Department of Cybersecurity, Information Processing and Storage

GUK 317, 325

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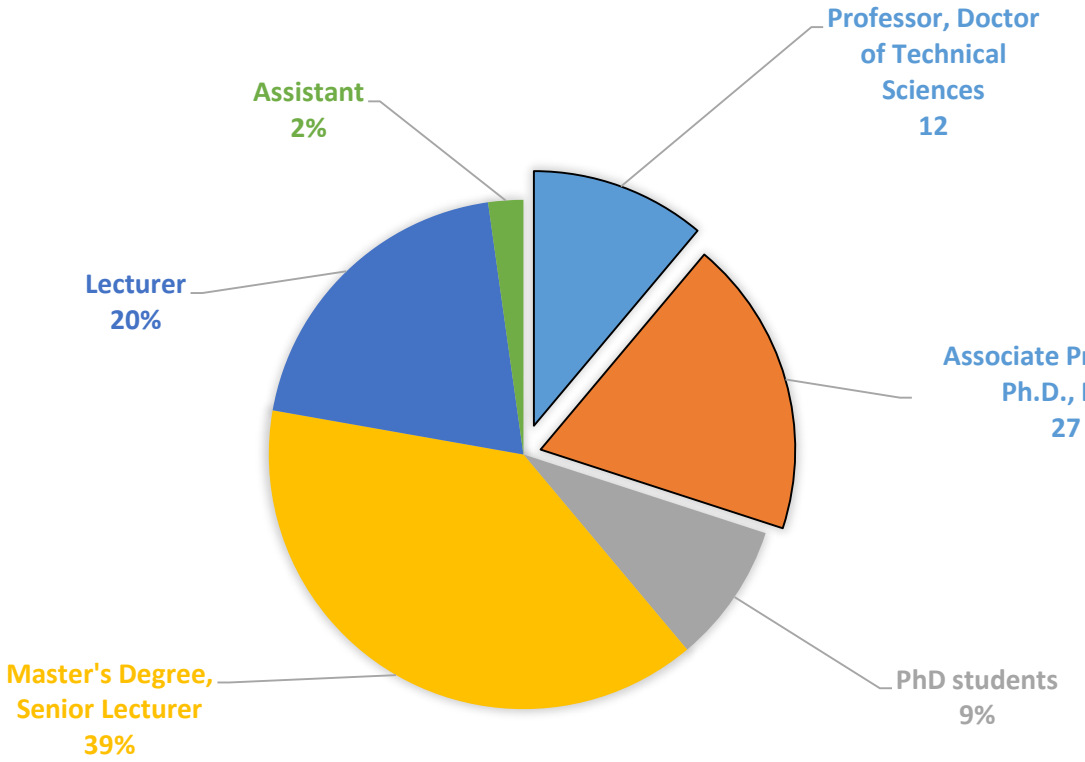
Department of Cybersecurity, Information Processing and Storage

	September 2021	September 2022	September 2023	September 2024	May 2025
Staff	16	21 ↑	22 ↑	**34**↑	**39**↑
Prudence	62.5	45.45% ↓	38% ↓	**40%**↑	**38%**↓
Bachelor's degree	520	740 ↑	**1991**↑	**2768**↑	**2750**↓
Master's degree	42	41 ↓	108 ↑	**124**↑	**124**↑
Doctoral studies	20	17 ↓	17 ↑	**15**↓	**19**↑
Doctoral student defense	0	1 ↑	1	**2**↑	**0**↓
Those who did not defend their doctoral dissertations.	0	5 ↓	**5**↓	**5**↓	**5**↓
GF	**0**	**0**	**27.7** million tng (1) ↑	**312** million (4)↑	**399** million (4) ↑
PCF	0	0	0	**855** million (1)↑	**855** million (1) ↑
Jas Galym	0	0	0	**27** million (1)↑	**58** million (2) ↑
Commercialization	0	0	0	0	0
Contract (economic agreement)	0	0	0	0	0
Publications	4	3 ↓	**5**↑	35/8 ↑	**36**↑
Double OP	0	0	0	**1**↑	**1**↑
Department branches	0	0	0	**1**↑	**1**↑

