

ADMISSIONS 2023

THE ULTIMATE GUIDE

UNIVERSITY OF TELECOMMUNICATIONS AND POST





www.utp.bg

UNIVERSITY OF TELECOMMUNICATIONS AND POST





EDUCATION IN ALL QUALIFICATION DEGREES

PROFESSIONAL BACHELOR
BACHELOR
MASTER

AREAS OF EDUCATION

CYBER SECURITY

ADMINISTRATION OF SOFTWARE APPLICATIONS

COMPUTER AND SOFTWARE TECHNOLOGIES

DIGITAL TECHNOLOGIES IN ENTREPRENEURSHIP AND PUBLIC ADMINISTRATION

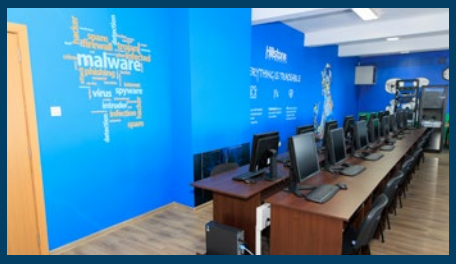
SOFTWARE DEVELOPMENT IN MEDICINE

TELEMEDICINE

MANAGEMENT COMMUNICATION SYSTEMS OF AIR TRAFFIC

JOINT EDUCATIONAL PROGRAMS WITH

MEDICAL UNIVERSITY – PLOVDIV
MEDICAL UNIVERSITY – PLEVEN
AND HIGHER AIR FORCE SCHOOL "G. BENKOVSKI"





Welcome to the University of Telecommunications and Post



Prof. Miglena Temelkova, Ph.D
Rector of UTP

The University of Telecommunications and Post (UTP) is a leading Bulgarian higher education institution in the field of telecommunications, computer sciences, and engineering. Founded more than 140 ago it remains faithful to its mission to educate and train engineers and professionals with competencies in the field of Information and communication technologies, computer science, cybersecurity, and many other modern specialties giving the graduates rare and highly appreciated skills.

Nowadays, UTP offers modern education in all qualification levels (professional bachelor, bachelor, master's program, and doctoral studies). The academically distinguished and internationally diverse staff takes care of the tuition process along with respected representatives of the corporate sector.

UTP prides itself on its partnerships with some of the world's leading Hi-Tec companies such as A1, DXC, Siemens, and many others.

Our multidimensional cooperation with companies results in modern teaching facilities, and cutting-edge laboratories. Our studying plans mix fundamental engineering knowledge with competencies and skills needed by the modern technology sector. The internships and mentoring programmes we provide to our students allow them to get in touch with corporations and get as much as possible from the interaction while the corporations are in a position to discover and develop talents within our students as early as possible and to offer them the best development opportunities.

Unsurprisingly, nearly 90 percent of our students find jobs in their specialty before graduation.

It is the leading university in the field of computer and communication technology with double-digit growth of students enrolling in that field and is the number one Higher school of choice of foreign students looking for education in that area.

From 2022, UTP offers cooperative „hybrid"bachelor's programmes in Telemedicine and Software Programming in Medicine along with the Medical University Pleven and Medical University Plovdiv. Thus we give our students the opportunity to become not just qualified engineers but to acquire knowledge about the health services, and technologies used in modern health care and the opportunity to become the first generation of Bulgarian engineers with medical expertise.

We developed our third hybrid programme in partnership with the Air Force Military Academy "Georgi Benkovski". Communication Systems for Servicing the Air Traffic prepares a new generation of civil engineers with specific knowledge and competencies accessible now only to military-grade engineers in Bulgaria.

We offer accommodation in our own facilities which are part of a compact campus that unites also teaching and training facilities, a sports center, and recreational spaces all within the territory of five football fields.

The campus is a part of the Student's District (Studentski Grad) just across the street from Studenski Park (one of the most beautiful in Sofia) next to a bus station with three lines and a connection to Sofia's underground line (five minutes walking).

The UTP community is ethnically diverse including students from Bulgaria, North Macedonia, Serbia, South Korea, Turkey, Ukraine, and other nations.

A Navigator for The Jobs of the Future



As a small university designated for teaching engineers, we aim at developing courses that prepare our students for the realities of the Fourth Industrial Revolution and the challenges coming with the fifth one.

In partnership with some of the leading transnational corporations, we define jobs, skills, and competencies that are going to be highly needed and appreciated for at least a decade ahead and adjust our curriculums in compliance with the demands of global trends. We believe that fundamental engineering knowledge mixed with modern-day competencies and lifelong learning habits are the columns on which a young engineer can rely for a successful career or entrepreneurship.

The infographic on page 6 is based on research made by the US Bureau of Labor Statistics and shows that we have developed courses in a way that prepares our alumni for some of the best-paid and most demanded jobs of this decade.

The school offers unique courses for undergraduate and graduate students in the field of cybersecurity allowing engineers to compete for some of the best-paid jobs worldwide. In cooperation with the Black Sea Security Academy UTP exploits a cyberattack simulator created in Israel. The students learn to detect and squash attacks, detect the sources of the attacks, and to conduct forensic investigations of the attacks. The engineers who graduate from our cybersecurity classes can become successful experts in the corporate sector or security services.

Our graduates receive diplomas both from UTP but also from the Black Sea Security Academy and the Israeli Institute of Cybersecurity.

We are proud to be among the first universities in Bulgaria that reached for partnerships with other universities in order to develop comprehensive interdisciplinary courses with high relevance to the changes in global business and demographics.

The so-called „hybrid"bachelor's programmes in Telemedicine and Software Programming in Medicine result from our partnerships with the Medical University Pleven and Medical University Plovdiv. Thus we give our students the opportunity to become not just qualified engineers but to acquire knowledge about the health services, and technologies used in modern health care and the opportunity to become the first generation of Bulgarian engineers with medical expertise.

Our belief is that demographic processes in the post-industrial world would require more and more specialists not just to perform medical tasks but also to participate in process of diagnosing and treatment by designing, setting, and operating new generations of equipment.

The growing market demand for skills in medical engineering already places many engineers in a situation to be retained by distributors of medical equipment to maintain modern robots or other sophisticated equipment during surgery in a particular hospital and the next day to move to another hospital possibly even in a neighboring country to maintain the same type of equipment but in other surgery.

The natural development is that in not so distant future every hospital and clinic to have its own teams of engineers whose job would be to maintain and operate innovative equipment. And our graduates will be fit for such positions but not only.

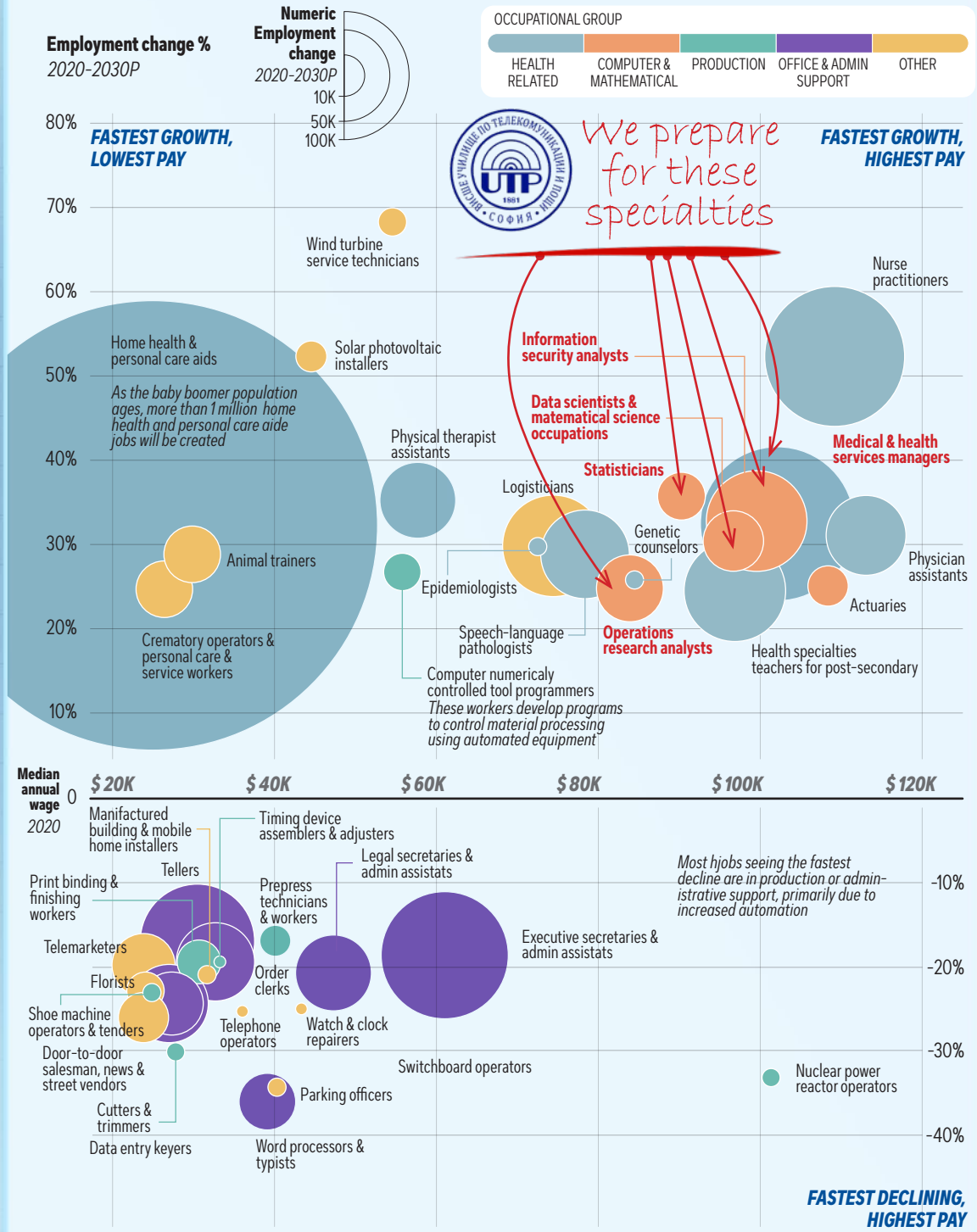
Having knowledge of subjects such as virtual reality and augmented reality, simulation software, and other Hi-Tec disciplines they will be prepared to lead the change, manage projects and launch their own enterprises.

