DEPARTMENT OF INFORMATION SYSTEMS

<table>
<tr><th colspan="3">Indicators of the Hirsch index of the teaching staff
for 2021-2022</th></tr>
<tr><th>No.</th><th>FULL NAME</th><th>Hirsch index</th></tr>
<tr><td>1</td><td>Shaykhanova A.K., PhD, assistant professor</td><td>4</td></tr>
<tr><td>2</td><td>Abdoldinova G.T., Ph.D., assistant professor, associate professor</td><td>1</td></tr>
<tr><td>3</td><td>Akishev K.M. , Master index</td><td>1</td></tr>
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<table>
<tr><th colspan="3">Scientific publications of the teaching staff in the international scientific publications Scopus and Web of science for 2021-2022</th></tr>
<tr><th>No.</th><th>Full name of authors</th><th>Article title</th></tr>
<tr><td>1</td><td>Shaykhanova A.K.</td><td>On the Problem of Visualization of Big Graphs for Infrastructure Engineering . Mechanisms and Machine Science , 107 / Martsenyuk , V. , Karpinski, M. , Martsenyuk , O. - – Springer, 2022- Pp. 277–288 . - ISBN: 978-3-030-76787-7. - DOI:10.1007/978-3-030-76787-7_13 - Chapter in monograph.</td></tr>
<tr><td>2</td><td>Akishev K.M.</td><td>MATHEMATICAL FORMULATION AND THE PROBLEM SOLUTION OF CLUSTERING RECIPES OF CONCRETE MIXTURES USING TECHNOGENIC WASTE AND SLAGS OF METALLURGICAL ENTERPRISES. Metallurjia, 2022.61(1)213-216. ISSN 0543-5846</td></tr>
<tr><td>3</td><td>Akishev K.M.</td><td>"Improving the reliability of mechanisms and assemblies in automatic control and regulation systems" Proceedings of the National Academy of Sciences of the Republic of Kazakhstan series of geology and technical sciences.1(451),2022.-p.115-125 (Scopus)</td></tr>
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<table>
<tr><th colspan="2">Scientific publications of the teaching staff in the international scientific publications Scopus and Web of science for 2021-2022</th></tr>
<tr><th>Full name of authors</th><th>Article title</th></tr>
<tr><td>Kusbekov D.K</td><td>The importance of vedic thanatology in the context of the modern worldviever crisis (the experience of philosophical discourse) ASTRA Salvensis . - 2021. - No. 1. - P. 269-284. Publisher : Transilvanian Association for the Literary and Culture of Romanian People (ASTRA) ISSN:2393-4727E-ISSN:2344-1887 2 p . l . Philosophy - 88. CiteScoreTracker 2021 - 1.4</td></tr>
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<table>
<tr><th colspan="3">Scientific publications and teaching aids for faculty for 2021-2022</th></tr>
<tr><th>No.</th><th>Full name of authors</th><th>Name</th></tr>
<tr><td>1</td><td>Yermekov N.T., Tarzhibaeva B.E.</td><td>Tutorial Introduction to programming in Python. Textbook, Lantad Trade Publishing House, Almaty - 2021</td></tr>
<tr><td>2</td><td>Baizhumanov M.K., Abdoldinova GT.</td><td>Modeling fundamentals of industrial and economic problems: RK Tutorial RUMS. "Design" - OP Aldaberenov street, 119. Taldykurgan IE-2021</td></tr>
</table>

3	Abdoldinova G.T.	Monograph: Methodology of developing logical thinking of future mathematics teachers with an aim of nurturing mathematical thinking of their prospective students. Taldykorgan : IE "Design" - OP Aldaberenov street, 119
4	Tulegulov A.D., Tokaeva A.O., Maksutova K.M., Talgat A.	Tutorial: Individual work of students and teachers on the subject of information and communication technologies. Almaty: Lantar Trade LLP.
5	Bektenov M.B.	Textbook: Laboratory work in physics. Almaty: Lantar Trade LLP.

