

Head of department:

## Khasanov Doston Turayevich

**Hours:** Monday, Wednesday, Friday (10:00 - 12:00)

**Telephone:** (+99871) 238-64-19

**E-mail:** [dhasanov@tuit.uz](mailto:dhasanov@tuit.uz)

The department was organized during the division of the department of "Telephone Communications" in 1958 and was declared the department of "Telegraph Communications", from 1967-1968 to 1996 – the department functioned as the department of "Discrete message transmission and telegraph communications", and then the department of "Telematic systems".

At that time, the department began to work in the main building of the Tashkent Vocational College, now AMITY University. In 1958 S.B. Bazilevich, a researcher at the Central Scientific Research Institute of Communications in Moscow, Candidate of Technical Sciences, gave lectures on "Fundamentals of Telegraphy", and laboratory classes were taught by assistant I.B. Zorin. In the 1958-1960 academic years, the department was headed by Candidate of Technical Sciences E.D. Milovidov. During this period, E.A. Emelyanov, Candidate of Technical Sciences, was sent on a work trip from the Leningrad Institute of Electrotechnical Communications, and lectured on "Fundamentals of Telegraphy".

From the 1960 to 1961 academic year, M.B. Askarova began working at the department as an assistant, who graduated from the Moscow Institute of Electrical Communications, and M.N. Aripov, who studied at the Tashkent Institute of Electrical Communications. In December 1960, Associate Professor M.N. Aripov was sent by the institute's administration to study for postgraduate school at the Moscow Institute of Electrical Communications.

After the institute moved to the main building at the beginning of the 1961-1962 academic year, a training laboratory "Fundamentals of telegraph communications and voice-frequency telegraphy" was created. From this year I.B. Zorin headed the department. In the next academic year A.V. Marin and from 1963-1964 to 1968 academic year, candidate of technical sciences O.A. Labichev headed the department. M.N. Aripov successfully defended his PhD thesis in 1964, returned to the department as an assistant and headed the department from 1968 to May 2000.

From 2001 to March 2005, Candidate of Technical Sciences, Associate Professor N.B. Usmanova headed the department.

In 2005 – 2007, the department was headed by a candidate of technical sciences, associate professor Yu.K. Kamolov.

In June 2008, by order of the rector of TUIT No. 550-01, the departments of "Telematic Systems" and "Telecommunication Network Management" were merged and named the department of "Data Communication Networks and Systems".

In the 2008-2009 academic year, the department was headed by Associate Professor Kh.A. Mukhitdinov, who was the General Director of Uzbektelecom JSC, and in 2009-2010, the General Director of the Communications and Information Agency of Uzbekistan.

After that, the following professors worked as heads of departments:

In the 2010-2017 academic years, PhD, Associate Professor U.B. Amirsaidov;

In the 2017-2019 academic years, PhD, Associate Professor Sh.Yu. Djabbarov;

In the 2019-2022 academic years, PhD, Associate Professor H.E. Khujamatov and PhD A.M. Abdullaev;

From 2022 to the present, the department have been headed by PhD, D.T. Khasanov.

The following candidates of technical sciences and associate professors over the past period at the department worked as a teacher and researcher: T.N.Nishanbayev, M.B.Askarova, S.N.Sakharchuk, Sh.Z.Yunusov, R.M.Radjabov, N.S.Khodzhaev, R.Z.Gizatulin M.I. Jalilov, Yu.K. Kamolov, E.D.Bychkov, S.O.Makhmudov senior teachers: A.V. Smorodin, Kh.Kh.Fetlyayeva, H.Q.Kadyrkhojaeva, R.Kh.Juraev, O.A.Mileeva, T.Z.Tursunkhodzhaeva and also research assistants: I.A.Fetlyayev, F.Z.Fakhrutdinov, N.Kh.Khikmatullaev, M.M.Zakirov.

In 1976-1986, Professor D.A. Abdullaev gave lectures on “Discrete transmission of information”.

Under the guidance of Professor M.N. Aripov, teachers and staff of the department conducted scientific research with research institutes and production enterprises in the cities of Moscow, Kaluga, Nizhny Novgorod. Research work at the department was carried out in two directions: “Methods for increasing the reliability of the transmission of discrete information” and “Technical diagnostics of the state of digital systems.”

When conducting this scientific research together with teachers, department staff I.A. Fetlyayev, R.Kh.Djuraev, I.P. Borodina, M.M. Minorov, M.M. Zakirov, E.D.Bichkov took an active part. Sh.Z. Yunusov, M.Z.Yakubova, Z.B.Tukubaev, M.I.Jalilov, E.D.Bichkov defended their candidate dissertations under the guidance of Associate Professor M.N. Aripov and with his scientific advice. Professors, teachers and researchers of the department have published more than 200 scientific articles, and about 100 textbooks, and they managed to obtain patents for 20 inventions.

Currently, the department employs 15 professor-teachers, including professor-teachers working on the main staff (full time):

DSc, Associate Professor U.B. Amirsaidov;

DSc, Associate Professor N.B. Usmanova;

PhD, Associate Professor Sh.Yu. Jabbarov;

Associate Professor R.H. Djuraev;

PhD, Associate Professor H.E. Khujamatov;

senior teacher E.N. Reybnazarov;

assistant N.R. Saburova;

assistant A.A. Kadyrov;

assistant D.M. Matkurbanov.

Part-time teaching staff:

assistant O.A. Khasanov;

assistant T.K. Toshtemirov;

assistant N.M. Akhmedov;

assistant D.H. Temirova;

assistant A.P. Lazarev;

assistant B.K. Turumbetov

Kadyrov also works as the head of the office.

The department employs 9 doctoral students and independent researchers who are currently engaged in

scientific research.