Faculty members of the department



100

employees

Сербин Василий Валерьевич

И.о. заведующего кафедрой

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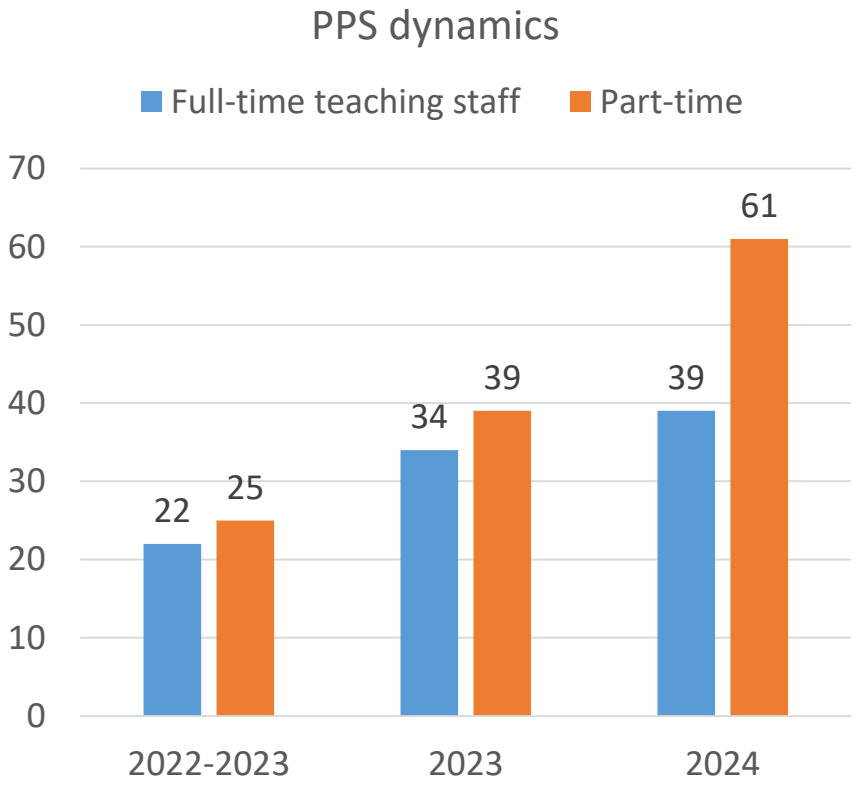
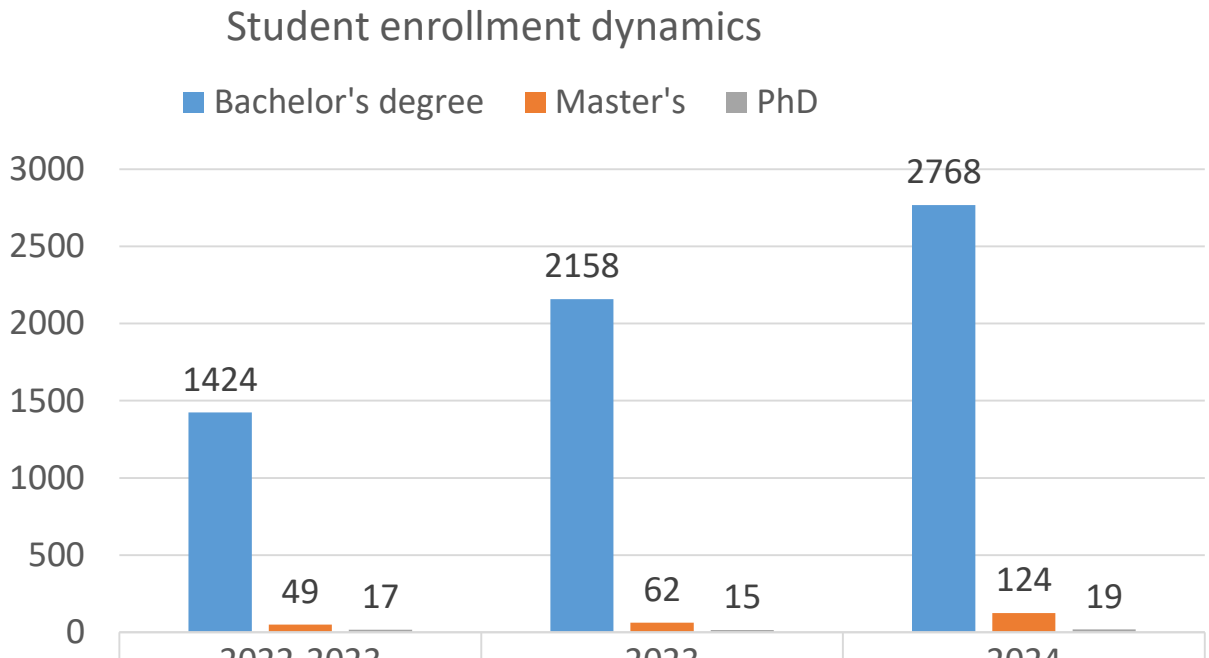
Maturity

