

**Non-Commercial Joint Stock Company  
“Gumarbek Daukeev Almaty University of Power Engineering and  
Telecommunications”**

**Guidebook / Handbook**

Academic Year 2025–2026

## **1. GENERAL INFORMATION ABOUT THE UNIVERSITY**

Almaty University of Power Engineering and Telecommunications was established on January 10, 1997, on the basis of the Almaty Power Engineering Institute (AEI), which operated from 1975 to 1997. It is the first private technical university with the status of a non-profit organization. Instruction is conducted in Kazakh and Russian.

In 2013, instruction in English was introduced in two specialties: “Radio Engineering, Electronics and Telecommunications” and “Electric Power Engineering.”

In 1989, the Almaty Power Engineering Institute was the first institution in Kazakhstan and one of the few in the Soviet Union to be accredited by the Commission of the State Inspectorate for Education of the USSR. The high level of specialist training at AEI was officially recognized at the Union level, which was undoubtedly a significant achievement for the students, faculty, and administration of the institute.

In May 1996, by decree of the Government of the Republic of Kazakhstan, a large-scale reorganization of the higher education system was carried out: regional universities were established in the regions of the republic through the merger of formerly independent higher education institutions. The Almaty Power Engineering Institute was incorporated into the Kazakh National Technical University as a structural subdivision — the Educational and Research Complex of Power Engineering and Telecommunications.

In May 1997, this complex was reorganized into the Almaty Institute of Power Engineering and Telecommunications with the status of a non-profit joint-stock company. Gumarbek Zhusupbekovich Daukeev was elected as the rector of the new institute.

Since July 2010, the Almaty Institute of Power Engineering and Telecommunications has been granted university status with the right to train Master’s and PhD students and was renamed the non-profit joint-stock company “Almaty University of Power Engineering and Telecommunications” (AUPET).

AUES named after Gumarbek Daukeev is the largest university in Central Asia training specialists in power engineering, IT, telecommunications, and environmental studies.

The University provides training in college-level specialties as well as undergraduate (Bachelor’s), graduate (Master’s), and PhD doctoral educational programs.

Our University trains specialists in the following main groups of educational programs in accordance with the classification of the Ministry of Education and Science of the Republic of Kazakhstan:

- Electrical Engineering and Power Engineering
- Communications and Communication Technologies
- Information Technology
- Information Security
- Electrical Engineering and Automation
- Mechanics and Metalworking
- Sanitary and Preventive Measures

- Air Transport and Technologies
- Transport Equipment and Technologies

AUES graduates actively participate in the Bolashak international scholarship program. They pursue Master's and PhD degrees both at universities in CIS countries and at leading international universities.

AUES graduates successfully find employment in their field not only in Kazakhstan but also in near and far abroad countries such as Russia, Germany and other European Union countries, the USA, the United Kingdom, Canada, Israel, and others.

## **2. ADMINISTRATION**

**Rector of the University – Gani Saktaganovich Nygymetov**



**Aibek Zhupankhan**  
**Vice-Rector for Academic Affairs**



**Kuanish Aringojaevich Alipbaev**  
**PhD – Vice-Rector for Scienc**



**Aizhamal Aitmukhamedovna Jazykpaeva**  
**Vice-Rector for Development**

**ACADEMIC CALENDAR**  
**for Bachelor's Degree Programs for the 2025–2026 Academic Year**

<b>FALL SEMESTER 1</b>	
Diagnostic language testing for applicants	August 6–25
Registration of 2nd–4th year students for the fall semester schedule	August 15–22
Fall semester schedule for 2nd–4th year students	August 25
Orientation week for 1st year students	August 26 – September 8
Beginning of theoretical instruction	September 2
Re-registration period (Add/Drop week). Adjustment of Individual Study Plans (ISPs) for 2nd–4th year students	September 2–8
Conversion/approval of ISPs for students of all years	until September 15
Midterm Assessment	October 13–18
Registration of 1st year students for the 2nd (spring) semester	November 17–22
“Career Fair – 2025”	2nd week of November
Midterm Assessment 2	December 8–14
Examination session	December 17–27
Retake period for FX and Incomplete grades	December 27–30
Winter break (reinstatement and transfer period)	December 31, 2025 – January 18
Registration and ISP formation for 1st–3rd year students for the 2026–2027 academic year	<b>March 9–20</b>
<b>SPRING SEMESTER 2</b>	
Beginning of theoretical instruction for 1st–3rd year students	January 19
Midterm Assessment 1	March 2–7
Midterm Assessment 1 for graduating students	March 30 – April 4
Beginning of theoretical instruction for graduating students	March 10
“Career Fair – 2026”	2nd week of April
Midterm Assessment 2	April 27 – May 2
Midterm Assessment 2 for graduating students	April 27 – May 2
Examination session	May 4–20

