The Head of the Department:

## Qalandarov Utkir

Reception: Wednesday , Friday (14:00-16:00)
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The Department of Higher Mathematics was founded in 1957 as one of the first. The department was founded in 1955 on the basis of the Department of Higher Mathematics and Physics. Candidate of Physical and Mathematical Sciences, Associate Professor (Professor since 1964) M.K. Kamalov headed the Department of Higher Mathematics from 1957 to 1972. After the death of Professor M.K. Kamolova, in 1973-1975. The Department of Higher Mathematics was headed by Candidate of Physical and Mathematical Sciences, Associate Professor M.Ya. Juraev, then Doctor of Physical and Mathematical Sciences, Professor R.Ya. Suncheleev (1975-1987); Candidate of Physical and Mathematical Sciences, Associate Professor E.I. Hegel (1987-1990); Candidate of Physical and Mathematical Sciences, Associate Professor F.Sh.Majidova (1991-1993); associate professor B.B. Ergashev (1993-1998); Associate Professor R.N. Usmonov (1998-2003); Academician of the Academy of Sciences of Uzbekistan, Professor F.B. Abutaliev (2003-2012); Associate Professor Yu.M.Abdurakhmanova (2012-2013); Associate Professor R.R. Rakhmatov (2013-2021). From the 2021-2022 academic year, the Department of Higher Mathematics is headed by Candidate of Physical and Mathematical Sciences, Associate Professor Kalandarov U.N.

At different stages of the Department of Higher Mathematics, professors and teachers gave students deep knowledge, laying the foundation for mastering general technical and special subjects. Among the experienced teachers who have worked at the department for many years, senior teachers M.G. Gendler, H.Z. Baskin were first to start the work.

In later years, Associate Professor A.I. Islamov, senior lecturer A.M. Lebedev, V.A. Kholmsky, assistant (later Doctor of Physical and Mathematical Sciences, Professor of the National University of Uzbekistan) Y.R. Kuchkarov; Associate Professor Juraev, Senior Lecturer R.Raimov, Associate Professors S.Yu. Krutyakov, E.S. Kozlova, A.Yu. Karimov, senior lecturer Valijonova I., assistants Kamoliddinova R., Zaitsev A., senior lecturers Zh.I. Mirkhosilov, R.Kh. Khakimov, N.E. Alekseeva, L.V. Frank, V.M. Obushnaya, T.K. Butko, assistants A.A. Agataev, V.M. Gendler, Associate Professor Sh.P. Primkulov, F. Buranov, senior lecturers V. A. Dzhuraeva, I. L. Chopin, A. G. Khodzhabagyan, assistants A. Sagintaev, M. M. Mamatov taught students the secrets of higher mathematics.

Since the establishment of the Department of Higher Mathematics, great attention has been devoted to educational, methodological and research work. Head of the Department Professor M.K. Kamolov conducted scientific work on the topic "The distribution of quadratic spaces composed of random variables and their application." Translated the textbook by V.I. Privalov "Analytical Geometry" into Uzbek. He was also a co-author of textbooks with teachers of the department. In 1962 he published a textbook in Uzbek "Analytical Geometry" for universities.

From 1998 to 2003, experienced teachers and the youth joined the department. These are: associate professors R.N. Usmanov, A.N. Mirzaev, A.E. Mamatov, R.R. Rakhmatov, Kh.A. Temirbekov, senior lecturer Kh.M. Bulakbaev, assistants: N.A. Pardaeva, Kh.D. Azizov, M.T. Payzieva, Sh.E. Tadzhibaeva, O.I. Abduganieva and F.S. Rakhimov.

In 1996, the Department of Probability Theory and Statistics was separated from the Department of Informatics. This department was headed by Doctor of Physical and Mathematical Sciences, Professor Sh.A. Mirakhmedov. The department was attached to the newly created Faculty of Engineering and Economics (now "Economics and Management"). In the initial period of the department's activity, Academician Sh.K. Farmonov, associate professors Yu.K.Akhatov, Z.S.Chay, O.O. Norkhodzhaev, assistants O.A. Saidova, O'N.

Kalandarov worked there. During the activity of the department under the leadership of Sh.A. Mirakhmedov in 2000, U.N. Kalandarov, in 2001 O.A. Saidova (now Islamova) defended their thesis and this department became the only department at the university where all employees have full academic degrees. In December 2002, the department was closed and attached to the Department of Higher Mathematics.