Even if later in the course of study they develop an interest in areas different from their direct qualification, the knowledge and competencies they have acquired studying at the University of Telecommunications and Posts would be a lifelong source of useful knowledge and wisdom.

The 20 fastest growing + Declining Jobs

OVER THE NEXT DECADE

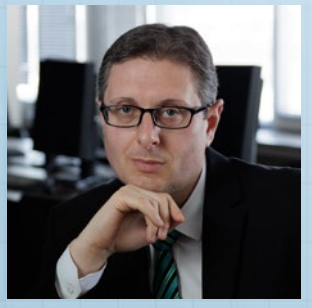
The U.S. Bureau of Labour Satistics predicts that 11.9 million new jobs will be created from 2020 to 2030 - a growth rate of 7.7%. Below, we show the fastest growing and fastest declining jobs, and how much they pay.



Source: U. S. Bureau of Labour Statistics
Note: The fastest growing occupation data excludes occupations with above average cyclical recovery (deu to COVID-19 pandemic) rather than structural growth.

Management in Telecommunications and Posts at the University of Telecommunications and Post

Prof. Ivaylo Stoyanov, PhD,
head of Management Studies
at the University of
telecommunications and posts



Management in Telecommunications and posts is a specifically profiled bachelor's program offered by the University of telecommunications and posts. It is dedicated to preparing qualified experts with managerial skills and a leader's approach for the sector of telecommunications and posts which is one of the fastest growing worldwide.

The program holds one of the highest rates for successful realization of graduates on the labor market – 92 percent. It is available for enrollment in full-time courses of study, correspondent learning, and distance learning in the English language. The full course lasts four years separated into eight semesters.

The teaching staff comprises respected academics and top-class professionals from the corporate sector with domestic and international experience. They introduce the students to the newest scientific achievements and build an agile working approach with the mindset to recognize and implement innovations and good practices. The curriculum derives from the partnership between UTP.bg and its multiple corporate partners in the telecommunication sector such as A1 and Siemens, which allows the simultaneous exchange of information for the demand for new skills.

The university of telecommunications and posts provides it students with the best possible conditions – infrastructure, teaching materials, literature, etc. We build and encourage the habits of lifetime learning and self-development of our students so they can achieve high performance and develop their intellectual potential. For that purpose, our students enjoy access to a rich library, databases, and various mentorship and internship programs developed with our corporate partners.

The program aims to stimulate the curiosity and creativity of the students, offering them real-life business cases. We encourage their mobility and participation in exchange programs that help them to better understand and assume the knowledge and skills they need in comparison with standards set in different countries.

The curriculum is structured on three main blocks of subjects. The first one includes the mandatory disciplines that give the necessary academic and practical fundamentals. Among them are Microeconomics and Macroeconomics, Maths, Applied Statistics, Law and Business Law, Accounting, Controlling, Management, Marketing, Risk Management, and Planning.

The second block offers an array of subjects among which every student has to pick those that match their professional aspirations and ambitions as well as foreign languages of choice. The third block offers the students an opportunity to participate in extracurricular activities – projects, internships, conferences, and other forms where they can manifest their interests and achievements interact with potential employers or find further academic opportunities.

The teaching method complies with the standards of the European Union and strives to upgrade the tuition forms with a mixture of theory, practical exercises, and internships. Students enjoy participation in simulations of corporate cases, seminars, and platforms for presenting their achievements.

Assessment of the students takes place in the form of written examinations, tests, various assignments, essays, and presentations. The performance of the students in practical exercises also contributes to their final assessment.

The alumni of the program have an understanding of general economic disciplines such as marketing, accounting, finance management, and business intelligence. It allows them to analyze business processes, and practical cases, organize administrative affairs, and manage business processes in companies providing telecommunications and postal services. They are well aware of the specifics of the telecom sector, and the national and European policies and are skilled to work with analytical tools for forecasting and current assessment of the business climate. Our graduates are also competent in strategic planning, targeting, task assignments, and controlling while acting with their personal management style and awareness of their responsibilities.

Cyber Security at the University of Telecommunications and Post

Assoc. Prof. Eng. Ivan Ivanov, PhD



Cybersecurity of Communication Technologies is one of the hottest bachelor's programs offered by the University of Telecommunications and Posts that enjoys some of the highest rates of interest measured by the submitted applications. It qualifies its graduates for some of the most demanded and well-appreciated jobs on the market, training them to be agile in a fast-changing environment, with intellectual challenges, and high remuneration.

Candidates can apply for a full-time and correspondent course of study, both lasting eight semesters stretched over four years.

The course's cornerstones are theoretical knowledge and practical skills in the field of cyber protection for communication systems, web-based solutions, and high technologies. The curriculum aligns with the highest international standards in the field of cybersecurity, thus providing the students with a variety of skills like planning, auditing, and maintaining the security of data communication networks and server-based services.

Students are provided with state of art learning materials and infrastructure, including laboratories and simulators where they can separate into teams and both launch, fight off and investigate cyber-attacks. Therefore, our graduates don't need any additional in-house training once starting a job. They are ready to take on the challenges.

The course helps students to develop not just basic competence but also encourages creative thinking, self-starting habits, and the ability to take personal decisions under pressure. Thinking "outside the box" and pursuing nonconventional solutions are essential parts of being successful experts in the field of cybersecurity since they have to deal with constantly evolving threats. Acknowledging this fact, we award bald-thinking students whether they demonstrate the needed qualities in their assignments, practical exercises, or during the simulations.

For the four-year course, the students go through subjects like Engineering Mathematics, Data Bases, Operational systems, Network Protocols, Law, Economics, Computer ArcHi-Tecture, Cryptography Basics, Linux Administration, IT Project Management, Web Based Applications, Object Oriented Design, Cloud Technologies, Software ArcHi-Tecture, Artificial Intelligence, Hackers' Attacks, and many others.

Students have to deal with at least 30 assignments, attend lectures, seminars, and practical and laboratory exercises.

Key skills our graduates possess once they complete the four years course of study are: configuration and administration of operative systems, projecting and management of software applications and databases, maintenance on networks, detection of break-ins, unassisted management of information security systems, self-learning, and self-development.

We have graduates that hold leadership positions with remuneration that is times higher than the average for Bulgaria. They are employed by corporations developing hi-tech solutions but also by the information security departments of financial institutions and various big companies. They have the ability to investigate cyber-attacks and pursue jobs in cyber forensics.

We at the University of Telecommunications and Posts take pride in the partnerships we have established with companies such as DXC, Atos, Hill Stone, F-secure, and others. They allow us to provide our students with tutors from the corporate sector who share with them their real-life experience, offer mentoring, and often select talents to take internships or start working prior to their graduation.

Our graduates are both prepared to take high paid jobs in the corporate sector or pursue a career as academics. The diploma is recognized in the entire European Union.

Ivailo Chanchev, "Do IT Wise" Ltd:

Corporate sector and the universities are the two sides of the same coin

The best way to build successful professionals and, later on, to build successful teams is to keep an eye on the talents that come directly from universities



Asst. Prof. Eng. Ivaylo Chenchev, PhD is one of our academic staff members from the corporate sector and helps us fill the gap between theory and practice. He works as ITOM (IT Operations Management) Department Manager at the private company "Do IT Wise" Ltd., a part of the Inetum group. Do IT Wise is a consulting company focused on transforming how organizations operate and digitally improving their end-to-end processes. The company is an Elite ServiceNow partner and one of the most recognizable ServiceNow partners in the EMEA region, especially in IT Operations Management.

What subjects do you teach at the University of Telecommunications and Posts?

I started working as an assistant professor in the "Information Technology" department, Faculty of Telecommunications and Management, UTP, in March 2022. I lead exercises on databases of all undergraduate majors from the 1st year. Currently, I teach and lead the exercises in three disciplines/subjects, namely "Programming fundamentals" of all majors from the 1st year, "Blockchain technologies" and "Protection of cloud infrastructures" of the 3rd year of the CSHT (Cyber Security of High Technologies) major, as well as "Server Administration Practicum" of the 3rd year from the CASA (Computer Administration of Software Applications) specialty.