#### **PhD Students:**

- Islam Holliiev;
- Bayram Turumbetov;
- Dilfuza Temirova;
- Nurshod Akhmedov;
- Temurbek Toshtemirov;
- Amir Lazarev;
- Orif Khasanov;
- Abdurauf Abdullaev;
- Elyanora Jolimbetova;
- Guzal Saitkamolova.

#### **Independent Researchers:**

- Jamshid Khoshimov;
- Jasur Kilichov.

### **EDUCATIONAL PROGRAMS**

#### **Undergraduate Programs:**

60611000 – Telecommunication technologies (“Telecommunications”).

#### **Graduate Programs:**

70611001 – Telecommunication engineering (Information transmission systems).

### **COURSES TAUGHT AT THE DEPARTMENT**

#### **For Undergraduate Students:**

- Information and coding theory;
- Computer networks;
- Virtual network technologies;
- Switching and Routing;
- Modeling and simulation of communication systems.

#### **For Graduate Students:**

- Network Security;
- Network management;
- Transmission multimedia over IP networks;
- Network optimization;
- Operation and maintenance of communication networks.

### **STATE AND FOREIGN GRANTS CARRIED OUT AT THE DEPARTMENT (FUNDAMENTAL, PRACTICAL, INNOVATION AND ECONOMIC PROJECTS):**

1. International project: European Association for Cooperation, European Association for Cooperation,

Erasmus + ERASMUS-EDU-2023-CBHE “DEBSEUz: Development of the targeted Educational program for Bachelors in Solar Energy in Uzbekistan (2024-2026).

2. International project: European Association for Cooperation, Erasmus + 609564-EPP-1-2019-1-EL-EPPKA2-CBHE-JP “MechaUZ: Modernization of Mechatronics and Robotics for Bachelor degree in Uzbekistan through Innovative Ideas and Digital Technology” (2021-2023).
3. International joint project: UZB-IND-2021-94 “Energy Efficient Communication and Data Flow in Smart City using CRN based IoT Framework” Uzbek-India International joint research project (2021-2023).

#### SCIENTIFIC AND METHODOLOGICAL WORKS OF THE DEPARTMENT:

1. У.Б. Амирсaidов Оптимизация сетей. Учебное пособие – Ташкент, ТУИТ, 2023. - 192 с.
2. В. Amirsaidov Tarmoqlarni optimallashtirish. O'quv qo'llanma - TATU, 2022, 167 bet.
3. Khujamatov Halimjon, Khaleel Ahmad, Khasanov Doston. Digital, Logic Design. Tutorial. – Tashkent: “Fan va Ta’lim” publishing house, 2022. – 289 p.
4. И.Х. Сиддиков, Д.Т. Ҳасанов, Х.Э. Хужаматов. “Телекоммуникация объекти энергия таъминоти манбаларини симсиз сенсор тармоқлар асосидаги мониторинги”. Монография. - 126 бет
5. E. Xujamatov, E.N. Reytnazarov, N.M. Axmedov, A.P. Lazarov, D.T. Hasanov. “Virtual tarmoq texnologiyalari”. Uslubiy qo'llanma. – Toshkent: TATU. 2022. -248 b.
6. O. Maxmudov, X.E. Xujamatov, D.M. Matqurbonov, A.P. Lazarev, D.X. Temirova. “Tarmoq xavfsizligi”. Uslubiy qo'llanma. – Toshkent: TATU 2022. -120 b.
7. Х.Э. Хужаматов, Е.Н. Рейпназаров, Н.М. Ахмедов, А.П. Лазарев, Т.К. Тоштемиров. «Технологии виртуальных сетей. Методический пособие по выполнению лабораторных работ» / ТУИТ имени Мухаммада ал-Хоразмий, 208 с. Ташкент, 2022.
8. В. Baltayev, R.X.Djuraev, Sh.Yu.Djabbarov. “Ko'p kanalli signaturali tahlil vositalari asosida ma'lumot uzatish tizimlarining mikrokontroller va mikroprotsessor qurilmalarini diagnostikalash samaradorligi” Monografiya, TDTrU, T.: 2022,170 bet.
9. Amirsaidov U.B., Usmanova N.B.Telekommunikatsiya tarmoqlarda sifatni ta'minlash va boshqarish masalalari. Monografiya. - Toshkent: TUIT. 2022.- 176 b.

#### ACHIEVEMENTS OF THE DEPARTMENT:

The effective work of professors and teachers of the department was adequately rewarded by our state. In particular, in 1998, on the 7th anniversary of Independence Day of R.Kh.Djuraev was awarded the title “A'lo darajali mutaxassis”; in 2005, at an event dedicated to the 50th anniversary of TUIT, senior lecturer of the department T.Z. Tursunkhojaeva was awarded the “Mehnat shuxrati” order of our country, N.B.Usmanova was awarded “Ko'krak nishoni” on the 15th anniversary of Independence; On the occasion of the 17th anniversary of the Independence of the Republic of Uzbekistan, the Communications and Information Agency of Uzbekistan awarded Sh.Yu. Jabbarov with the “O'z kasbinining ustasi” in recognition of service and “Ko'krak nishoni” on the occasion of the 30th anniversary of our independence in 2021. In 2023, the Ministry of Digital Technologies awarded R.Kh.Djuraev the “1-darajali mehnat faxriysi” order for many years of service. Also, a doctoral student of the department E.N. Repnazarov became the winner of the state presidential scholarship for doctoral students in 2023. He was also recognized as the best author for publication activity in the Scopus database in the categories “Computer Science” and “Decision Sciences” at the Scopus Awards - 2023, was awarded with statuette and certificate by Elsevier and by the Ministry of Higher Education, Science and Innovation.