Contingent of PPS and Students



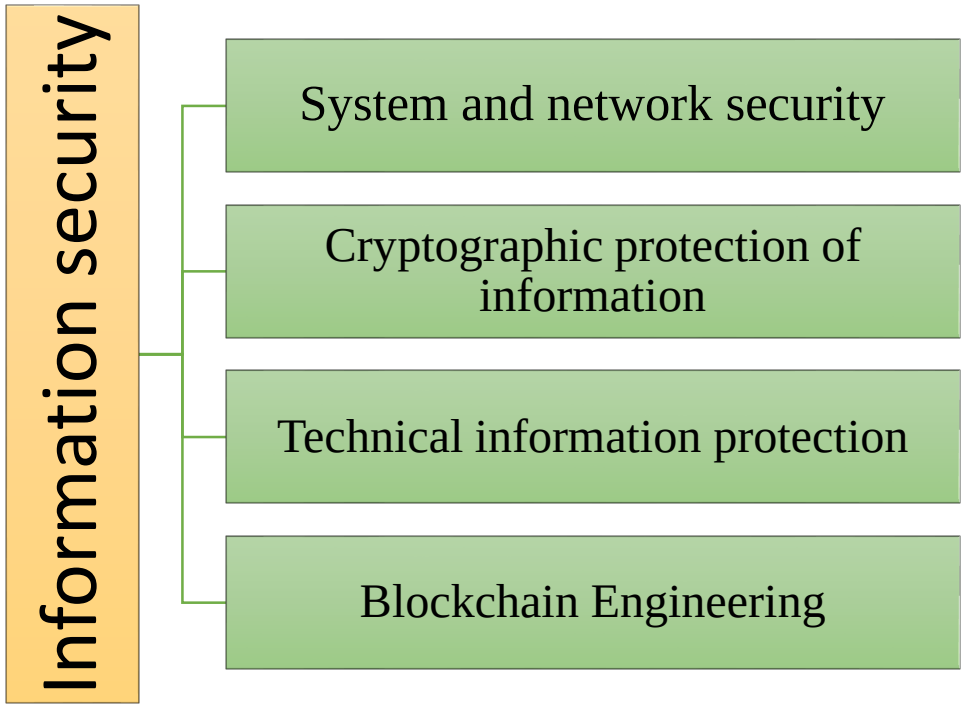


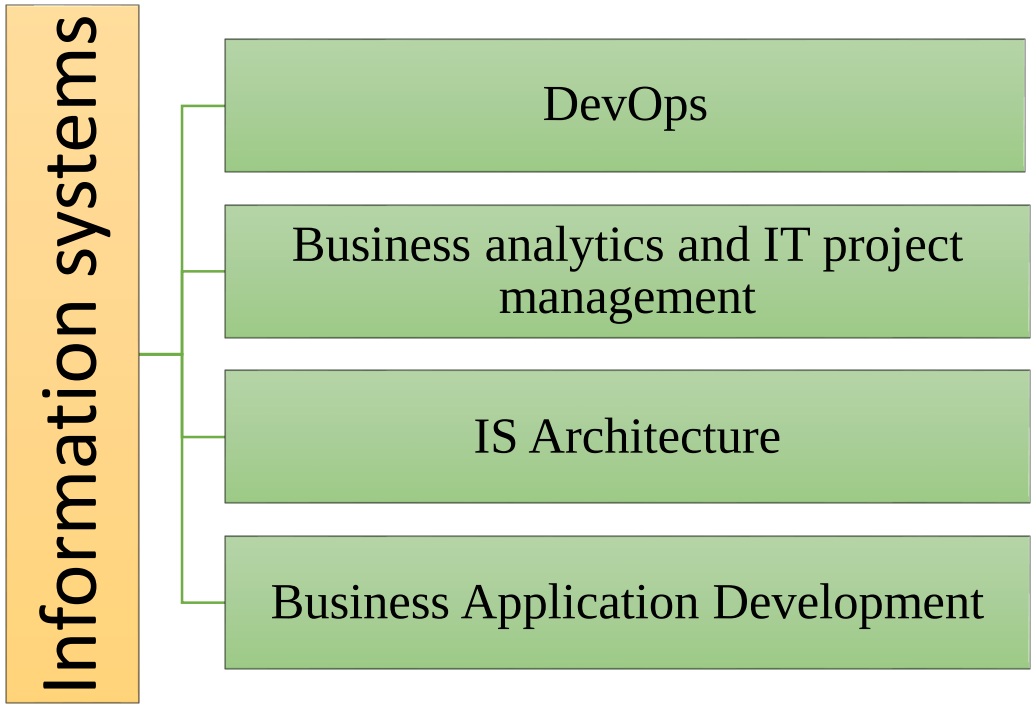
	2022-2023	2023	2024
Bachelor's degree	1424	2158	2768
Master's	49	62	124
PhD	17	15	19