Retake period for FX and Incomplete grades	May 20–23
Registration for the additional summer semester	May 25–30
Additional summer semester for 1st–3rd year students	June 1 – July 4
Examination session of the additional summer semester	July 6–18
Summer break for 1st year students (reinstatement and transfer period)	May 25 – August 31
Summer break for 2nd–3rd year students (reinstatement and transfer period)	July 1 – August 31
Class schedule for the 1st semester of the 2026–2027 academic year (for 2nd–4th year students)	August 17
<b>Graduation (Final-Year Students)</b>	
Pre-graduation internship.	19 января по 07 марта
Defense of pre-graduation internship reports	March 10–14
Pre-defense of diploma theses (projects)	December 2025 – January 2026 / April – May
Final certification and defense of diploma theses (projects)	January 12–17 / June 1–27
State examinations	January 12–17 / June 1–27
Awarding of diplomas	
<b>Industrial Internship</b>	
Industrial internship for 2nd–3rd year students	May 25 – June 30
Defense of internship reports	July 1–5
<b>Public Holidays (Non-Working Days)</b>	
Qurban Ait	June 16
Constitution Day of the Republic of Kazakhstan	August 30
Capital City Day	July 6
Republic Day	October 25
Independence Day of the Republic of Kazakhstan	December 16
New Year	January 1–2
Orthodox Christmas	January 7
International Women’s Day	March 8
Nauryz Meyrami —	March 21–23
People’s Unity Day of Kazakhstan	May 1
Defender of the Fatherland Day	May 7
Victory Day	May 9

### **3. UNIVERSITY INFRASTRUCTURE**

- 3 Institutes
- 12 Departments
- 3 academic and laboratory buildings
- 3 student dormitories (2,406 bed spaces)
- More than 100 laboratories
- 29 lecture halls equipped for televised/streamed lectures
- 32 practice classrooms
- 27 computer labs
- 96 учебные and laboratory classrooms
- 5 reading rooms in student dormitories
- 1 business incubator (A511)
- 2 cafeterias
- Laptop zone
- Coworking space
- 3 mini-football fields and sports halls
- Sports clubs and sections
- Sports facilities (4,149 sq. m.)
- Regional CISCO and Microsoft Academies
- ORACLE Academy
- Robotics and Innovative Technology Club FABLAB
- AUES College
- Professional Development Center
- Youth Center “Entel”
- Hewlett-Packard Competence Center
- HUAWEI Academy
- Schneider Electric Competence Center for Industrial Automation
- Honeywell Center

#### **4. BACHELOR'S DEGREE PROGRAM**

##### **What is a Bachelor's Degree Program?**

A Bachelor's degree is a higher education qualification confirmed by a Bachelor's diploma awarding an academic Bachelor's degree or professional qualification.

##### **What is a Bachelor's diploma for?**

A Bachelor's diploma provides the right to hold positions for which higher education is required according to qualification standards.

It also gives the right to continue studies at the Master's degree level.

A Bachelor's diploma certifies that its holder has completed higher professional education and serves as an official document confirming graduation from a higher education institution.

##### **How does the Bachelor's program work?**

At AUES, higher education is delivered under a credit-based system. Students attend classes according to an established schedule. Classes may be scheduled between **8:20 a.m. and 6:30 p.m.**

The credit-based system is a method of organizing the educational process in which students, within defined limits, can individually plan their educational trajectory and sequence of courses.

A credit (credit-hour) is a standardized unit for measuring the academic workload of both students and instructors. Under the credit system, **1 credit equals 3 hours of work per week.** One academic hour is accompanied by 2 hours of independent student work (including studying textbooks, completing assignments, conducting research, and consulting with instructors).

The main objectives of the credit-based learning system are:

- Standardization of the volume of students' knowledge;
- Maximum individualization of learning;
- Increasing the role of independent study.