What is your experience, and in what areas do you help the UTP students?

I joined the academic staff of the University of Telecommunications and Posts, hoping to share my experience in various IT domains. I specialize in operating systems, cluster solutions, systems arcHi-Tecture, monitoring, automation, virtualization and containerization, cloud technologies, security, and blockchain.

Combining years of Technology Consulting experience with deep implementation knowledge of leading software vendors, such as HP/HPE/MicroFocus and ServiceNow, I try to prepare the students for the challenges they will face once they take a similar position.

In 2022, Do IT Wise organized a three-month educational program called ITOM Academy led by me. Thirteen people, most graduate students, got a chance to start their new journey as ServiceNow IT technical consultants. At a later stage, those who passed several mandatory exams and certifications were offered permanent employment.

The corporate sector offers better remuneration compared to a university. What is your motivation to teach students?

It is difficult to compare the corporate sector to the universities. There is nothing to compare between those. They are the two sides of the same coin. I find the corporate world and the universities complementary to each other. In the corporate sector, the overall remuneration packages are better than the ones in the universities. But teaching is not for everyone. Every successful company owes its success to a well-worked team of colleagues. And the best way to build successful professionals and, later on, to build successful teams is to keep an eye on the talents that come directly from universities and to give a chance to those with a good attitude, performance, and trustworthiness.

Practical orientation and applicability, as well as the preparation of future IT specialists and engineers, is of utmost importance. Those people must be well prepared for tomorrow's IT world. The students' new IT journey has already begun at the time of enrollment at the university, regardless of whether they study in the major courses or master's programs. After graduation, the graduates have to be able to demonstrate an understanding of the technologies. Also, they must be ready to show projects they have worked on during their education and be confident with the disciplines they studied. So, they are prepared to start working from day one side by side with experienced specialists in the IT industry and not only. I believe in the young generation and don't spare energy in my mission to prepare the young talents for tomorrow's challenges by sharing my example, knowledge, and experience.

UNIVERSITY OF TELECOMMUNICATIONS AND POST

Admissions 2023

[Professional bachelors]

10	Wireless communications
11	Computer Administration Of Software Applications
12	Cybersecurity Of High Technologies
13	Software Development
14	Management and Information Technology in Telecommunications and Posts

[Bachelors]

15	Telecommunication Technologies
16	Cybersecurity of Communication Technologies
17	Computer Technologies
18	Cybersecurity in Business
19	Communication systems for air traffic organization
20	Software Development in Medicine
21	Telemedicine
22	Management in Telecommunications and Posts

[Masters]

23	Digital and social technologies
25	Management of Services
28	Smart Leadership
31	Communication networks and cybercrime investigation
33	Digital leadership
34	Information Technologies
37	Mobile communications and Internet

Professional bachelors

>_: Wireless communications

SEMESTER 1

[required]
>_ : Engineering mathematics 1
>_ : Fundamentals of telecommunications
>_ : Fundamentals of programming
>_ : Fundamentals of electrical engineering
>_ : Sport
[selectable 1 of 2]
>_ : Presentation and communication skills
>_ : Organizational behavior
[selectable 1 of 2]
>_ : English 1
>_ : German 1

SEMESTER 2

[required]
>_ : Engineering mathematics 2
>_ : Computer graphics of communication shemes
>_ : Materials and electronic components
>_ : Digital and microprocessor technology
>_ : Sport (ongoing control without evaluation)
>_ : Practice 1
[selectable - 1 of 2]
>_ : Databases in telecommunications
>_ : Fundamentals of operating systems
[selectable 1 of 2]
>_ : English 1
>_ : German 1

SEMESTER 3

[required]
>_ : Signals and systems
>_ : Networks and protocols 1
>_ : Computer arcHi-Tectures
[selectable - 1 of 2]
>_ : Fundamentals of the economics
>_ : Digital economics
[selectable - 1 of 2]
>_ : Switching and multiplexing
>_ : Measurement in telecommunications
[selectable 1 of 2]
>_ : English 1
>_ : German 1

SEMESTER 4

[required]
>_ : Digital signal processing
>_ : Optical communications
>_ : Networks and protocols 2
>_ : Practice 2
[selectable 1 of 2]
>_ : Fundamentals of management
>_ : Corporate social responsibility
[selectable 1 of 3]
>_ : Cloud technologies
>_ : Object-oriented programming
>_ : Basics of data transmission

SEMESTER 5

[required]
>_ : Radio communication technologies
>_ : Wireless networks
>_ : Cellular technologies
>_ : Digital TV
>_ : Sensory networks
[selectable 1 of 2]
>_ : Electromagnetic compatibility in communications
>_ : Security and monitoring systems

SEMESTER 6

[required]
>_ : Wireless network security
>_ : Mobile convergence
>_ : Satellite and navigation communications
>_ : Practicum on wireless terminal devices
>_ : Practice 3
>_ : Management and regulation of telecommunications
>_ : Management and regulation of electronic communications
>_ : Course project

Professional bachelors

>_: Computer administration of software applications

SEMESTER 1

[required]
>_ : Engineering Mathematics 1
>_ : Introduction to the specialty
>_ : Fundamentals of Programming
>_ : Fundamentals of electrical engineering
>_ : Intellectual property
>_ : Physical culture (ongoing control without evaluation)
[selectable 1 of 2]
>_ : Presentation and communication skills
>_ : Digital Communications

>_ : Foreign language

SEMESTER 2

[required]
>_ : Engineering Mathematics 2
>_ : Fundamentals of operating systems
>_ : Databases
>_ : Fundamentals of Electronics
>_ : Legal regime of patents
>_ : Physical culture (ongoing control without evaluation)
[selectable 1 of 2]
>_ : Operating Systems Practicum
>_ : Programming Practicum

>_ : Foreign language

SEMESTER 3

[required]
>_ : Networks and protocols 1
>_ : Administration of web servers
>_ : Computer arcHi-Tectures
>_ : Database Management Systems
[selectable 1 of 2]
>_ : Fundamentals of the economy
>_ : Digital economy

>_ : Foreign language

SEMESTER 4

[required]
>_ : Fundamentals of cryptography
>_ : Administration of Linux
>_ : Networks and protocols 2
>_ : Weblogic Application Server 1
[selectable 1 of 2]
>_ : Fundamentals of Management
>_ : Corporate Social Responsibility
[selectable 1 of 2]
>_ : Data Backup Systems - Backup
>_ : Network load balancing
>_ : IT Project Management

SEMESTER 5

[required]
>_ : Firewalls
>_ : Processes in Information Technology - ITIL
>_ : Weblogic 2 Application Server
>_ : Criminal Law Aspects of Cybersecurity
[selectable]
>_ : Introduction to Cloud Technologies
>_ : Storage Networks - SAN (Storage)
[selectable 1 of 2]
>_ : Integration of database systems
>_ : Big Data Management Systems

SEMESTER 6

[required]
>_ : Websphere Application Server
>_ : Message Passing (MQ) Software Solutions
>_ : Server Administration Practicum
[selectable 1 of 2]
>_ : Location Authentication Servers (LDAP)
>_ : Geographic Information Systems

>_ : Pre-graduate internship

Professional bachelors

>_: Cybersecurity of the high technologies

SEMESTER 1

[required]
>_ : Engineering Mathematics 1
>_ : Security Fundamentals and Information Security Standards
>_ : Fundamentals of Programming
>_ : Fundamentals of electrical engineering
>_ : Physical culture (ongoing control without evaluation)
[selectable 1 of 2]
>_ : Presentation and communication skills
>_ : Digital Communications

>_ : Foreign language

SEMESTER 2

[required]
>_ : Engineering Mathematics 2
>_ : Fundamentals of operating systems
>_ : Databases
>_ : Fundamentals of Electronics
>_ : Legal regime of patents
>_ : Physical culture
>_ : Information and Technological Security Practicum
>_ : Programming Practicum
>_ : Foreign Language 2 (optional)

SEMESTER 3

[required]
>_ : Networks and protocols 1
>_ : Cyber threats and cyber crises
>_ : Computer arcHi-Tectures
>_ : Database Management Systems
>_ : Fundamentals of the economy
>_ : Digital economy
>_ : Foreign Language 2 (optional)

SEMESTER 4

[required]
>_ : Fundamentals of cryptography
>_ : Administration of Linux
>_ : Networks and protocols 2
>_ : Fundamentals of Management
>_ : Corporate Social Responsibility
>_ : Information protection in e-commerce
>_ : Protection of wireless communications
>_ : Information protection in e-commerce
>_ : Protection of wireless communications
>_ : IT Project Management

SEMESTER 5

[required]
>_ : Firewalls
>_ : Hacker attacks and tools
>_ : Introduction to Cloud Technologies
>_ : Technical security systems
>_ : Criminal Law Aspects of Cybersecurity
>_ : Protection of classified information
>_ : Security of electronic payment cards