Fields of study

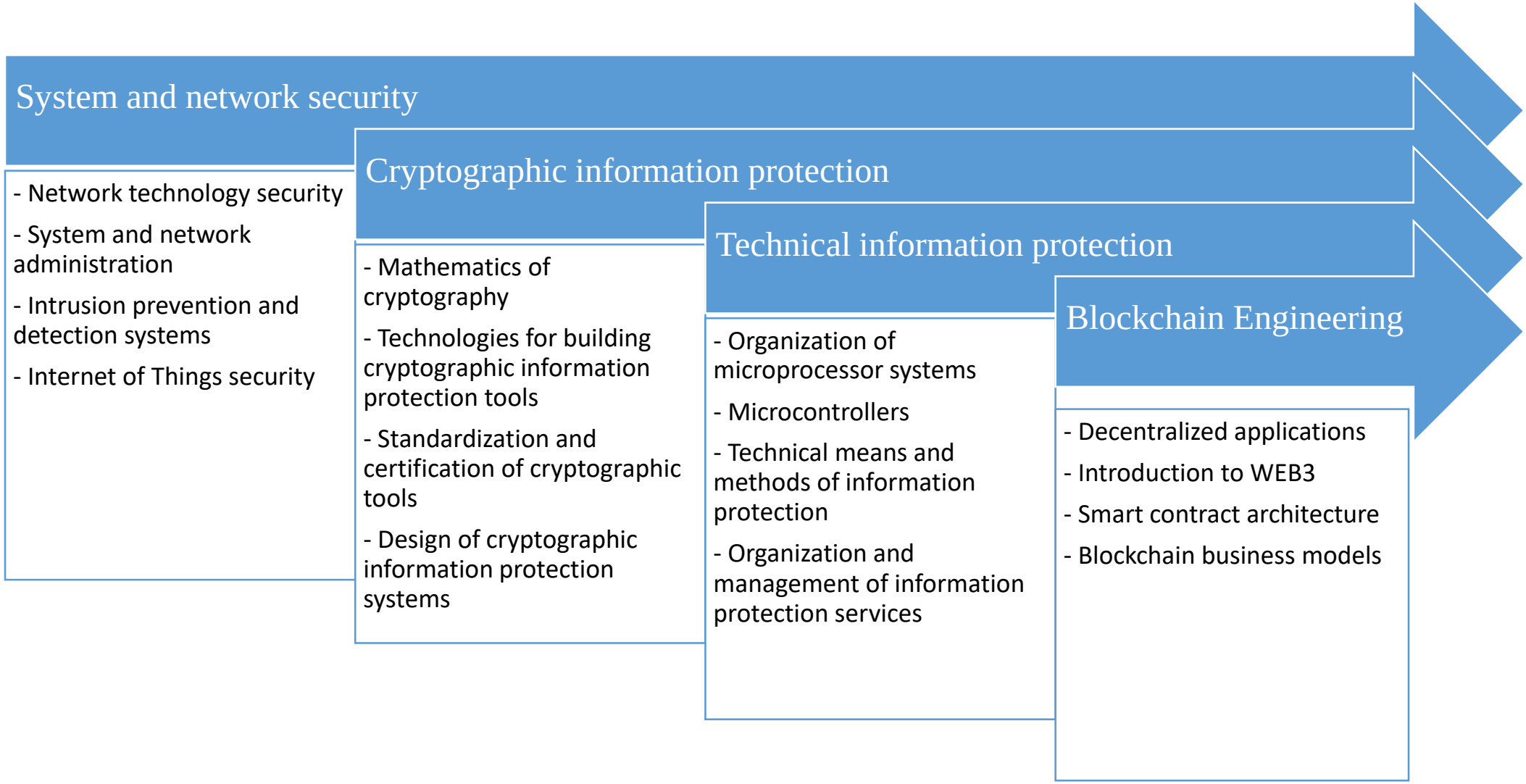
	Educational programs:	Accreditation
Bachelor's degree	• Information Security (4 years) • Information Systems (4 years)	Until 06.2026 Plan IQAA, ABET, ASIIN
Master's	• Comprehensive Information Security (1, 1.5, 2 years) • Management of information systems (1, 1.5, 2 years)	Until May 2028 HAAP Until May 2026 HAAP
PhD	• Management Information Systems (3 years) • Information security systems (3 years)	Until 06.2027 HAAP Until 06.2027 HAAP

Educational program trajectories (bachelor's degree)

