=resultslist Indonesian Journal of Electrical Engineering and Computer Science Vol. 22, no. 3, June 2021, pp. 1650~1658 ISSN: 2502-4752, DOI: 10.11591/ijeecs.v22.i3.pp1650-1658	0.241

Total: 3

Total by faculty:

5.3 The number of scientific publications of doctoral students in scientific journals that are not included in the Thomson Reuters and Scopus databases:

a) in foreign journals (RSCI, etc.)

No.	FULL NAME. author (s)	Publication title	Name of the journal, year, number, pages, ISSN
<i>department</i>			
1	Ergalieva B.B., Ospanov R.M., Seitkulov E.N., Sisenov N.M.	An example internal function for a Sponge schema built using the AES Generic Design Methodology	Reports of BSUIR, 2021, Volume 19, No. 3, -S. 89-95.
<i>Total: 1</i>			
<i>Total by faculty:</i>			

b) in the journals of the Republic of Kazakhstan, included in the list of KKSON MES RK

No.	FULL NAME. author (s)	Publication title	Name of the journal, year, number, pages, ISSN
<i>department</i>			
1	E.N. Seitkulov, R.M. Ospanov, B.B. Yergaliyeva	On cryptographic properties of s-boxes	<i>Bulletin of Satbayev University</i> , 143 (4), 2021 -C.96–103.
2	E.N. Seitkulov, R.M. Ospanov, B.B. Yergaliyeva	An example of a cryptographic hash function based on a modified Sponge scheme	Bulletin of KazNITU , No. 143 (1), 2021, - S. 247-259.
<i>Total:2</i>			
<i>Total by faculty:</i>			

c) in journals of the Republic of Kazakhstan that are not included in the list of KKSON MES RK

No.	FULL NAME. author (s)	Publication title	Name of the journal, year, number, pages, ISSN
<i>department</i>			
1	A. Ospanova , A. Zharkimbekova , L. Kusepova , A. Tokkulieva , M. Manmurnyn	Computerlik jellylerds korgauga zha monitoringileuge arnalgan bulk service	KazUTZU Khabarshysy , No. 3, 2021, pp. 222-229. DOI: https://doi.org/10.51301/vest.su.2021.i3.29
<i>Total: 1</i>			

<i>Total by faculty:</i>	
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5.4 Number of scientific publications of doctoral students in conference proceedings in the Republic of Kazakhstan

No.	FULL NAME. author (s)	Publication title	Name of the journal, year, number, pages, ISSN
<i>department</i>			
1	Abdiraman A.S. Scientific adviser: Nurusheva A.M.	Analysis of methods for assessing the level of information security of information systems	International journal of information & communication technologies, special issue, March, 2021/ ISSN 2708-2032 (print), ISSN 2708-2040 (online)
2	Ergalieva B. B., Sisenov N., Ospanov R. M., Zhetpisbaeva A. T.	Implementation of the Choice Function in the Modified Sponge Scheme for Designing Cryptographic Hash Functions	Collection of materials of the XVI International Scientific Conference of Students and Young Scientists "GYLYM JÁNE BILIM - 2021", Nur-Sultan, 2021, - P. 611-614.
3	N. Sisenov , R. Ospanov , B. Yergaliyeva , A. Zhetpisbayeva	Implementation of the selection function in the modified Sponge cryptographic hash functions design scheme	Materials of the international scientific conference of students and young scientists "FARABI ALEMI", Almaty, Kazakhstan, April 6-8, 2021, - P. 82. Nurbek Sisenov , Ruslan Ospanov , Banu Yergaliyeva , Ainur Zhetpisbayeva
4	B. Yergaliyeva , K. Niyazaliyev , R. Ospanov , G. Ulyukova	On criteria and methods for generating optimal S-boxes	materials international scientific conference of students and young scientists "Farabi Alemi ". Almaty, Kazakhstan, April 6-8, 2021, - P. 84.

Total:4

<i>Total by faculty:</i>	
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5.5 Number of scientific publications of doctoral students in collections of conferences held abroad

No.	FULL NAME. author (s)	Publication title	Name of the journal, year, number, pages, ISSN	The country
<i>department</i>				

1	A. Ospanova , B. Tuleuov , A. Zharkimbekova , L. Kussepova , M. Mangmurnyn	Mobile Devices and Portable Classroom Based on Raspberry Pi Computers	Proc. 12th National Conference with International Participation "Electronica 2021", May 27 - 28, 2021, Sofia, Bulgaria, p. 62-65. DOI: 10.1109/ELECTRONICA52725.2021.9513685 ISBN:978-1-6654-4061-5 www.scopus.com/record/display.uri?eid=2-s2.0- 85114128179&origin=resultslist	Bulgaria
2	A. Ospanova , B. Tuleuov , G. Karzhauova , L. Kussepova	Advanced Administration of Windows Based on Open Source Utilities	Proceedings of the World Congress on Engineering 2021, WCE 2021, July 7-9, 2021, London, UK, p. 118-121. ISBN: 978-988-14049-2-3	UK
3	Ademi B. Ospanova , Berik I. Tuleuov , Aizhan K. Tokkuliyeva , Lazzat T. Kussepova , Aizhan T. Zharkimbekova	Intelligent Mobile Hardware-software Device for Automated Testing and Monitoring of Computer Networks Based on Raspberry Pi	Proceedings of the 2021 IEEE 15th International Conference of Actual Problems of Electronic Instrument Engineering (APEIE), Nov. 20, 2021, Novosibirsk, Russia. to be published	Russia
<i>Total:3</i>				
<i>Total by faculty:</i>				