SEMESTER 6

[required]
>_ : Blockchain Technologies
>_ : Protection of cloud infrastructures
>_ : Server Protection Practicum
[selectable 1 of 2]
>_ : Video surveillance systems
>_ : Access control systems

>_ : Foreign language

Professional bachelors

>_: Software Development

SEMESTER 1

[required]
>_: Engineering Mathematics 1
>_: Introduction to the specialty
>_: Fundamentals of programming
>_: Fundamentals of electrical engineering
>_: Intellectual property
>_: Physical culture (ongoing control without evaluation)
[selectable 1 of 2]
>_: Presentation and communication skills
>_: Digital Communications

SEMESTER 2

[required]
>_: Engineering Mathematics 2
>_: Fundamentals of operating systems
>_: Databases
>_: Fundamentals of Electronics
>_: Legal regime of patents
>_: Physical culture (ongoing control without evaluation)
[selectable 1 of 2]
>_: Practicum by operating systems
>_: Programming Practicum

SEMESTER 3

[required]
>_: Networks and protocols 1
>_: Algorithms and data structures
>_: Computer arcHi-Tectures
>_: Database Management Systems
[selectable 1 of 2]
>_: Fundamentals of the economy
>_: Digital economy

>_: Foreign language

SEMESTER 4

[required]
>_: Fundamentals of cryptography
>_: Administration of Linux
>_: Object-oriented design
>_: Design of WEB-based applications
>_: Design of mobile applications
[selectable 1 of 2]
>_: Fundamentals of Management
>_: Corporate Social Responsibility
[selectable - 1 of 3]
>_: Information protection in e-commerce
>_: Multimedia technologies
>_: IT Project Management

SEMESTER 5

[required]
>_: ArcHi-Tectural models for SOFTWARE DEVELOPMENT
>_: Processes in Information Technology - ITIL
>_: Introduction to Cloud Technologies
>_: Software Quality Assurance
>_: Design of distributed software systems
[selectable 1 of 2]
>_: Integration of database systems
>_: Big Data Management Systems

>_: Foreign language

SEMESTER 6

[required]
>_: Artificial intelligence
>_: Designing secure applications
>_: Secure Application Design Practicum
[selectable 1 of 2]
>_: Serverless computing
>_: Geographic Information Systems

>_: Pre-graduate internship

Professional bachelors

>_: Management and Information Technologies in Telecommunications and Posts

SEMESTER 1

[required]
>_: Analytical microeconomic
>_: Fundamentals of management – Part I
>_: Fundamentals of information technology
>_: Physical culture
[selectable 1 of 2]
>_: Mathematics
>_: Applied statistics and mathematics
[selectable 1 of 2]
>_: Fundamentals of low
>_: Fundamentals of trade low
[optional discipline]
>_: Foreign language 1 (electicve)

SEMESTER 2

[required]
>_: Dynamic macroeconomics
>_: Fundamentals of management – part ii
>_: Fundamentals of finance
>_: Physical culture
[selectable 1 of 2]
>_: Quality management systems in communications
>_: Quality and monitoring standards in communications
[selectable 1 of 2]
>_: Fundamentals of accounting
>_: Fundamentals of control
[optional discipline]
>_: Foreign language 2 (electicve)

SEMESTER 3

[required]
>_: Economics of communications
>_: Conventional and digital firm management
>_: Conventional and digital marketing
>_: Risk management
>_: Physical culture
[selectable 1 of 2]
>_: Fundamentals of telecommunications
>_: Networks for mobile communications
[selectable 1 of 2]
>_: Database management system
>_: Website design
[optional discipline]
>_: Foreign language 3 (electicve)

SEMESTER 4

[required]
>_: Innovation management in communications
>_: Organisation and management of telecommunication services
>_: Organizational and digital leadership
>_: Business negotiation
>_: Physical culture
[selectable 1 of 2]
>_: Project management in commnications
>_: Economic approach to project management in communications
[selectable 1 of 2]
>_: E-commerce
>_: Security policies
[optional discipline]
>_: Foreign language 4 (electicve)

SEMESTER 5

[required]
>_: Organisation and management of postal services
>_: Enterpreneural management
>_: Human resource management
>_: Investment projects management in communication
[selectable 1 of 2]
>_: Logistics management in communications
>_: Audit activity in communications
[optional discipline]
>_: Introduction to operating systems (Windows)
>_: Introduction to network technologies

SEMESTER 6

[required]
>_: Knowledge management system
>_: Cyber-physical systems and additive technologies
>_: Information security management systems
[selectable 1 of 2]
>_: Corporate social responsibility in telecommunication companies
>_: Ethical standards and practices in telecommunication business
>_: Speciality practice

Bachelors

>_: Telecommunication technologies

SEMESTER 1

[required]
>_: Engineering Mathematics 1
>_: Fundamentals of telecommunications
>_: Fundamentals of programming
>_: Fundamentals of electrical engineering
>_: Physical culture
[selectable 1 of 2]
>_: Presentation and communication skills
>_: Organizational behavior

>_: Foreign language

SEMESTER 2

[required]
>_: Engineering Mathematics 2
>_: Computer graphics of communication circuits
>_: Materials and electronic components
>_: Digital electronics and microprocessors
>_: Physical culture (ongoing control without evaluation)
>_: Manufacturing Practice 1
[selectable 1 of 2]
>_: Databases in telecommunications
>_: Fundamentals of operating systems

>_: Foreign language

SEMESTER 3

[required]
>_: Signals and systems
>_: Networks and protocols 1
>_: Computer arcHi-Tectures
[selectable 1 of 2]
>_: Fundamentals of the economy
>_: Digital economy
[selectable 1 of 2]
>_: Commutation and multiplexing
>_: Measurement in telecommunications

>_: Foreign language

SEMESTER 4

[required]
>_: Digital signal processing
>_: Optical communications
>_: Networks and protocols 2
>_: Practice 2
[selectable 1 of 2]
>_: Fundamentals of Management
>_: Corporate social responsibility
[selectable 1 of 3]
>_: Cloud technologies
>_: Object-oriented programming
>_: Fundamentals of data transmission

SEMESTER 5

[required]
>_: Radio Communication Technologies
>_: Wireless networks
>_: Cell Technologies
>_: Digital TV technologies
>_: Sensor networks
[selectable 1 of 2]
>_: Electromagnetic compatibility in communications
>_: Security and monitoring systems

SEMESTER 6

[required]
>_: Wireless network protection
>_: Converged mobile networks
>_: Satellite and navigation communications
>_: Practicum on Wireless Terminal Devices
>_: Manufacturing Practice 3
[selectable 1 of 3]
>_: Governance and Regulation in Telecommunications
>_: Management and regulation of electronic communications
>_: Semester project

SEMESTER 7

[required]
>_: Teletrafical design
>_: Fibre optic networks
>_: Audio and video equipment
>_: Satellite and Navigation Communications Practicum
[selectable 1 of 2]
>_: Security in communication networks
>_: Security in telecommunications
[selectable 1 of 3]
>_: Computer graphics
>_: Video technologies
>_: Course project in teletraffic design

SEMESTER 8

[required]
>_: Internet communications
>_: Noise-resistant coding
>_: Design of corporate networks
>_: Work in a team environment
>_: Practicum on monitoring and management of video surveillance and security systems
>_: Pre-Diploma Manufacturing Practice

Bachelors

>_: Cybersecurity of Communication Technologies

SEMESTER 1

[required]
>_: Engineering Mathematics 1
>_: Security Fundamentals and Information Security Standards
>_: Fundamentals of Programming
>_: Fundamentals of electrical engineering
>_: Physical culture (ongoing control without evaluation)
[selectable 1 of 2]
>_: Presentation and communication skills
>_: Digital Communications

>_: Foreign language

SEMESTER 2

[required]
>_: Engineering Mathematics 2
>_: Fundamentals of operating systems
>_: Databases
>_: Fundamentals of Electronics
>_: Legal regime of patents
>_: Physical culture (ongoing control without evaluation)
[selectable 1 of 2]
>_: Information and Technological Security Practicum
>_: Programming Practicum

>_: Foreign language

SEMESTER 3

[required]
>_: Networks and protocols 2
>_: Cyber threats and cyber crises
>_: Computer arcHi-Tectures
>_: Database Management Systems
[selectable]
>_: Fundamentals of the economy
>_: Digital economy

>_: Foreign language

SEMESTER 4

[required]
>_: Fundamentals of cryptography
>_: Administration of Linux
>_: Networks and protocols 2
[selectable 1 of 2]
>_: Fundamentals of Management
>_: Corporate Social Responsibility
[selectable 1 of 2]
>_: Information protection in e-commerce
>_: Protection of wireless communications
[selectable 1 of 3]
>_: E-management in crises
>_: Politicians for CyberSigurnost
>_: IT Project Management

SEMESTER 5

[required]
>_: Firewalls
>_: Hacker's attacks and instruments
>_: Introduction to cloud technologies
>_: Security sistems
>_: Legal aspects
[selectable 1 of 2]
>_: Protection of classified informations
>_: Security of electronic payment cards