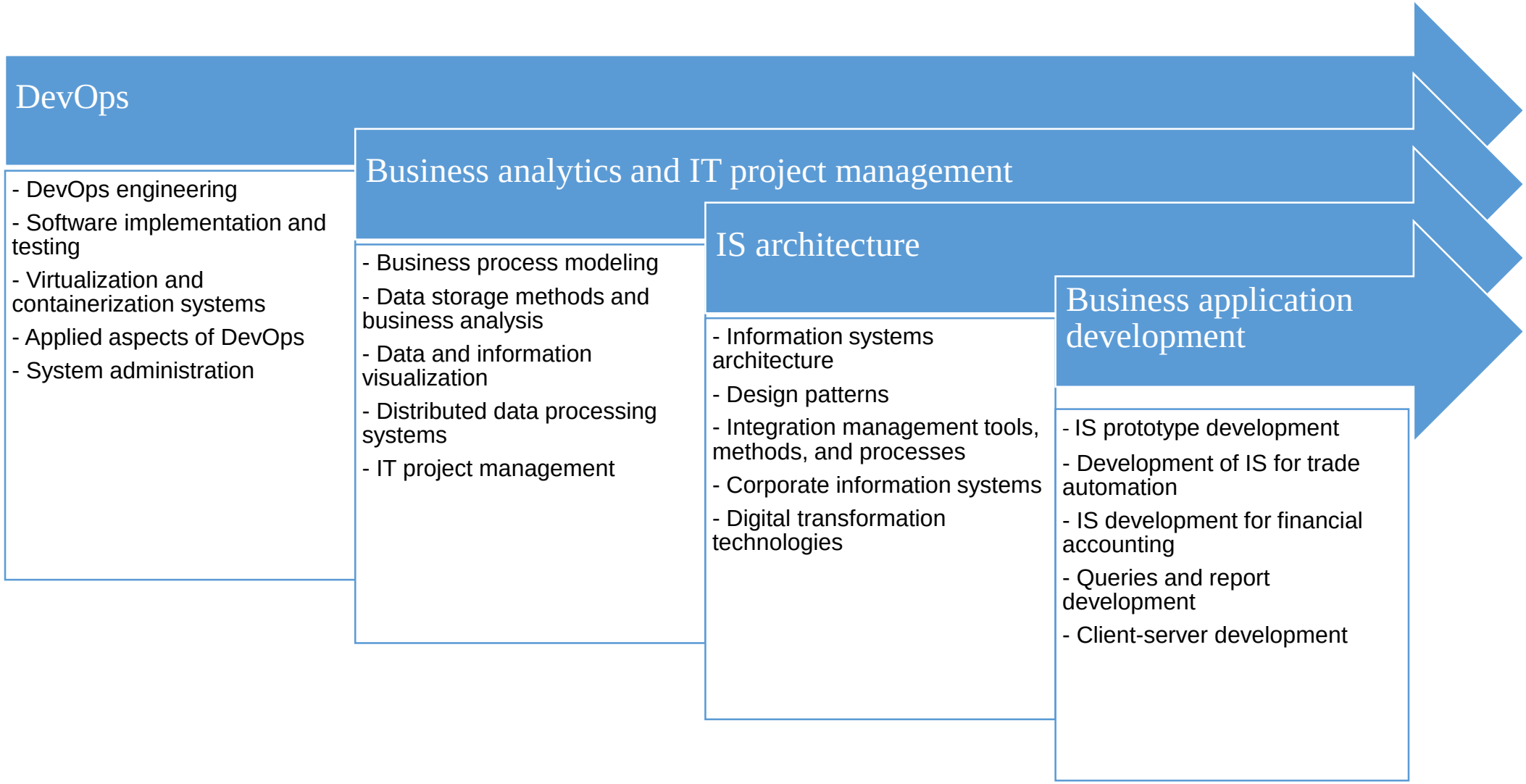




Cybersecurity trajectory disciplines:



IS trajectory disciplines:



Funding for scientific activities

TOTAL: 1,312,942,37 tenge

IRN	Project name	Full name of scientific supervisor	Priority	Type of research	Competition	Implementation period	Amount of funding
AP19675961	Development and research of key distribution protocols based on quantum properties	Begimbayeva Enlik Erikovna	Information, communication, and space technologies	Applied	GF 2023-2025	2023-2025	99,288,413
AP2348999	Development of intelligent technology and a digital platform for adaptive zoning **of territories** in conditions of climate dynamics	Yagalieva Bagdat Esenovna	Advanced manufacturing, digital and space technologies	Applied	GF 2024–2026	2024 - 2026	90,000,000
AP23487678	Development of a broadband, energy-efficient, and compact converter of mechanical vibrations in the environment into electrical signals	Albanbay Nurtai	Advanced manufacturing, digital and space technologies	Applied	GF 2024–2026	2024–2026	119,758,000
AP19678995	Development of a method for speaker recognition using deep neural networks with ultra-short duration of clean speech	Akhmediyarova A.T.	National security and defense	Applied	GF 2023 - 2025	2023 - 2025	90 234 130
BR24993166	Development of a comprehensive innovative online platform, an automated legal assistance system, and a unified system for automating the work of lawyers	Akhmediyarova A.T.	Intellectual potential of the country	Applied	PCF 2024-2026	2024–2026	855,000,000
AP22686112	Study of somatic mutations based on single-cell RNA data using machine learning methods in patients with peripheral artery disease	Kunikheev A.	Advanced manufacturing, digital and space technologies	Applied - Bioinformatics	Zhas-Galym 2024–2026	2024 - 2026	29,816,820
AP24786145	Development of an algorithm for filtering and preprocessing biomedical images for cardiological diagnostics	Kabdullin Maksat	Advanced manufacturing, digital and space technologies	Applied - Bioinformatics	Zhas-Galym 2025–2027	2025 - 2027	28,845,010