Professors and teachers of the department have published about 400 scientific articles, more than 200 textbooks. Under the leadership of Academician F.B. Abutaliev, one of the scientific directions of the Department of Higher Mathematics became "Creation of software and a mathematical model of systems for accepting a knowledge base based on expert systems based on methods of unstable logic."

Since the 2013-2014 academic year, the department "Higher Mathematics" was divided into two and a new department "Algorithmization and Mathematical Modeling" was created in order to ensure interaction with special disciplines.

Currently, under the guidance of U.N.Kalandarov, in the department of "Higher Mathematics" teachers with great pedagogical experience and scientific potential are working, they are: Professor R.Z. Abdullaev, associate professors: R.R.Rakhmatov, O.A. Islamova, Z.S. Chai, K.A. Igamberdiev, S.S. Sadaddinova, A.E. Mamatov, Yakhshiboyev D, M.I.Oxunboyev, S.Sh.Safarov N.Y.Jurayeva, R.S.Khudazarov, O.T.Muhiddinova D.Sh .Tajibayeva, F.A. Rakhimova, Sayfullayeva M.Z, assistants: O.I. Abduganiyeva, Sh.M.Fayzullayev, F.S.Abdullayeva, Abdullayev O.K, Eshmirzayev Sh.Sh, Madatova Z.A, Khurramov A.X, Sh.M.Fayzullayev, S.A.Chepuxalin.

Conducting the results of the year, according to the survey within the student, O'.N.Qalandarov was awarded by the rector of TUIT as "The teacher of the year".

## Following scientific researches are being carried out in the department of high mathematics:

- Research and practical application of mathematical modeling covering the continuous case
- To remake statistically the Information in the system of communication

The professor teachers of the department are working on creating manuals for using new communication technologies and changing manuals into Latin alphabet.

## The educational tendencies of bachelor's degree of the department:

60310500
Digital economy (by networks and sectors);
60320400
Library and information activities (by types of activities);
60412800

Electronic commerce
60610300
Information security (by sectors);
60610500
Computer engineering ("Computer engineering", "IT service", "Multimedia technologies")

60610600

## Software engineering;

60610700
Artificial intelligence;
60611000
Telecommunication technologies ("Telecommunications", "Broadcasting", Mobile systems);

60611100
Television technologies ("Audiovisual technologies", "Telestudio systems and applications");

60611200
Economics and management in the field of information and communication technologies;

60611300
Vocational education in the field of information and communication technologies; 60611400

Postal communication technology;
60612000
Information communication engineering;
60612100
Cyber Security Engineering;
60711500
Mechatronics and robotics;

## The subjects taught in the Department

Bachelor's degree:

- Calculus
- probability and statistics
- Linear algebra
- Differential equations
- Higher mathematics 1
- Mathematics (Mathematics for Economists)


## Professor teachers of the department

- Khalandarov Utkir Nomozovih associate professor
- Abdullayev Rustam Zoirovich professor
- Rakhmatov Rabbim Rakhmatovich associate professor
- Safarov Jorabek Shirinovich associate professor
- Chay Zoya Sergeyevna associate professor
- Mamatov Abdugani Ermatovich associate professor
- Islamova Odila Abduraimovna associate professor
- Sadaddinova Sanobar Sobirovna associate professor
- Oxunboyev Muzaffar Ibragimovich associate professor
- Jurayeva Nodira Yunusovna associate professor
- Muhiddinova Akila Tolkinovna associate professor
- Khudazarov Ravshan Safarovich associate professor
- Tadjibayeva Shakhzadakhan Ergashevna associate professor
- Rakhimova Feruza Saidovna associate professor
- Sayfullayeva Maftuxa Zafrullayevna associate professor
- Abduganiyeva Ozoda Ismailovna assistant
- Abdullayev Otabek Kerimberdiyevich assistant
- Abdullayeva Feruza Saydaxmedovna assistant
- Fayzullayev Sherali Mavrutaliyevich assistant
- Eshmirzayev Shokhjahon Shodiyorovich assistant
- Madatova Zukhra Abdurakhimovna assistant
- Faizullayeva Shahlo Alisherovna assistant
- Khurramov Aziz Khusniddin o'g'li assistant
- Chepukhalin Sergey Anatolyevich assistant


## Scientific researches being carried out in the department in the following directions:

- Differential equations and mathematical physics
- Mathematical analysis
- Mathematical modeling and numerical methods
- Theory of probability and mathematical statistics
- Mechanics of a deformable solid

The address of the department.: A-block, 3 floor, room 306, 307, 309, 311