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	group number, course	Date of receipt of the award, diploma; indicate the prize	Name conferences	Location	Mob.tel .	Email	Link to the organizer's website
1									
<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	group number, course	Date of receipt of the award, diploma; indicate the prize	Name conferences	Location	Mob.tel .	Email	Link to the organizer's website
1									
<i>Total:</i>									

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

No.	FULL NAME. doctoral student	department	group number, course	Date of receipt of the award, diploma; indicate the prize	Name conferences	Location	Mob.tel .	Email	Link to the organizer's website
1									
<i>Total:</i>									

6. INTERNATIONAL SCIENTIFIC COOPERATION

In the 2021-2022 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

N o.	Organization (universities, research centers, etc.)	The country	Title of the document	date of signing	Validity	Implementation progress
1						
<i>Total:</i>						

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

N o.	FULL NAME. visiting professor	Organization/country of visiting professor	Name of scientific event	Periods of stay	Brief information
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1	Yakovlev Viktor Alekseevich	Doctor of Technical Sciences, Professor of the Department of Secure Communication Systems, Saint-Petersburg State University of Telecommunications. Professor M. A. Bonch-Bruevich (St. Petersburg, Russia)	Courses taught - Theory of signal transmission - Security of computer networks-1 lectured for doctoral students	04.11.2021 - 04.12.2021	https://fit.enu.kz/s_ubpage/mezhduna_rodnoe-sotrudnichestvo-kafedry-iib
2	Abdul Razak	PhD Doctor of New York University (USA)	Courses taught - Security of computer networks and network protocols -Network cyber security lectured for doctoral students	11/08/2021 - 12/08/2021	https://fit.enu.kz/s_ubpage/mezhduna_rodnoe-sotrudnichestvo-kafedry-iib
3	Adzhemov Artem Sergeevich	Doctor of Technical Sciences, Professor of the Moscow Technical University of Communications and Informatics (Moscow, Russia)	Courses taught - Theory of information and coding participated in conferences	09/02/2021 - 12/14/2021	https://fit.enu.kz/s_ubpage/mezhduna_rodnoe-sotrudnichestvo-kafedry-iib
<i>Total: 3</i>					

The department actively and closely cooperates with foreign partners and constantly expands its external contacts.

7. ANALYSIS OF Staff of the Department of Information Security (the results of the work of the faculties / department, comparison with the previous year)

No.	Indicators	Previous 2020	Reporting 2021
1.	Scientific publications in international scientific journals ThomsonReuters :	5	3

2.	Scientific publications in international scientific journals Scopus:	17	17
3.	<i>Publications in journals not included in the ThomsonReuters and Scopus databases</i> <i>a) in foreign journals (RSCI, etc.)</i> <i>b) in the journals of the Republic of Kazakhstan, included in the list of KKSON MES RK</i> <i>c) in journals of the Republic of Kazakhstan that are not included in the list of KKSON MES RK</i>	3 17 4	1 7 4
4.	Scientific publications in the collections of conferences held in the Republic of Kazakhstan:	13	9
5.	Scientific publications in scientific conferences, symposiums, seminars abroad:	6	12
6.	Organization and holding of scientific events at the faculty/department: International conferences	-	1 1
7.	List of STUDENTS who received prizes (I, II, III) in various competitions, exhibitions, conferences in the Republic of Kazakhstan	-	10
8.	List of STUDENTS who received prizes (I, II, III) in various competitions, exhibitions, conferences in the CIS	1	4
9.	Number of scientific publications of STUDENTS in scientific journals, total The number of scientific publications of students in the collections of conferences held in the Republic of Kazakhstan The number of scientific publications of students in the collections of conferences abroad	2 1 1	14 5 9
10.	The number of scientific publications of MASTER STUDENTS in scientific journals <i>included in the ThomsonReuters and Scopus databases</i> :	-	1 1
11.	The number of scientific publications of MASTER STUDENTS in scientific journals <i>not included in the ThomsonReuters and Scopus databases</i> : <i>a) in foreign journals (RSCI, etc.)</i> MASTER STUDENTS	12	8
12.	<i>in journals of the Republic of Kazakhstan that are not included in the list of KKSON MES RK</i> MASTER STUDENTS	2	-
13.	The number of MASTER STUDENTS scientific publications MASTER STUDENTS in the collections of conferences held in the Republic of Kazakhstan:	33	11

14	Number of scientific publications of MASTER STUDENTS in collections of conferences held abroad	6	4
15	List of MASTER STUDENTS who received prizes (I, II, III) in various competitions, exhibitions, conferences in the Republic of Kazakhstan	2	8
16	List of MASTER STUDENTS who received prizes (I, II, III) in various competitions, exhibitions, conferences in the CIS, abroad	1	3
17	The number of scientific publications of DOCTORAL STUDENTS in scientific journals included in the Scopus database	1	1 3
18	The number of scientific publications of DOCTORAL STUDENTS in scientific journals <i>not included in the Web of Science and Scopus databases:</i> a) <i>in foreign journals (RSCI, etc.)</i> b) <i>in the journals of the Republic of Kazakhstan, included in the list of KKSON MES RK</i> c) <i>in journals of the Republic of Kazakhstan that are not included in the list of KKSON MES RK</i>	-	1 2 1
19	The number of scientific publications of doctoral students in the collections of conferences in the Republic of Kazakhstan. DOCTORAL STUDENTS	1	4
20	The number of scientific publications of doctoral students in the collections of conferences held abroad. DOCTORAL STUDENTS		3

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

Overall, calendar year 2021 performance is better in many ways compared to 2020 performance.

The department plans next year to improve the performance of 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 students' publications, to publish the results of SRW in publications indexed by Scopus and WoS ; to continue work on the participation of teaching staff in events held by the faculty and the university.

Responsible for research work of the Information Security Department



Ospanova A.B.

Agreed

Head of the Department "Information Security"



Satybaldina D.Zh.