SEMESTER 6

[required]
>_: Information Security Management
>_: Access management and network audit
>_: Artificial intelligence
[selectable 1 of 2]
>_: Anonymous Communications (TOR Networks)
>_: Online tracking and secure search engines
[selectable 1 of 2]
>_: Risk management
>_: Quality management
[selectable 1 of 2]
>_: Access Management and Network Audit Practicum
>_: End-Device Protection Practicum

SEMESTER 7

[required]
>_: Security systems with artificial intelligence
>_: Designing secure networks
>_: Server Protection
>_: Introduction to Geographic Information Systems
>_: Project Courses
[selectable 1 of 2]
>_: Management of international business projects
>_: Business Information Systems

SEMESTER 8

[required]
>_: Blockchain Technologies
>_: Protection of cloud infrastructures
>_: Server Protection Practicum
[selectable 1 of 2]
>_: Video surveillance systems
>_: Access control systems

>_: Pre-graduate internship

Bachelors

>_: Computer technologies

SEMESTER 1

[required]
>_: Engineering Mathematics 1
>_: Introduction to the specialty
>_: Fundamentals of Programming
>_: Fundamentals of electrical engineering
>_: Intellectual property
>_: Physical culture (ongoing control without evaluation)
[selectable 1 of 2]
>_: Presentation and communication skills
>_: Digital Communications

>_: Foreign language

SEMESTER 2

[required]
>_: Engineering Mathematics 2
>_: Fundamentals of operating systems
>_: Databases
>_: Fundamentals of Electronics
>_: Legal regime of patents
>_: Physical culture (ongoing control without evaluation)
[selectable 1 of 2]
>_: Practicum by operating systems
>_: Programming Practicum

>_: Foreign language

SEMESTER 3

[required]
>_: Networks and protocols 1
>_: Algorithms and data structures
>_: Computer arcHi-Tectures
>_: Database Management Systems
[selectable 1 of 2]
>_: Fundamentals of the economy
>_: Digital economy

>_: Foreign language

SEMESTER 4

[required]
>_: Fundamentals of cryptography
>_: Administration of Linux
>_: Object-oriented design
[selectable 1 of 2]
>_: Design of WEB-based applications
>_: Design of mobile applications
[selectable 1 of 2]
>_: Fundamentals of Management
>_: Corporate Social Responsibility
[selectable 1 of 3]
>_: Information protection in e-commerce
>_: Multimedia technologies
>_: IT Project Management

SEMESTER 5

[required]
>_: ArcHi-Tectural models for SOFTWARE DEVELOPMENT
>_: Processes in Information Technology - ITIL
>_: Introduction to Cloud Technologies
>_: Software Quality Assurance
>_: Design of distributed software systems
[selectable 1 of 2]
>_: Integration of database systems
>_: Big Data Management Systems

SEMESTER 6

[required]
>_: Modern databases
>_: Artificial intelligence
>_: Internet of Things
>_: Project Courses
[selectable 1 of 2]
>_: Hacker attacks and tools
>_: Network load balancing
[selectable 1 of 2]
>_: Risk management
>_: Quality management

SEMESTER 7

[required]
>_: Management of international business projects
>_: Introduction to Geographic Information Systems
>_: Automated testing of software applications
>_: Project Courses
[selectable 1 of 2]
>_: E-management in crises
>_: Computer vision
[selectable 1 of 2]
>_: Neuron-linguistic programming - designing
>_: Business Information Systems

SEMESTER 8

[required]
>_: Virtual Reality Technologies
>_: Designing secure applications
>_: Secure Application Design Practicum
[selectable 1 of 2]
>_: Serverless computing
>_: Geographic Information Systems

>_: Pre-graduate internship

Bachelors

Cybersecurity in business

SEMESTER 1

[required]
>_ : Engineering Mathematics 1
>_ : Security Fundamentals and Information Security Standards
>_ : Fundamentals of Programming
>_ : Fundamentals of the economy
>_ : Physical culture (ongoing control without evaluation)
[selectable 1 of 2]
>_ : Business Leadership
>_ : Leadership and Entrepreneurship

>_ : Foreign language

SEMESTER 2

[required]
>_ : Engineering Mathematics 2
>_ : Fundamentals of operating systems
>_ : Databases
>_ : Fundamentals of management
>_ : Human Factors and Engineering Environment
>_ : Physical culture (ongoing control without evaluation)
[selectable 1 of 2]
>_ : Legal aspects of digital business structures
>_ : Legal regulation of Industry 4.0

>_ : Foreign language

SEMESTER 3

[required]
>_ : Networks and protocols 1
>_ : Cyber threats and cyber crises
>_ : Computer arcHi-Tectures
>_ : Entrepreneurial and Leadership Digital Competencies
[selectable 1 of 2]
>_ : Human Resource Gap Management
>_ : Management of professional development of human resources

>_ : Foreign language

SEMESTER 4

[required]
>_ : Fundamentals of cryptography
>_ : Administration of Linux
>_ : Networks and protocols 2
[selectable 1 of 2]
>_ : Protection of intellectual property in cyberspace
>_ : Protection of copyright in software programs and databases
[selectable 1 of 2]
>_ : Project management
>_ : An economic approach to design decisions
[selectable 1 of 3]
>_ : E-management in crises
>_ : Politicians for CyberSigurnost
>_ : IT Project Management

SEMESTER 5

[required]
>_ : Management of human resources
>_ : Hacker attacks and tools
>_ : Introduction to Cloud Technologies
>_ : Business Information Systems 1
>_ : Criminal Law Aspects of Cybersecurity
[selectable 1 of 2]
>_ : Protection of classified information
>_ : Security of electronic payment cards

SEMESTER 6

[required]
>_ : Information Security Management
>_ : Cybersecurity Management
>_ : Additive processes
[selectable 1 of 2]
>_ : Business Process Analysis
>_ : Business Process Management
[selectable 1 of 2]
>_ : Organizational behavior
>_ : Behaviour in management
[selectable 1 of 2]
>_ : Management of e-business with services
>_ : Online positioning of services

SEMESTER 7

[required]
>_ : Management of investment projects
>_ : Digital environment and high-tech business
>_ : Server Protection
>_ : Business Information Systems 2
>_ : Project Courses
[selectable 1 of 2]
>_ : Cyber Espionage
>_ : Cyber Diplomacy

SEMESTER 8

[required]
>_ : Blockchain Technologies
>_ : Protection of cloud infrastructures
>_ : Corporate Social Responsibility
[selectable 1 of 2]
>_ : Working conditions and stress management in the working environment
>_ : Labour behaviour of human resources

>_ : Pre-graduate internship

Bachelors

>_: Communication systems for air traffic organization

SEMESTER 1

[required]
>_: Engineering Mathematics 1
>_: Fundamentals of Communication Systems
>_: Computer graphics
>_: Digital electronics
>_: English
>_: Physical culture*
[selectable 1 of 2]
>_: Work in a team environment
>_: Management and regulation in electronic communications

SEMESTER 2

[required]
>_: Engineering Mathematics 2
>_: Satellite technologies
>_: Materials and electronic components
>_: Computer and microprocessor equipment
>_: English
>_: Physical culture*
[selectable 1 of 2]
>_: Fundamentals of databases
>_: Fundamentals of operating systems

SEMESTER 3

[required]
>_: Engineering Mathematics 3
>_: Signals and systems
>_: Fundamentals of data transmission
>_: Fundamentals of Radio Communications
>_: English
>_: Physical culture*
[selectable 1 of 2]
>_: Data storage in cloud technologies
>_: Measurement in communications

SEMESTER 4

[required]
>_: Encoding information messages
>_: Wireless networks
>_: English
>_: Physical culture*
[selectable 1 of 2]
>_: Fundamentals of the economy
>_: Digital economy
[selectable 1 of 3]
>_: Fundamentals of radio navigation systems
>_: 5G Networks
>_: Internet communications

* *ongoing control without evaluation*

SEMESTER 5

[required]
>_: Propagation of electromagnetic waves and antennas
>_: Antenna arrays
>_: Radio Transmitting Devices
>_: Occupational environment
>_: Air traffic management
>_: Physical culture *
[selectable 1 of 2]
>_: Aircraft guidance with complex navigation systems
>_: Construction of take-off schemes and landing approaches

SEMESTER 6

[required]
>_: Statistical theory of electronic devices
>_: Analog circuit technics
>_: The human factor
>_: Air law
>_: Emergencies and emergencies
>_: The Jepson Aeronautical Manual
>_: Aviation English
>_: Physical culture*
>_: Teaching practice *
[selectable 1 of 2]
>_: Theory of electronic circuits
>_: Reliability and diagnostics
[selectable 1 of 2]
>_: Theoretical foundations of the flight activity I *
>_: Theoretical bases of flight activity II *

SEMESTER 7

[required]
>_: Radio receivers of the device
>_: Fundamentals of Radiolocation
>_: Fundamentals of radio navigation
>_: Navigation - Part I
>_: Meteorology
>_: Flight safety
>_: Physical culture*
[selectable 1 of 2]
>_: Power supplies
>_: Electromechanical devices
[selectable 1 of 4]
>_: Flight Activity Bases III*
>_: Theoretical foundations of flight activity IV*
>_: Construction and operation of aircraft I*
>_: Design and operation of aircraft II *