## **4.1. List of Institutes and Departments**

### **Institute of Information Technology**

Director: Rat Shyndalievich Berdibayev

Office: D409

Departments:

- Department of IT Engineering and Artificial Intelligence
- Department of Cybersecurity

### **Institute of Power Engineering and Green Technologies**

Director: Yernar Tangirbergenuly Amitov

Office: D209

Departments:

- Department of Thermal Power Engineering and Physics
- Department of Electric Power Engineering
- Department of Electric Power Systems
- Department of Ecology and Engineering Management
- Department of Mathematics

### **Institute of Telecommunications and Automation**

Director: Alnura Orazgalikyzy Omarbekova

Office: D307

Departments:

- Department of Telecommunication Engineering
- Department of Aerospace and Electronic Engineering
- Department of Automation and Control
- Department of Languages
- Department of Social Sciences

<b>Educational Program Group</b>	<b>Educational Programs:</b>	<b>Core Subjects</b>
Information Technology	Artificial Intelligence and Data Analytics	Informatics + Mathematics
	Information Systems	Informatics + Mathematics
	Computer Engineering and Software	Informatics + Mathematics

#### **4.2. Groups of Educational Programs Group: Information Technology – B057**

##### **Artificial Intelligence and Data Analytics**

- **Artificial intelligence and data analysis.**

**A bachelor's degree in Artificial Intelligence and Data Analysis provides the knowledge and skills necessary to perform professional activities related to:**

- data analysis and Data Science
- development and implementation of AI and machine learning systems
- design and maintenance of intelligent information systems
- software development using AI algorithms
- Big Data technologies
- business process analytics and decision support systems
- neural networks and intelligent algorithms
- research in AI and data analytics
- administration and optimization of data warehouses

##### **Material and technical resources:**

- hardware and software complex for studying mobile phone operation;
- computer and network technology classroom based on Windows, Linux, etc. operating systems;
- Cisco network equipment;
- software products for creating and modelling network topologies: Cisco Packet Tracer, GNS3;
- high-level programming languages: Visual Studio C#, Python, Java, C++, etc.;
- software products for creating and working with databases: MS SQL Server, Oracle, etc.;
- WEB technologies: HTML, PHP, CSS;
- information protection based on Cisco equipment (Firewall, VPN)
- MSDN AA subscription (students have the right to use Microsoft Windows).

**Graduates can work as:**

- Data Analysts;
- Data Scientist;
- Machine Learning Engineer;
- Intelligent Systems Developer;
- Artificial Intelligence Engineer;
- Big Data Engineer;
- business analyst;
- software developer using AI technologies;
- data analysis and modelling specialist;
- researcher (in research and scientific organisations).

**Information Systems**

**A Bachelor of Information Systems possesses the knowledge and skills necessary for work related to:**

- creating the architecture and components of information systems;
- designing mathematical, linguistic, informational, software, and technical support for information systems;
- designing human-machine interfaces for hardware and software complexes;
- designing human-machine interfaces for hardware and software complexes;
- administering information resources;
- developing intelligent information systems;
- developing mobile applications and computer games;- producing, testing and debugging software complexes for information systems;
- installation, configuration and administration of network services for information and computing networks;
- programming for the processing, storage and presentation of information resources;
- consulting in the field of information system support.

**Material and technical resources:**

- hardware and software complex for studying mobile phone functioning;
- computer and network technology classroom based on Windows, Linux, etc. operating systems;
- Cisco network equipment;
- software products for creating and modelling network topology: Cisco Packet Tracer, GNS3;
- high-level programming languages: Visual Studio C#, Python, Java, C++, etc.;
- software products for creating and working with databases: MS SQL Server, Oracle, etc.;
- WEB technologies: HTML, PHP, CSS;
- information security based on Cisco equipment (Firewall, VPN)
- MSDN AA subscription (students have the right to use Microsoft Windows).

**Graduates can work as:**

- IT project architects;
- information systems designers;
- information systems implementation specialists;

- database management system developers;
- information resource administrators;
- user interface designers;
- information resource processing specialists.

**A Bachelor's degree graduate in "Computer Engineering and Software" possesses the knowledge and practical skills necessary to carry out professional activities in the field of development, implementation, and maintenance of information technologies.**

The graduate is qualified to perform the following types of professional activities:

- design, development, and maintenance of software;
- development, implementation, and operation of computer systems and computer networks;
- programming of application, system, and embedded software;
- administration and technical support of information systems and databases;
- development and implementation of hardware-software systems;
- ensuring information security of computer systems and networks;
- testing, debugging, and optimization of software products;
- application of modern information technologies in various fields of activity.