Percentage of faculty members with a Hirsch index

Full-time teaching staff

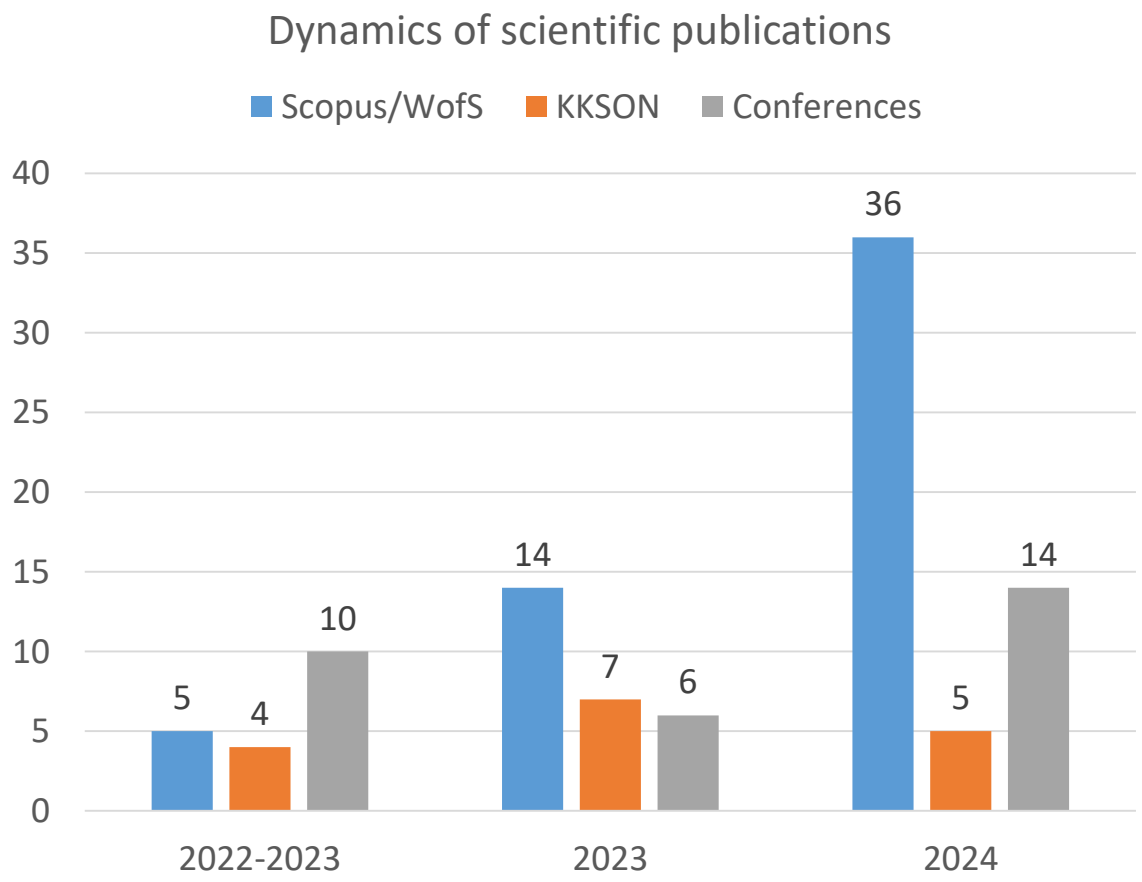
$$30 \quad \frac{12}{39}$$

Full-time and part-time

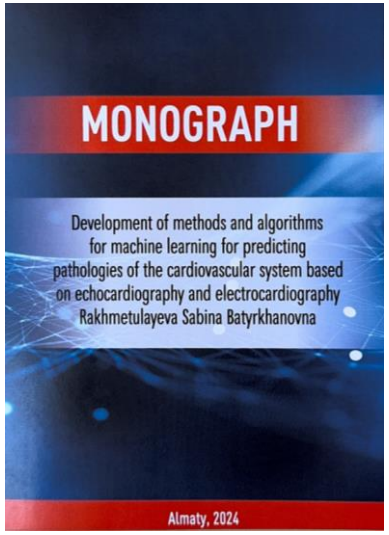
$$41 \quad \frac{41}{39+61}$$

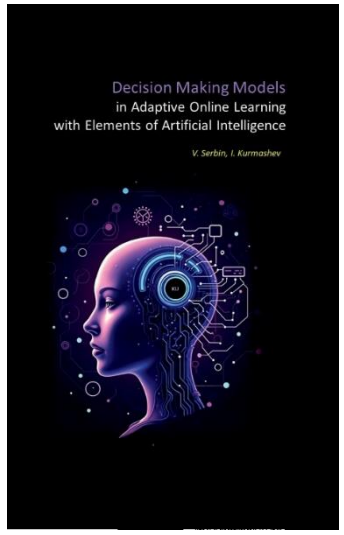
No	Full name of teaching staff KOiHI	h-index (Scopus)
1	Razak Abdul	23
2	Kozhamzharova D.H.	8
3	Rakhmetualayeva S.B.	5
4	Yubuzova H.I.	4
5	Alimseitova Zh.K.	4
6	Serbin V.V.	3
7	Satybaldieva R.Zh.	3
8	Begimbayeva E.E.	3
9	Yagalieva B.S.	3
10	Aitkhozhayeva E.Zh.	2
11	Mailybaev E.	2
12	Shukaev D.N.	2
13	Albanbay N.	2
14	Zhumagaliyev B.I.	1
15	Beketova G.S.	1
16	Akatayev N.	1
17	Aristombaeva M.	1
18	Bolyskhanova M.Zh.	1
19	Tulegnova B.A.	1

Dynamics of scientific works



Monographs (2024-2025 academic years):





Patents (2023-2025):

1. Aitkhozhayeva E.Zh. – 3
2. Serbin V.V. – 1
3. Rakhmetulaeva S.B. -1

Dual degree programs and joint educational programs

PennState

Hof University
University of Applied Sciences

SU educational program	Partner University Educational Program	Double degree/ Joint	Number of students	Status