SEMESTER 8

[required]
>_: Navigation – Part II
>_: Equipment and systems
>_: Airports
>_: Air traffic services
>_: Teaching practice*
>_: Physical culture *

Bachelors

>_: Software Development in Medicine

SEMESTER 1

[required]
>_: Engineering Mathematics 1
>_: Physics
>_: Fundamentals of Programming
>_: Fundamentals of Electrical Engineering and Electronics
>_: Physical culture (unassessed)
[selectable 1 of 2]
>_: Networks and protocols
>_: Preparation of scientific documentation

>_: English 1
>_: German 1

SEMESTER 2

[required]
>_: Engineering Mathematics 2
>_: Fundamentals of operating systems
>_: Databases
>_: Microprocessor systems and computer arcHi-Tectures
>_: Physical culture (unassessed)
[selectable 1 of 2]
>_: Web Application Design
>_: Object-oriented programming

>_: English 2
>_: German 2

SEMESTER 3

[required]
>_: Human physiology and anatomy
>_: Application of Computer Technologies in Internal Medicine Departments - Part 1
>_: Application of Computer Technologies in Diagnostic Laboratory Medicine
>_: Simulation equipment and simulation softwares
>_: Physical Foundations of Medical Equipment
[selectable 1 of 2]
>_: Health Technology Assessment
>_: Medical standards for interoperability
[selectable 1 of 3]
>_: English - medical terminology
>_: German - medical terminology
>_: French - medical terminology

SEMESTER 4

[required]
>_: Information and Communication Technologies in Health (eHealth)
>_: Application of Computer Technologies in Diagnostic Imaging
>_: Introduction to Biotechnology and 3D Printing
>_: Anesthesiological, surgical and resuscitation equipment and software
>_: Application of computer technologies in the departments of Internal Diseases - 2h.
[selectable 1 of 2]
>_: Methodology of research work
>_: Health Projects
[selectable 1 of 2]
>_: Communication techniques and skills
>_: Biostatistics and statistical software products

SEMESTER 5

[required]
>_: Server management and automation of server processes
>_: Signals and systems
>_: Introduction to Cloud Technologies
>_: Designing IoT Apps
>_: Artificial intelligence
[selectable 1 of 2]
>_: Digital economy
>_: Digital control

SEMESTER 6

[required]
>_: Modern databases with application in medicine
>_: Intelligent Systems in Medicine
>_: Designing secure applications
[selectable 1 of 2]
>_: Systems for monitoring human health through the Internet of Things (IoT systems for monitoring human health)
>_: Creating software applications in medicine
[selectable 1 of 2]
>_: Information systems in prehospital care
>_: Information systems in hospital care
[selectable 1 of 3]
>_: Risk management when using medical devices
>_: Quality Management in Medicine
>_: Processes in Information Technology - ITIL

SEMESTER 7

[required]
>_: Telemedicine in outpatient care
>_: Telesurgery
>_: Telerobotics
[selectable 1 of 2]
>_: Fundamentals of Telemedicine
>_: Teleradiology
[selectable 1 of 2]
>_: Systems using virtual reality in medical education
>_: Simulation systems in medical training
[Course projects]
>_: Digital Systems for Human Health Surveillance
>_: Robotic Systems in Healthcare
>_: Information systems used in medicine
>_: Simulation systems used in training

SEMESTER 8

[required]
>_: Thesis preparation

Bachelors

>_: Telemedicine

SEMESTER 1

[required]
>_: Engineering Mathematics 1
>_: Physics
>_: Fundamentals of Programming
>_: Fundamentals of Electrical Engineering and Electronics
>_: Physical culture (ongoing control without evaluation)*
>_: Networks and protocols 1
[selectable 1 of 2]
>_: English 1
>_: German 1

SEMESTER 2

[required]
>_: Signals and systems
>_: Fundamentals of operating systems
>_: Databases
>_: Microprocessor systems and computer arcHi-Tectures
>_: Networks and protocols 2
>_: Physical culture (ongoing control without evaluation)
[selectable 1 of 2]
>_: English 2
>_: German 2

SEMESTER 3

[required]
>_: Human physiology and anatomy
>_: Application of Computer Technologies in Internal Medicine Departments - Part 1
>_: Application of Computer Technologies in Diagnostic Laboratory Medicine
>_: Simulation equipment and simulation software
>_: Physical Foundations of Medical Equipment
[selectable 1 of 2]
>_: Health Technology Assessment
>_: Medical standards for interoperability

>_: English - medical terminology
>_: German - medical terminology
>_: French - medical terminology

SEMESTER 4

[required]
>_: Information and Communication Technologies in Health (eHealth)
>_: Application of Computer Technologies in Diagnostic Imaging
>_: Introduction to Biotechnology and 3D Printing
>_: Anesthesiological, surgical and resuscitation equipment and software
>_: Application of computer technologies in the departments of Internal Diseases - 2h.
[selectable 1 of 2]
>_: Methodology of research work
>_: Health Projects
[selectable 1 of 2]
>_: Communication techniques and skills
>_: Biostatistics and statistical software products

SEMESTER 5

[required]
>_: Server management and automation of server processes
>_: Network security
>_: Introduction to Cloud Technologies
>_: Internet of Things
>_: Artificial intelligence
[selectable 1 of 2]
>_: Digital economy
>_: Digital control

SEMESTER 6

[required]
>_: Robotic systems with application in medicine
>_: Image processing and recognition
>_: Geographic Information Systems
>_: Systems for monitoring human health through the Internet of Things
>_: Wireless networks
[selectable 1 of 2]
>_: Administration of Linux
>_: Administration of DBMS

SEMESTER 7

[required]
>_: Telemedicine in outpatient care
>_: Telesurgery
>_: Telerobotics
[selectable 1 of 2]
>_: Fundamentals of Telemedicine
>_: Teleradiology
[selectable 1 of 2]
>_: Systems using virtual reality in medical education
>_: Artificial Intelligence and Augmented Reality in Medicine
[Course projects]
>_: Digital Systems for Human Health Surveillance
>_: Robotic Systems in Healthcare
>_: Information systems used in medicine
>_: Artificial Intelligence and Augmented Reality in Medicine

SEMESTER 8

[required]
>_: Thesis preparation

Bachelors

>_: Management in Telecommunications and Posts

SEMESTER 1

[required]
>_: Analytical microeconomic
>_: Fundamentals of management – part I
>_: Fundamentals of information technology
>_: Physical culture
[selectable 1 of 2]
>_: Mathematics
>_: Applied statistics and mathematics
[selectable 1 of 2]
>_: Fundamentals of low
>_: Fundamentals of trade low
[optional discipline]
>_: Foreign language 1 (electicve)

SEMESTER 2

[required]
>_: Dynamic macroeconomics
>_: Fundamentals of management – part ii
>_: Fundamentals of finance
>_: Physical culture
[selectable 1 of 2]
>_: Quality management systems in communications
>_: Quality and monitoring standards in communications
[selectable 1 of 2]
>_: Fundamentals of accounting
>_: Fundamentals of control
[optional discipline]
>_: Foreign language 2 (electicve)

SEMESTER 3

[required]
>_: Economics of communications
>_: Conventional and digital firm management
>_: Conventional and digital marketing
>_: Risk management
>_: Physical culture
[selectable 1 of 2]
>_: Fundamentals of telecommunications
>_: Networks for mobile communications
[selectable 1 of 3]
>_: Planing and analysis in communications
>_: Management accounting
[optional discipline]
>_: Foreign language 3 (electicve)

SEMESTER 4

[required]
>_: Innovation management in communications
>_: Organisation and management of telecommunication services
>_: Organizational and digital leadership
>_: Business negotiation
>_: Physical culture
[selectable 1 of 2]
>_: Project management in commnications
>_: Economic approach to project management in communications
[selectable 1 of 2]
>_: Business process reengineering
>_: Business process management
[optional discipline]
>_: Foreign language 4 (electicve)

SEMESTER 5

[required]
>_: Organisation and management of postal services
>_: Enterpreneural management
>_: Human resource management
>_: Investment projects management in communication
[selectable 1 of 2]
>_: Logistics management in communications
>_: Audit activity in communications
[selectable 1 of 2]
>_: Business communication in communications
>_: Public relations in communications

SEMESTER 6

[required]
>_: Management of postal networks and systems
>_: Controlling in communications
>_: Organizational behavior
>_: Planning and management of scrum projects and methodologies in communication
[selectable 1 of 2]
>_: Quality and competitiveness of postal services
>_: Quality of service logistics
[optional discipline]
>_: Management of e-buness in services
>_: Web positioning of services

SEMESTER 7

[required]
>_: Business analysis
>_: Strategic management
>_: Telecommunications products and services: markets and competitiveness
>_: Marketing management in communications
[selectable 1 of 2]
>_: Logistics systems in the services sector
>_: Distribution logistics in the services sector
[optional discipline]
>_: Work with clients in telecommunication services
>_: Sales management in the postal services

SEMESTER 8

[required]
>_: Knowledge management system
>_: Cyber-physical systems and additive technologies
>_: Information security management systems
[selectable 1 of 2]
>_: Corporate social responsibility in telecommunication companies
>_: Ethical standards and practices in telecommunication business
>_: Speciality practice

