5. RESEARCH WORK OF DOCTORAL STUDENTS

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

No.	FULL NAME. author(s) (indicate in English)	Publication title	Name of the journal, year, number, pages,
p/n			ISSN
1.	Ospanov, RM, Seitkulov, YN, Sissenov, NM,	An example of an internal function for	VESTNIK SANKT-PETERBURGSKOGO
	Yergalieva, BB	the SPONGE scheme	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.	FULL NAME. author(s) (indicate in	Publication title	Name of the journal, year, number, pages,	journal impact
p/n	English)		ISSN	factor
1	Seitkulov, YN, Boranbayev, SN,	Methods for secure cloud	Indonesian Journal of Electrical Engineering	0.241
	Ulyukova, GB, Yergaliyeva, BB,	processing of big data	and Computer Science, 2021, 22(3), p.	
	Satybaldina, D.		1650–1658	
2	Ospanov , RM, Seitkulov , YN,	Sponge Inner Function Example	Bulletin of St. Petersburg University. Applied	
	Sissenov, NM, Yergalieva, BB		Mathematics. Informatics. Management	
	_		processes. 2021, Vol. 17. Issue . 3 S. 287-293.	
3	Yerzhan N. Seitkulov , Seilkhan N.	Methods for secure cloud	https://www.scopus.com/sourceid/21100799	0.241
	Boranbayev, Gulden B. Ulyukova,	processing of big data	500?origin=resultslist	
	Banu B. Yergaliyeva, Dina Satybaldina		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	
Total:	3			
Total by f	aculty:			

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)		Name of the journal, year, number, pages, ISSN
depar	rtment	,	
1	Ergalieva B.B., Ospanov R.M., Seitkulov E.N., Sisenov	An example internal function for a	Reports of BSUIR, 2021, Volume 19, No. 3,
	N.M.	Sponge schema built using the AES	-S. 89-95.
		Generic Design Methodology	
Total	: 1		
Total	by faculty:		

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							
depar	rtment									
1	E.N. Seitkulov, R.M. Ospanov, B.B. Yergaliyeva	On cryptographic properties of s- boxes	Bulletin of Satbayev University, 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								
	Total:2 Total by faculty:									

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
depai	rtment		
1	A. Ospanova , A. Zharkimbekova , L. Kusepova , A. Tokkulieva , M. Manmuryn	. 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
Total	<i>:</i> 1		

Total by faculty:

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								
departn	nent										
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.	•	Collection of materials of the XVI International Scientific Conference of Students and Young Scientists "ĠYLYM 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									
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	Total:4										
Total by	y faculty:										

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
depar	rtment			

1	A. Ospanova, B. Tuleuov,	Mobile Devices and Portable Classroom	Proc. 12th National Conference with International B	Bulgaria					
	A. Zharkimbekova , L.	Based on Raspberry Pi Computers	Participation "Electronica 2021", May 27 - 28, 2021, Sofia,						
	Kussepova, M. Mangmuryn		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						
2	A. Ospanova, B. Tuleuov,		Proceedings of the World Congress on Engineering 2021, U	JK					
	G. Karzhauova , L.	Based on Open Source Utilities	WCE 2021, July 7-9, 2021, London, UK, p. 118-121. ISBN:						
_	Kussepova		978-988-14049-2-3						
3	<u> </u>		Proceedings of the 2021 IEEE 15th International Conference R	Russia					
			of Actual Problems of Electronic Instrument Engineering						
	1		(APEIE), Nov. 20, 2021, Novosibirsk, Russia. to be						
	Kussepova , Aizhan T.	on Raspberry Pi	published						
	Zharkimbekova								
Total:3									
Total	by faculty:								

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									
Total									

^{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									
Total.	:								

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									
Total.									

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						
Tot	tal:					

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

N	FULL NAME. visiting	Organization/country	of visiting	Name of scientific event	Periods of stay	Brief information
О.	professor	professor				

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 tal: 3	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

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.	Publications in journals not included in the ThomsonReuters and Scopus databases		
	a) in foreign journals (RSCI, etc.)	3	1
	b) in the journals of the Republic of Kazakhstan, included in the list of KKSON MES RK	17	7
	c) in journals of the Republic of Kazakhstan that are not included in the list of KKSON MES RK	4	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:	-	1
	International conferences		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	2	14
	The number of scientific publications of students in the collections of conferences held in the Republic of	1	5
	Kazakhstan	1	9
	The number of scientific publications of students in the collections of conferences abroad		
10.	The number of scientific publications of MASTER STUDENTS in scientific journals included in the	-	1
	ThomsonReuters and Scopus databases:		1
11	The number of scientific publications of MASTER STUDENTS in scientific journals not included in the		
	ThomsonReuters and Scopus databases:		
	a) in foreign journals (RSCI, etc.)	12	8
	MASTER STUDENTS		
12.	in journals of the Republic of Kazakhstan that are not included in the list of KKSON MES RK 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

4	Number of scientific publications of MASTER STUDENTS in collections of conferences held abroad	6	4
5	List of MASTER STUDENTS who received prizes (I, II, III) in various competitions, exhibitions, conferences in the Republic of Kazakhstan	2	8
6	List of MASTER STUDENTS who received prizes (I, II, III) in various competitions, exhibitions, conferences in the CIS, abroad	1	3
7	The number of scientific publications of DOCTORAL STUDENTS in scientific journals included in the Scopus database	1	1 3
8	The number of scientific publications of DOCTORAL STUDENTS in scientific journals not included in the Web of Science and Scopus databases: a) in foreign journals (RSCI, etc.) b) in the journals of the Republic of Kazakhstan, included in the list of KKSON MES RK c) in journals of the Republic of Kazakhstan that are not included in the list of KKSON MES RK	-	1 2 1
9	The number of scientific publications of doctoral students in the collections of conferences in the Republic of Kazakhstan. DOCTORAL STUDENTS	1	4
0	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	gy	Ospanova A.B.
Agreed Head of the Department "Information Security"		_ Satybaldina D.Zh.