6B06301 – Information Security	Cybersecurity	Joint 3+1 Double degree 3+3+1	26 (3+1+1)	
6B06301 – Information Security	Computer Science (Cybersecurity track)	Joint	39	
7M06103 – Management of Information Systems	Inha University	Double degree 3+1		In plan
6B06301 – Information Security	KNB Academy	Joint	17 (from the KNBS)	Since 2014

Percentage of foreign students

0.86

No	Code and name of educational program	Number of students
1	6B06301 Information Security	20
2	6B06106 Information Systems	13
3	7M06109 Management of information systems	2
4	7M06301 Comprehensive information security	1
	TOTAL:	**25**

Contingent of the KOiHI department as of October 10, 2024.

Total: 2,911 people.

Department laboratories

Circuit Design Laboratory

HUAWEI

HUAWEI Laboratory

1C

1C Laboratory

CISCO

Cisco Laboratory

MyBPM

MyBPM Laboratory for Business Process Automation

Lenovo

Plan:

FORTINET

NOVENTIQ

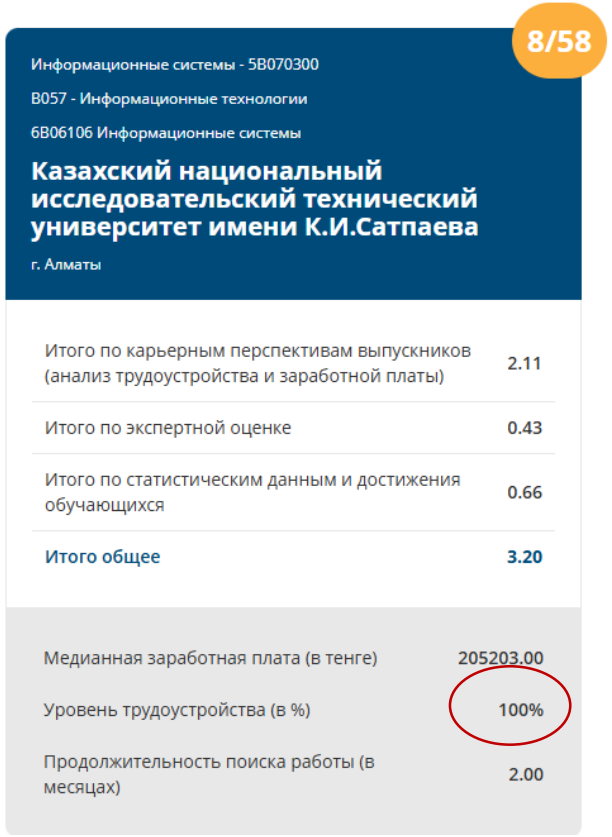
Accredited Laboratory

KNB

Accredited **Information Security** Laboratory
(headed by R. Ibraev)

Classified!