**Material and Technical Resources:**

- hardware and software complex for studying the functioning of mobile phones;
- computer and networking laboratory based on operating systems such as Windows, Linux, etc.;
- Cisco networking equipment;
- software tools for creating and modeling network topologies: Cisco Packet Tracer, GNS3;
- high-level programming languages: Visual Studio C#, Python, Java, C++, etc.;
- software products for database creation and management: MS SQL Server, Oracle, etc.;
- web technologies: HTML, PHP, CSS;
- information security solutions based on Cisco equipment (Firewall, VPN);
- MSDN AA subscription (students are entitled to use Microsoft Windows).

**Graduates can work as:**

- software developers;
- software testing and maintenance engineers;
- system administrators;
- information security specialists;
- computer systems and network engineers;
- database analysts and developers;
- embedded and application systems developers;
- IT implementation and support specialists;
- research associates in the field of information technology and computer engineering;
- specialists in the Ministry of Internal Affairs, the National Security Committee of the Republic of Kazakhstan, and the Tax Police;

-specialists in various banks such as Halyk Bank, KazCom, NURBAK, and

Educational program group	Educational program	Core subjects
Information security	6B06306-Information security systems	Physics + Mathematics
	6B06307 - System and Network Administration	

others.

## Group: Information Security – B058

### Guide to the Information Security Systems program

This educational program trains specialists in digital space protection. You will learn how to identify vulnerabilities, counter cyberattacks, and create comprehensive information protection systems for organizations of any size.

The graduate's mission: to become a guarantor of confidentiality, integrity, and accessibility of information in today's world, where digital threats are becoming increasingly complex.

#### What you will learn:

#### 1. Comprehensive information protection:

- Build protection systems against unauthorized access (UAA) for networks and services.

- Apply cryptography and steganography for encryption and covert data transmission.

- Ensure database security — from design to daily operation.

- Analyze the risks of information leaks through technical communication channels.

#### 2. Ensure infrastructure security:

- Analyze and improve the fault tolerance, performance, and security of computer systems and networks.

- Practice penetration testing and analyze digital evidence of hacking.

- Administer and maintain the performance of information security systems (firewalls, intrusion detection systems, antivirus software).

- Work with physical security systems: video surveillance and access control (ACS).

#### 3. Respond to incidents and manage security:

- Quickly identify and eliminate the consequences of information security (IS) breaches.

-Develop and implement policies and processes for managing the organization's information security.

- Create solutions for the secure storage, processing, and transmission of information.

**What tools and technologies you will master:**

- Programming languages: C++, Java, Python — for creating secure applications and code analysis.

- Databases: Oracle, MS SQL Server, PostgreSQL — with an emphasis on data protection and DBMS administration.

-Modern hardware and software information security systems (crypto gateways, traffic control tools, DLP systems).

-Advanced methods from the fields of mathematics and IT for threat modeling and creating reliable security mechanisms.

**Where you will work:**

You will become a key specialist in any company that has digital infrastructure and data that needs to be protected.

Your future roles:

- Information security specialist
- Cybersecurity analyst
- Information security administrator
- Information security auditor
- Incident Response Specialist (SOC Analyst)
- Secure Systems Developer

**Objects of your professional activity:**

Computer and telecommunications systems, information resources, and technologies—everything that needs protection from modern digital threats.

This is a specialty for those who want to be at the forefront of the fight against cyber threats. You will gain a unique blend of knowledge — from in-depth technical training in programming and networking to security policy management skills. You will not just be closing vulnerabilities, but designing entire security architectures, making the digital world more secure.

**Guide to the specialty “System and Network Administration”**

The educational program trains versatile IT specialists who ensure the smooth operation of an organization's entire digital infrastructure—from work computers and servers to corporate networks and databases.

The graduate's mission: to become the technical backbone of the company, responsible for the stability, security, and efficiency of all information systems.

What you will learn:

- Design, build, and maintain networks:
- Create and maintain local and distributed corporate networks.
- Install and maintain cable systems.
- Configure network equipment and troubleshoot problems.
- Work with network services: domain infrastructure (Active Directory), VPN, remote access.

2. Ensure security:

- Protect the network from attacks using firewalls.
- Implement intrusion detection and prevention systems (IDS/IPS).
- Monitor vulnerabilities, assess risks, and configure security policies.
- Administer access control systems (ACS) and video surveillance.