Masters

>_: Digital and social technologies
(2 semesters)

SEMESTER 1

[required]
>_: Media and Digital Technologies
>_: Image management in a digital environment
>_: Creativity Management and Communication Policies
>_: Management of IT devices
>_: Cyber attacks and protection in the Internet space
>_: Management in the digital environment

[selectable 1 of 2]
>_: Leadership in a Digital Media Environment
>_: Analysis of the digital media environment

SEMESTER 2

[required]
>_: Public Relations and Digital Media
>_: Communication Brand Management in Information Technology
>_: Digital advertising and marketing communications

[selectable 1 of 2]
>_: Visualization tools in the creative process
>_: Administration of online communication platforms

>_: Human Resource Management in a Digital Environment
>_: Social aspects of digital media technologies

>_: Digital and social technologies
(3 semesters)

SEMESTER 1

[required]
>_ : Media and Digital Technologies
>_ : Image management in a digital environment
>_ : Creativity Management and Communication Policies
>_ : Management of IT devices
>_ : Cyber attacks and protection in the Internet space
>_ : Management in the digital environment

[selectable 1 of 2]
>_ : Leadership in a Digital Media Environment
>_ : Analysis of the digital media environment

SEMESTER 2

[required]
>_ : Visualization tools in the creative process
>_ : Administration of online communication platforms
>_ : Public Relations and Digital Media
>_ : Communication Brand Management in Information Technology, Telecommunications and Post Organizations
>_ : Digital advertising and marketing communications
>_ : Management of IT Porjects
[selectable 1 of 3]
>_ : Human Resource Management in a Digital
>_ : Environment
>_ : Social aspects of digital media technologies

SEMESTER 2

>_ : Thesis

>_: Management of Services
(2 semesters)

SEMESTER 1

[required]
>_ : Firm management in the services sector
>_ : Leadership styles in organizations in the service sector
>_ : Quality management systems and service certification
>_ : Communication management in service projects
>_ : Service marketing
>_ : Conventional and digital management and entrepreneurship
[selectable 1 of 2]
>_ : Government policies and strategies
>_ : Political leadership and behaviour
[selectable 1 of 3]
>_ : Law regulations in service sector
>_ : Service logistics and merchandising
>_ : Leadership behaviour psychology

SEMESTER 2

[required]
>_ : Supply chain management systems in the service sector
>_ : Business leadership in service sector organizations
>_ : Team management in service sector organizations
>_ : Conflict management in service sector organizations
>_ : Master's seminary

Masters

>_: Management of Services
(3 semesters)

SEMESTER 1

[required]
>_ : Fundamentals of economics
>_ : Fundamentals of management
>_ : Fundamentals of entrepreneurship
>_ : Fundamentals of project management
>_ : Fundamentals of quality management

SEMESTER 2

[required]
>_ : Firm management in the services sector
>_ : Leadership styles in organizations in the service sector
>_ : Quality management systems and service certification
>_ : Communication management in service projects
>_ : Service marketing
>_ : Conventional and digital management and entrepreneurship
[selectable 1 of 2]
>_ : Government policies and strategies
>_ : Political leadership and behaviour
[selectable 1 of 3]
>_ : Law regulations in service sector
>_ : Service logistics and merchandising
>_ : Leadership behaviour psychology

SEMESTER 3

[required]
>_ : Supply chain management systems in the service sector
>_ : Business leadership in service sector organizations
>_ : Team management in service sector organizations
>_ : Conflict management in service sector organizations
>_ : Master's seminary

Masters

>_: Management of Services
(4 semesters)

SEMESTER 1

[required]
>_: Firm management in the services sector
>_: Leadership styles in organizations in the service sector
>_: Quality management systems and service certification
>_: Communication management in service projects
>_: Service marketing
>_: Conventional and digital management and entrepreneurship
[selectable 1 of 2]
>_: Government policies and strategies
>_: Political leadership and behaviour
[selectable 1 of 3]
>_: Law regulations in service sector
>_: Service logistics and merchandising
>_: Leadership behaviour psychology

SEMESTER 2

[required]
>_: Innovation in organizations from the services sector
>_: Financial management in the services sector
>_: Change management of service sector organizations
>_: Management consulting services
>_: Brand management in the services sector
[selectable 1 of 2]
>_: Marketing research in the services sector
>_: Marketing decisions in the services sector
[selectable 1 of 3]
>_: Social services and systems
>_: Social entrepreneurship
>_: Social behaviour psychology

SEMESTER 3

[required]
>_: Specific financial instruments in the services sector
>_: Management of key customers in the services sector
>_: Mentoring and coaching services
>_: Integrated business process management systems
>_: Digiital marketing in service sector
[selectable 1 of 2]
>_: Public management and policy
>_: Regional planning and development
[selectable 1 of 3]
>_: Risk management in service sector
>_: Product and promotional policy in the services sector
>_: Business environment and sustainable development

SEMESTER 4

[required]
>_: Supply chain management systems in the service sector
>_: Business leadership in service sector organizations
>_: Team management in service sector organizations
>_: Conflict management in service sector organizations
>_: Master's seminary

Masters

>_: Smart Leadership
(2 semesters)

SEMESTER 1

[required]
>_ : Leadership and management styles
>_ : Business Leadership
>_ : Management of investment projects
>_ : Project management, leadership and competitiveness
>_ : Market Leadership and Brand
>_ : Market leadership and creativity

[selectable]
>_ : Human Resources and Tembuilding
>_ : Quality management systems

>_ : Intellectual property
>_ : Change management

SEMESTER 2

[required]
>_ : Leadership strategies
>_ : Business Analytics
>_ : Communication strategies and negotiations
>_ : Leadership Management - Practice in the Learning Process

[selectable]
>_ : Psychology of Leadership
>_ : Leadership and Power in a Business Organization
>_ : Ekipno interaction

>_: Smart Leadership
(3 semesters)

SEMESTER 1

[required]
>_ : Microeconomics
>_ : Macroeconomics
>_ : Fundamentals of management
>_ : Entrepreneurship and small business
>_ : Marketing

SEMESTER 2

[required]
>_ : Leadership styles
>_ : Business leadership
>_ : Investment project management
>_ : Project management, leadership and competitiveness
>_ : Market leadership and brand
>_ : Innovation and creativity
[selectable 1 of 2]
>_ : Human resource and teambilding
>_ : Quality management systems
[selectable 1 of 2]
>_ : Intellectual Property
>_ : Change management

SEMESTER 3

[required]
>_ : Leadership strategies
>_ : Business analysis
>_ : Communications strategies and negotiation
>_ : Leadership management - practice in the learning process
[selectable 1 of 3]
>_ : Psychology of leadership
>_ : Leadership and power in the business organization
>_ : Team interaction

Masters

>_: Smart Leadership
(4 semesters)

SEMESTER 1

[required]
>_ : Leadership and entrepreneurial skills
>_ : Restructuring of economic structures
>_ : European project policy
>_ : Strategic leadership
>_ : Regional leadership
>_ : Innovation and scientific development
[selectable 1 of 2]
>_ : Development research
>_ : Operations management
[selectable 1 of 2]
>_ : Product leadership
>_ : Consumer behaviour

SEMESTER 2

[required]
>_ : Smart technologies and standards
>_ : Risk management
>_ : Financial indicators for leadership
>_ : Conflict management
>_ : Smart management
>_ : Controlling
[selectable 1 of 3]
>_ : Social aspect of smart leadesrship
>_ : Equality policies
>_ : Political leadership
[selectable 1 of 2]
>_ : Sustainable development
>_ : Smart specialization of the regions

SEMESTER 3

[required]
>_ : Leadership styles
>_ : Business leadership
>_ : Investment project management
>_ : Project management, leadership and competitiveness
>_ : Market leadership and brand
>_ : Innovation and creativity
[selectable 1 of 2]
>_ : Human resource and teambilding
>_ : Quality management systems
[selectable 1 of 2]
>_ : Intellectual Property
>_ : Change management

SEMESTER 4

[required]
>_ : Leadership strategies
>_ : Business analysis
>_ : Communications strategies and negotiation
>_ : Leadership management - practice in the learning process
[selectable 1 of 3]
>_ : Psychology of leadership
>_ : Leadership and power in the business organization
>_ : Team interaction

Masters

>_: Communication networks and cybercrime investigation (2 semesters)

SEMESTER 1

[required]
>_ : Introduction to Digital Forensics
>_ : Network Monitoring and Detection
>_ : Identification of Cyber-attacks
>_ : Windows Malware Forensics
>_ : Linux Forensics
[selectable 1 of 2]
>_ : Network Security
>_ : Python automation in SDN
[selectable 1 of 2]
>_ : Forensics Labs
>_ : Information Security Management Systems

SEMESTER 2

[required]
>_ : Threat Hunting with SIEM
>_ : Reverse Engineering
>_ : Defense Labs
[selectable 1 of 2]
>_ : Basics of criminal and criminal procedure law
>_ : Cyber-Enabled Intellectual Property Crime

Masters

>_: Communication networks and cybercrime investigation (4 semesters)