Percentage of graduates employed in the first year after completing their studies out of the total number of graduates



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Информационные системы - 5B070300

B057 - Информационные технологии

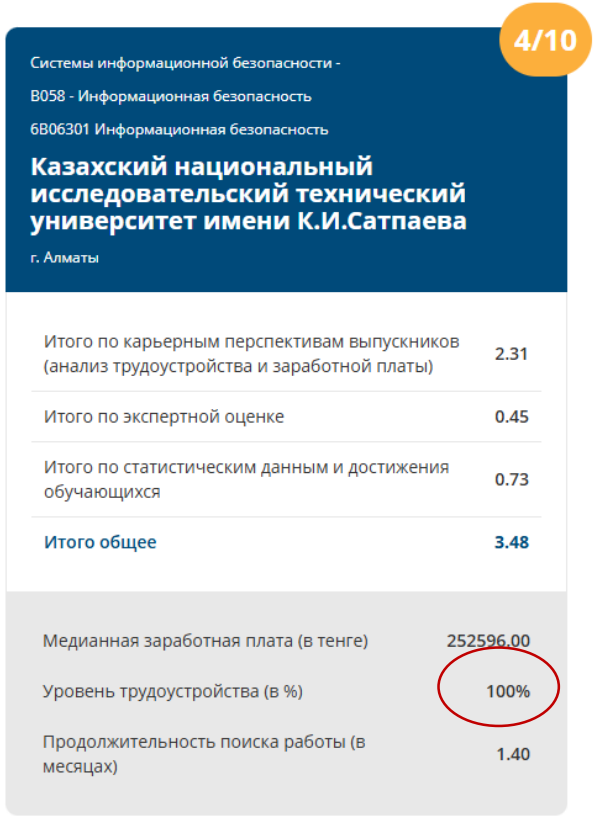
6B06106 Информационные системы

Казахский национальный исследовательский технический университет имени К.И.Сатпаева

г. Алматы

Итого по карьерным перспективам выпускников (анализ трудоустройства и заработной платы)	2.11
Итого по экспертной оценке	0.43
Итого по статистическим данным и достижения обучающихся	0.66
Итого общее	**3.20**

Медианная заработная плата (в тенге)	205203.00
Уровень трудоустройства (в %)	100%
Продолжительность поиска работы (в месяцах)	2.00



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Системы информационной безопасности -

B058 - Информационная безопасность

6B06301 Информационная безопасность

Казахский национальный исследовательский технический университет имени К.И.Сатпаева

г. Алматы

Итого по карьерным перспективам выпускников (анализ трудоустройства и заработной платы)	2.31
Итого по экспертной оценке	0.45
Итого по статистическим данным и достижения обучающихся	0.73
Итого общее	**3.48**

Медианная заработная плата (в тенге)	252596.00
Уровень трудоустройства (в %)	100%
Продолжительность поиска работы (в месяцах)	1.40

100%

Source: www.atameken.kz

2023: 16 student teams (90 students) from SU, MUIT, KBTU, Energo University, Al-Farabi Kazakh National University, Nazarbayev University, Astana IT University, etc.

2025: 19 student teams (120 students) from SU, MUIT, KBTU, Energo University, Al-Farabi Kazakh National University, Nazarbayev University, Korkyt Ata University, Kozybayev University, etc.

Development plan: indicators

Teaching staff:

1. Department cohesion (number of departmental events from 3 to 7 per year)
2. Rejuvenation (under 40 years old) from 25 to 30 teaching staff (64% to 70%)
3. Maturity to be maintained at 38%!
4. Reduction in the number of part-time staff by increasing the number of full-time teaching staff from 39 to 50
5. Increase in the number of teaching staff conducting classes in English from 9 to 15
6. Attracting practitioners from 14 to 20 people
7. Attract foreign teachers and scientists to participate in the educational process and scientific activities of the department from 1 to 3 people.

Educational activities:

1. Increase the number of subjects taught in English from 13 to 22
2. Accreditation of all educational programs (Abet for IB, ASIIN for IS)
3. Increase in the number of foreign students from 25 to 50
4. Increase in teaching aids from 1 to 5.

Science:

1. Increase in commercialization projects from 0 to 3
2. Increase in GF projects from 3 to 6
3. Increase in student commercialization projects: from 0 to 5

International activities:

1. Dual degree program with Penn State: from 0 to 50 students
2. Dual degree program with Hof U: 0 to 20 students

Laboratory facilities:

1. Opening of the Fortinet laboratory (information security)
2. Opening of the MyBPM laboratory (IS automation)

SOCIAL NETWORKS Satbayev University

Website

Youtube

VK

Facebook

Instagram

TikTok

Telegram