### 3. Administer servers and clouds:

- Install, configure, and maintain server hardware and software.
- Work with various operating systems (Windows Server, Linux).
- Use cloud platforms (Microsoft Azure, AWS, Yandex Cloud).
- Automate routine tasks using scripts (PowerShell, Bash, Python).

### 4. Work with data and ensure fault tolerance:

- Create and administer databases.
- Configure backup and recovery systems.
- Develop plans for eliminating failures and ensuring business continuity.

### 5. Manage IT infrastructure:

- Assemble, install, and maintain server and network equipment.
- Perform regular maintenance (scheduled work).
- Diagnose and troubleshoot problems at all levels.

### **Your career after graduation:**

You will become a sought-after specialist capable of solving complex tasks in the following roles:

- System and network administrator
- Technical support engineer
- Information security specialist
- Database administrator
- DevOps engineer (at the entry level)
- Cloud infrastructure specialist

This specialty is for those who want to understand how IT systems work from the inside and be responsible for their reliability and security. You will learn not just to press buttons, but to design, build, and protect digital environments for businesses of any scale.

**Group: Communications and Communication Technologies – B059**

Educational program group	Educational program	Core subjects
Communications and Communication Technologies	Radio engineering, electronics and telecommunications	Physics + Mathematics
	Telecommunications engineering	Physics + Mathematics

**Guide to educational programmes: “6B06201 - Radio Engineering, Electronics and Telecommunications” and “6B06204 - Telecommunications Engineering”**

**Educational programme: “6B06201 - Radio Engineering, Electronics and Telecommunications”:**

Professional activities: companies, organisations, manufacturing and business structures that design, create and operate technical equipment, technological systems and networks using various transmission media to provide modern multi-service telecommunications services.

**Subjects of professional activity:**

- Multiservice networks;
- Mobile, satellite, trunking and other wireless systems and networks;
- Cellular and space tracking systems;
- Video surveillance systems;
- Radio and television centres;
- Radio relay and multichannel transmission systems

**Learning outcomes:**

-Graduates will be able to plan and design wireless and wired telecommunications networks and systems.

-Graduates will be able to optimise network solutions based on modern technologies to improve network performance.

- Graduates will be able to analyse and make decisions in emergency situations and carry out technical maintenance of wireless and wired telecommunications networks and systems.

-Graduates will be able to understand current trends and innovations in wireless technologies, including the development of 5G, 6G and 7G.

### **Advantages of EP “6B06201 – RET”.**

The EP is licensed by the international accreditation agency ASIIN, which gives graduates the opportunity to work abroad without having to confirm their qualifications. Graduates of the OP are in demand in the labour market in the field of communications, IT and radio electronics. They combine fundamental engineering training and practice-oriented education, and possess knowledge of modern telecommunications and digital technologies. They have skills in the design, development and operation of electronic and radio engineering systems, multiservice, optical, satellite and mobile networks.

Graduates have the opportunity to work in various fields: mobile and satellite companies, banking, the National Security Committee, the Ministry of Internal Affairs, housing and utilities, industrial automation, and the defence industry.

### **Educational programme: “6B06204 – Telecommunications Engineering”**

Areas of professional activity: enterprises, organisations, manufacturing, business structures that operate technical equipment and technological systems, and networks using various transmission media to provide modern information and communication services.

#### **Areas of professional activity**

Radio and television centres; Satellite and space tracking systems; Radio relay transmission systems; Video surveillance systems; Digital television; Cellular and trunking communication networks; Infotelecommunication networks; Multichannel telecommunication systems.

#### **Learning outcomes:**

-Graduates will be able to design and develop telecommunications networks and systems based on various information and communication technologies.

-Graduates will be able to work with modern network equipment and software for telecommunications networks and systems, and will be able to analyse and make decisions in various situations.

-Graduates will be able to provide technical support for telecommunications systems and networks.

### **Advantages of EP “6B06204 – TI”.**

Graduates of EP have knowledge of modern data transmission technologies, mobile and wireless communications, and next-generation networks; they have practical training in the design, implementation, and operation of telecommunications systems.

Graduates have employment opportunities in cellular and telecommunications companies, the IT sector, industry, and research organisations.