Patents of the teaching staff for 2020-2022	
Full name of authors	Name of the patent
Akishev K.M.	Concrete mix. Patent No. 34714 dated November 20, 2020

Research work of students for 2020-2022
Student Club of Information Technologies is a voluntary association of students and employees of JSC "Kazakh University of Technology and Business", engaged in research, design and educational activities in the field of IT, implemented by the Department of Information Technologies. The goal of the IT club is to improve the skills and competence of students in research and project activities, develop the scientific and technical potential of members of this student club, increase practical and additional knowledge of information technology, develop in all areas of Computer Science , a skills exchange to increase the versatility of the IT club. The teaching staff of the department and students, undergraduates are directly involved in organizing and conducting scientific conferences and seminars. Students of the department demonstrate outstanding success in their studies and scientific activities. Many students and undergraduates are winners and prize-winners of international and republican subject Olympiads and scientific competitions. In order to deepen the knowledge of students in major disciplines and prepare for participation in olympiads, scientific projects, seminars, conferences, a student IT club was organized at the Department of Information Technology, as well as circle work with students "Young Programmer" and "Robotics Circle" . During the semester, students of the Department of Information Technology work weekly to develop the IT club. Members of the IT club are actively preparing for the Republican Scientific research work of students competition, take part in international, republican, city events in the field of IT technologies (Hackathons , IT forums, conferences, olympiads, competitions, etc.); Implemented projects of students, undergraduates Department of Information Technology:
1. Project Electronic portal www.cooutb.kz for the Student Service Center of JSC "Kazakh University of Technology and Business", the developer is a 1st year student of the program "Information Systems" Yeldeyev Ruslan (admission 2018). Leader: Tleubayeva Arailym Orynbaikyzy , M.T.S., Senior Lecturer .

2. The project "Career of students and graduates of KazUTB ", a web portal designed for the interaction of students, graduates, the university and organizations on career development. Developer: Azhinali Sabyrzhan , specialty "Information systems", (admission 2018). Leader: Tleubayeva Arailym Orynbaikyzy , M.T.S. , Senior Lecturer .

Video link: https://youtu.be/0WCRstmcIi8

Results of participation in various competitions

On April 20-21, 2022, students of the Department of Information Technologies took part in the 2nd stage of the Republican Subject Olympiad in the OP "Information Systems" among students of universities of the Republic of Kazakhstan.

Olympics were held in Esil University Nur - Sultan April 20-21, 2022 Our university was represented by a team led by the senior lecturer of the department Tleubayeva Arailym Orynbaevna .

Line-up:

1. Seitov Chingiz, Is-183.4 course
2. Sabyrzhan Yermakhan , Is-192.3 course
3. Kalmukhamet Almas , Is-202,2 course

According to the results of the Olympiad, the 4th year student of the program "Information Systems" Seitov Chingiz took the 2nd place.

Certificate 1 (top left):

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II дәрежелі

ДИПЛОМ

6B06101 – «Ақпараттық жүйелер» білім беру бағдарламасы бойынша жоғары оқу орындары студенттері арасында өткен Республикалық пән олимпиадасының II кезеңінде II орынды иеленген

Қазақ технология және бизнес университетінің студенті

Сеитов Чингиз Арманович

МАРАПАТТАЛАДЫ

Ректор   А.А.Таубаев

Нұр-Сұлтан, 2022

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ҚАЗАҚ ТЕХНОЛОГИЯ ЖӘНЕ БИЗНЕС УНИВЕРСИТЕТІНІҢ студенттерін дайындағаны үшін

Тлеубаева Арайлым Орынбайқызы

МАРАПАТТАЛАДЫ

Ректор   А.А.Таубаев

Нұр-Сұлтан, 2022

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Қазақ технология және бизнес университетінің студенті

Сабыржан Ермахан

МАРАПАТТАЛАДЫ

Ректор   А.А.Таубаев

Нұр-Сұлтан, 2022

Certificate 4 (bottom right):

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АЛҒЫС ХАТ

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Қазақ технология және бизнес университетінің студенті

Калмухамет Алмас

МАРАПАТТАЛАДЫ

Ректор   А.А.Таубаев

Нұр-Сұлтан, 2022

On April 18-19, 2022, students of the Department of Information Technology took part in the Republican Robotics Championship Robocon-2022 among university students, the team included students of 2-3 courses:

1. Sabyrzhan Yermakhan , Is-192,

2. Berikuly Telman, Is-201,
3. Kalmukhamet Almas , Is-202

Team leader - Tleubaeva Arailym Orynbaevna , M.Sc. , Senior Lecturer of the Department

February 28, 2022 3rd year student of the program "Information Systems" Kenzhebaev Talap took 3rd place in the Online Hackathon property Hack on the topic "Property" Hack (search for hardware ideas)"

     March 14, 2022 3rd year student of the program "Information Systems" Kenzhebaev Talap was awarded a diploma of the 1st degree for participation in the project " IV International Book Edition", "The Best Student" among the scientific and educational institutions of the Commonwealth of Independent States, organized by the Association of Legal Entities in the form of the Bobek Nationwide Movement Association .