SEMESTER 1

[required]
>_ : Cybersecurity Fundamentals
>_ : Introduction to Probability Theory
>_ : Computer Networks 1
[selectable 1 of 2]
>_ : Python Programming
>_ : C# Programming
[selectable 1 of 2]
>_ : Operating Systems
>_ : Cyber Operations

SEMESTER 2

[required]
>_ : Encryption Algorithms - Encryption and Decryption
>_ : Linux OS
>_ : Computer Networks 2
[selectable 1 of 2]
>_ : Assembly Programming
>_ : C Programming
[selectable 1 of 2]
>_ : Java Programming
>_ : JavaScript Programming

SEMESTER 3

[required]
>_ : Introduction to Digital Forensics
>_ : Network Monitoring and Detection
>_ : Identification of Cyber-attacks
>_ : Windows Malware Forensics
>_ : Linux Forensics
[selectable 1 of 2]
>_ : Network Security
>_ : Python automation in SDN
[selectable 1 of 2]
>_ : Forensics Labs
>_ : Information Security Management Systems

SEMESTER 4

[required]
>_ : Threat Hunting with SIEM
>_ : Reverse Engineering
>_ : Defense Labs
[selectable 1 of 2]
>_ : Basics of criminal and criminal procedure law
>_ : Cyber-Enabled Intellectual Property Crime

Masters

>_: Digital leadership

SEMESTER 1

[required]
>_ : Leadership Styles in a Digital Environment
>_ : Design of digital business structures
>_ : Digital Business and Customer Relations
>_ : Digital innovations and technologies
>_ : Digital Communications and Negotiation
>_ : Emotional intelligence and creativity in the digital environment

[selectable 1 of 2]
>_ : Leadership positioning through Scrum projects and methodologies
>_ : Leadership in the public sector

[selectable 1 of 2]
>_ : Intellectual property
>_ : Legal aspects of the econocity of sharing

SEMESTER 2

[required]
>_ : Digital Business Leadership
>_ : Virtual Team Management
>_ : Master's Seminar

[selectable 1 of 2]
>_ : e-Supply Chain Management
>_ : Leadership in Digital Media

Masters

>_: Information Technologies
(2 semesters)

SEMESTER 1

[required]
>_ : Internet Multimedia Communications
>_ : Image processing in GIS
>_ : Knowledge Discovery from Large Databases
[selectable 1 of 2]
>_ : Electronic Business
>_ : Blockchain technologies
[selectable 2 of 4]
>_ : Monitoring and security in corporate networks (Netwrix)
>_ : Building storage systems
>_ : Earth observation and Satellite communication
>_ : Cybersecurity Practices in DevOps

SEMESTER 2

[required]
>_ : Buildig data storage systems
>_ : Applied cryptography
>_ : Geo-statistics
[selectable 1 of 2]
>_ : Crisis communications
>_ : 5G and Smart Technologies
[selectable 2 of 4]
>_ : Automated control of Linux configuration
>_ : Configration, administration and management of MS Exchange сървър
>_ : Cloud Services AWS
>_ : Automation with Pyton

Masters

>_: Information Technologies
(3 semesters)

SEMESTER 1

[required]
>_ : International Business Projects Management
>_ : Intelligent systems
>_ : Virtualization and containerization platforms
[selectable 1 of 2]
>_ : Basics of critical infrastructure
>_ : Business information systems
[selectable 2 of 4]
>_ : Remote sensing-GIS
>_ : Software design processes (SDLC)
>_ : Admiistration of business communications Systems
>_ : Monitoring systems and IT-infrastructure audit

SEMESTER 2

[required]
>_ : Internet Multimedia Communications
>_ : Image processing in GIS
>_ : Knowledge Discovery from Large Databases
[selectable 1 of 2]
>_ : Electronic Business
>_ : Blockchain technologies
[selectable 2 of 4]
>_ : Monitoring and security in corporate networks (Netwrix)
>_ : Building storage systems
>_ : Earth observation and Satellite communication
>_ : Cybersecurity Practices in DevOps

SEMESTER 3

[required]
>_ : Buildig data storage systems
>_ : Applied cryptography
>_ : Geo-statistics
[selectable 1 of 2]
>_ : Crisis communications
>_ : 5G and Smart Technologies
[selectable 2 of 4]
>_ : Automated control of Linux configuration
>_ : Configration, administration and management of MS Exchange сървър
>_ : Cloud Services AWS
>_ : Automation with Pyton

Masters

>_: Information Technologies
(4 semesters)

SEMESTER 1

[required]
>_ : Internet of things (IoT)
>_ : Cloud Infrastructure management
>_ : Modern databases
>_ : Elective course (1 of 2 courses)
>_ : Intellectual Property
>_ : Cybercrimes
[selectable 2 of 4]
>_ : Network programming
>_ : Introduction to geographical information systems (GIS)
>_ : Software testing automation
>_ : Linux administration LPIC-2

SEMESTER 2

[required]
>_ : International Business Projects Management
>_ : Intelligent systems
>_ : Virtualization and containerization platforms
[selectable 1 of 2]
>_ : Basics of critical infrastructure
>_ : Business information systems
[selectable 2 of 4]
>_ : Remote sensing-GIS
>_ : Software design processes (SDLC)
>_ : Admiistration of business communications Systems
>_ : Monitoring systems and IT-infrastructure audit

SEMESTER 3

[required]
>_ : Internet Multimedia Communications
>_ : Image processing in GIS
>_ : Knowledge Discovery from Large Databases
[selectable 1 of 2]
>_ : Electronic Business
>_ : Blockchain technologies
[selectable 2 of 4]
>_ : Monitoring and security in corporate networks (Netwrix)
>_ : Building storage systems
>_ : Earth observation and Satellite communication
>_ : Cybersecurity Practices in DevOps

SEMESTER 4

[required]
>_ : Buildig data storage systems
>_ : Applied cryptography
>_ : Geo-statistics
[selectable 1 of 2]
>_ : Crisis communications
>_ : 5G and Smart Technologies
[selectable 2 of 4]
>_ : Automated control of Linux configuration
>_ : Configration, administration and management of MS Exchange сървър
>_ : Cloud Services AWS
>_ : Automation with Pyton

Masters

>_: Mobile communications and Internet (3 semesters)

SEMESTER 1

[required]
>_ : Internet communications
>_ : Noise-resistant coding
>_ : Design of corporate networks
>_ : Work in a team environment

[selectable 1 of 2]
>_ : Practicum on monitoring and management of video surveillance and security systems
>_ : Corporate Network Design Practicum

[selectable 1 of 2]
>_ : Radio access technologies
>_ : ArcHi-Tectures and interfaces in cellular networks

SEMESTER 2

[required]
>_ : Network infrastructures
>_ : IP TV and video streaming
>_ : Smart Management of Communication Applications
>_ : Project management

[selectable 1 of 4]
>_ : Operating systems for mobile devices
>_ : Software-defined networks
>_ : Project Courses
>_ : Pre-diploma practice

SEMESTER 3

[required]
>_ : Internet of Things
>_ : Multimedia Communications on the Internet
>_ : Managing mobile devices with artificial intelligence
>_ : Practicum on Sensor Applications

Masters

>_: Mobile communications and Internet (4 semesters)

SEMESTER 1

[required]
>_: Teletraffic design
>_: Optical backbone networks
>_: Audio and video technologies
>_: Practicum on satellite and navigation communications
[selectable 1 of 2]
>_: Communication networks security
>_: Video and multimedia platforms
[selectable 1 of 3]
>_: Computer graphics
>_: Video technologies
>_: Course project on teletraffic design

SEMESTER 2

[required]
>_: Internet communications
>_: Error-resilient coding
>_: Corporate networks design
>_: Teamworking
[selectable 1 of 2]
>_: Practicum on CCTV and security systems
>_: Practicum on corporate networks design

SEMESTER 3

[required]
>_: Network infrastructures
>_: IPTV and video streaming
>_: Smart management of communication applications
>_: Project management
[selectable 1 of 4]
>_: OS for mobile devices
>_: Software defined networks
>_: Course project
>_: Pre-graduation practice

SEMESTER 4

[required]
>_: Internet of things
>_: Internet multimedia communications
>_: Management of mobile devices with AI
>_: Practicum on sensor applications
>_: Pre-graduation design

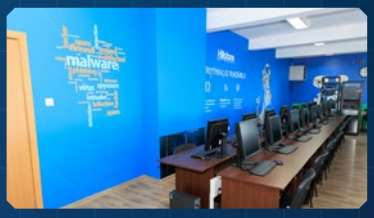
>_: The Campus



The campus of the University of telecommunications and Post is located in the heart of Sofia's Students' District and neighbors the Students' Park. The campus includes a main Building where study facilities, laboratories, a library, and the administration take place.



It has two residential buildings and a separate sports center with a basketball/volleyball hall, a fitness center, and a smaller hall for table tennis and others sports.







The University of telecommunications and Posts has an impressive history and develops active scientific and practical activity. It has international recognition and ambitions for the future. But more important – it has motivated and talented academic staff and students.
It works for filling the gap between theory and practice and the new courses it offers to assist our transition towards a digital economy.

*Mr. **Rumen Radev**,*
President of the Republic of Bulgaria

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