Material and technical resources of the Telecommunications Engineering Department:

B121 – The Radio Assembly Laboratory is equipped with radio assembly stands consisting of 20 seats, each of which is equipped with a set of radio assembly tools and a digital tester, a C1-220-20MHz oscilloscope, and a 40-watt soldering station for assembly and measurement work. Each radio assembler workstation is also equipped with a SovPlym exhaust system. ALINCO trunking radio stations; M890R multimeters; Radio assembly unit; soldering irons.

B401 – The ‘Infocommunication Technologies’ Laboratory is an authorised D-Link training centre named after Professor Bektibaev T.K. It contains D-Link (China) network and subscriber access kits: IPDSLAM; 2nd and 3rd level Gigabit Ethernet switches; modem equipment; WI-FI network equipment; DWS3024-WI-FI wireless switches; video cameras; IP phones, gateways, PBX server type; SDH STM-4 equipment.

– B406 - Nero Smart Energy Laboratory - contains various IoT meters used in the housing and utilities sector of the Republic of Kazakhstan and serves to train specialists in SMART Energy.

B409 – The High-Speed Optical Communication Systems Laboratory is equipped with laboratory stands for researching the characteristics of optical fibre joints, optical fibre characteristics, and transmission optical modules for fibre-optic communication systems. ‘Research into the characteristics of receiving optical modules for fibre optic communication systems’ for studying multi-channel telecommunications systems.

B412 – The ‘Antenna-feeder devices and radio wave propagation’ is equipped with laboratory installations for studying the processes of radio wave conversion in waveguides of various types, as well as modern computers for emulating the operation of antenna-feeder devices and software for protecting information in telecommunications systems connected to a DHCP server. This laboratory also has a laboratory model for video surveillance.

The Cloud IoT Platforms Laboratory, equipped with a hardware and software complex (HSC), includes six student workstations and a telecommunications cabinet with server and communications equipment. Each student workstation has a switch for connecting all components into a single network, a PC, a LoRaWAN base station, a LoRaWAN hardware tester, and a set of LoRaWAN sensors: a magnetic contact sensor, a motion sensor, and a universal 5-in-1 sensor. The telecommunications cabinet contains a hardware server with pre-installed software, an L2 switch for connecting equipment on students' desks, and a router for remote access to the laboratory in distance learning mode.

The ‘Object-Oriented Programming and Mobile Technologies’ laboratory is equipped with four laboratory stands with interchangeable blocks of varying levels of complexity, from studying simple circuits to systems built on microcontrollers: Stand equipment for wireless technologies: Bluetooth, Wi-Fi, ZigBee, GSM, sensor networks; Basic elements of digital technology, ADC codecs; Test bench equipment for remote monitoring; Time division multiplexing communication systems.

Graduates work in various departments and positions, including management, engaged in service, operational, organisational and managerial, installation and commissioning, and design and calculation activities at various telecommunications companies: Astel JSC, Kazakhtelecom JSC, TransTelecom JSC, SKTB Granit LLP, Kap-Tel LLP, Eltex LLP, PSTK Bitelecom JSC, Altel JSC, KazTransCom JSC, W Telekom LLP, Kaztelradio JSC, Huawei-Almaty LLP, Tarlan Telecom LLP, Basis Telecom LLP, Mobile Telecom Service LLP, Alsi LLP, Otis LLP, Beeline, K'cell, LG, NERO GROUP.

### Group: Electrical Engineering and Power Engineering – B062

Educational program group	Educational program	Core subjects
Electrical engineering and power engineering	Thermal power engineering	Physics + Mathematics
	Autonomous energy systems	Physics + Mathematics
	Thermal power stations	Physics + Mathematics
	Nuclear power stations and installations	Physics + Mathematics
	Energy management and energy audit	Physics + Mathematics
	Electric power industry	Physics + Mathematics
	Integration and management of smart energy saving and energy efficiency technologies in the electric power industry	Physics + Mathematics

Bachelor's degree holders in thermal power engineering and this subprogramme possess the knowledge and skills necessary for work related to the design, installation, commissioning, and operation of:

- thermal power plants;
- industrial and heating boiler rooms;
- thermal technologies;
- centralised and autonomous energy supply for industrial enterprises and organisations;
- heating networks;
- water and fuel preparation systems;
- elements of automated control systems for thermal power engineering and heating technology facilities;
- non-traditional and renewable sources of thermal energy.

**The field of professional activity is:**

thermal power engineering as an integral part of technology, which includes a set of means, methods and techniques of human activity created for the generation and application of heat, control of its flows and conversion of various types of energy into heat.