On December 1-2, Almaty hosted the II Republican Robotics Championship among universities "ETU Robocon 2021".

The ETU Robocon 2021 Championship is a competition between student teams in robotics based on the Arduino platform . It enables young scientists to create robots from scratch, starting with design and mechanics, then electronics, and ending with writing a robot intelligence program. Thus, each participant of the championship is a ready-made young specialist, suitable for the position of a junior laboratory assistant in any scientific institute engaged in science in the field of IT, electronics and robotics.

This year, 13 student teams from Nur-Sultan, Almaty, Kyzylorda, Pavlodar, Ust-Kamenogorsk and Almaty region take part in ETU Robocon 2021.

Before the championship, young designers on the basis of their universities, with the help of mentors, assembled two robots each: an automated one and a controlled one. This took them six to eight months. The task of the first is to send a "rocket" to an improvised planet, and the second must move along a certain trajectory and load the balls into the hole.

Note that all robots are assembled from scratch, and from improvised means - cardboard, plastic, metal, batteries, ropes and other things. The imagination of the participants is not limited here. The main condition is that the device must work on the Arduino platform . This is a small board with its own processor and memory. A pre-written program with all the necessary parameters is loaded into the processor, through which the robot is controlled.

From the "Kazakh University of Technology and Business" @ kazutb_university , the team of the "IT" department participated under the guidance of the senior teacher of the department Tleubayeva Arailym Orynbaikyzy ,

Line-up:

1. Berikuly Telman, 2 course, EP "IS",
2. Yelemes Sunkar Saduaqasuly , 2nd course, EP "IS",
3. Yerman Ramazan Batyrbayuly , 2 course, EP "IS",

4. Kalmukhamet Almas Askaruly , 2 course, EP "IS",

5. Kadyrkhanov Mukhamednur Mirambekovich , 3 course, EP " A&U ".

The team showed itself proactively in the competition, certificates of participation were awarded.

The team and the department support the development of the direction of robotics in further studies at the university and wish new success in development!

October 1, 2021, the first Start-up was held at the Department of Information Technology Ideathon is a competition for generating new start-up ideas from KazUTB students !

We are very grateful to the sponsors and our partners @ dr.cleverest @ techlabds_itclub

Special thanks to the mentor Nikolai Tyan @ nick.tyan for the lecture!

Students of the department "Information Technology" took 3rd place in the competition of social project Meikaton "TOM: Nur-Sultan "

Youth resource center "Astana zhastary " together with the ALE "Association of Friends of Tel Aviv University in the Republic of Kazakhstan", the University " Astana International University "and the social workshop" GreenTal "with the support of the State Institution "Department for Youth Policy of the City of Nur - Sultan" held the social project Meikaton "TOM: Nur-Sultan ".

Makethon is a 72-hour marathon where inventors, engineers, doctors (makers) developed devices, gadgets, prototypes to make life easier for people with disabilities (neednowers). The project consisted of such stages as: Stage Pre TOM (April 23): the first meeting of the teams with the needlers , where ideas and how to implement them into a prototype are discussed, the teams present their ideas for passing to the next stage. TOM stage (May 28-31): teams meet a month after the PreTOM stage , 72 hours of work on their project and presentation to the jury.

In the final stage, our team with KazUTB " MBTF" consists of:

1. Kadyrkhanov Mukhamednur , 2nd year student of the OP
"Automation and control"

2. Yelemes Sunkar, 1st year student of the EP
" Information Systems"

3. Berikuly Telman, 1st year student of the EP

"Information Systems" with the project "Fixing Stocking for Stabilizing the Foot" won 3rd place Each team member was awarded certificates for 40,000 tenge from Sulpak !

Team Leader: Tleubaeva Arailym O., M.Sc. , Lecturer of the Department "IT"

Congratulations and wish you creative success and even more victories

Students of the specialty "Information Systems" took part in the competition of IT projects "Hakaton Yassawi SmartTech ", which was held in Turkestan on February 28-29, 2020. According to the results of the competition, our KazUTB team received the nomination "Best Presentation" and a smart watch as a prize.