The objects of professional activity of graduates are:

- energy systems and complexes;
- energy supply systems for technical facilities and economic sectors;
- energy supply systems for industrial enterprises;
- energy supply systems for autonomous facilities;
- power plants;
- power plants and complexes based on non-traditional and renewable energy sources;
- heat technology schemes for production;
- technological installations for the production, distribution and use of heat;
- steam and hot water boilers for various purposes, steam generators for nuclear power plants;
- steam and gas turbines, power units;
- installations for the production of compressed and liquefied gases, compressor, refrigeration and cryogenic installations, air conditioning systems, heat pumps;
- installations, systems and complexes for high-temperature and thermo-humidity technologies, chemical reactors;
- auxiliary thermal equipment, heat and mass transfer devices for various purposes;
- heating networks;
- installations for conditioning heat carriers and working fluids;
- process fluids, gases and vapours;
- melts, solids and bulk materials as heat carriers and working fluids for power and technological installations;
- fuel and oils;
- fuel and oil preparation systems;
- installations, systems and complexes for the preparation and use of water of standardised quality;
- technological installations for the preparation and use of water at thermal and nuclear power plants: pre-treatment equipment, ion exchange and membrane installations, technological installations for the preparation and use of water in heating networks and by heating consumers;
- recirculating water supply systems;
- wastewater treatment plants, systems and complexes;
- plants, systems and complexes for the treatment and use of water in the food industry;
- technological equipment for the treatment and use of water in evaporation and steam conversion plants;
- automatic control and management systems for thermal and electrical processes, installations, systems and complexes;
- regulatory and technical documentation and standardisation systems, methods and means of testing equipment and controlling the quality of products supplied.

**Graduates work in various departments and positions**, including management, engaged in service, operational, organisational and managerial, installation and commissioning, and design activities in:

**Power generation and distribution companies:** Almaty Electric Power Plants JSC, including TPP-1, TPP-2, CHP-3; Almatytelecommunenergo LLP; Almaty Heat Networks JSC; Alatau-Zharik JSC; Atyrau CHP; AES Ekibastuz LLP (Ekibastuz GRES-1); EEK JSC (Aksu GRES); JSC ‘Zhambyl GRES named after Batur’; JSC ‘Ekibastuz GRES-2 Station’; LLP ‘MAEK-Kazatomprom’ CHPP-2, CHPP-3; Karaganda GRES-2 (Kazakhmys Corporation) ; Pavlodar CHPP-3 (Pavlodarenergo JSC); Access Energo Petropavlovsk CHPP-2 LLP; Aluminium of Kazakhstan JSC (Pavlodar CHPP-1); CHPP-2 Astana Energoservice JSC;

Management and service companies: National Dispatch Centre of the System Operator, KEGOC JSC; KOREM (Kazakhstan Electricity and Power Market Operator); Pool REM (Electricity Reserve Pool) institution; Komgosenegonadzor;

Design and research organisations: KazNIPI EnergoProm; KazNIPII TES Energia; Chokin KazNli Energetiki;

Oil and gas production and refining companies involved in oil and gas transportation: Tengizchevroil; Karachaganak Petroleum Operating; KazMunayGas; KazTransGas; Aktobemunaygas; Kazakhoil, Petro Kazakhstan - SHNOS;

Mining companies; enterprises engaged in the processing of ores and minerals: Transnational company Kazchrome; Donskoy Mining and Processing Plant, Aktobe Ferroalloy Plant; Aluminium of Kazakhstan JSC and its enterprises; KazZinc JSC and its enterprises; Ust-Kamenogorsk Titanium-Magnesium Plant JSC.

**• The professional activities of a bachelor's degree holder in electrical power engineering and this subprogramme include:**

- power stations;
- electrical systems and networks of various voltages;
- relay protection and automation of electric power systems;
- power supply to enterprises in various industries;
- non-traditional and renewable energy sources;
- electromechanics;
- lighting technology and light sources;
- electric drives and automation of technological complexes.

**Material and technical resources of the departments:**

· educational and research laboratories on power stations, electrical networks and systems, relay protection of power systems, power supply, electrical apparatus, electrical machines, conversion technology, electrical engineering materials;

· Laboratory stand ‘Elements of a digital substation’: research into the reception of analogue signals on the Process Bus according to the IEC 61850-9-2LE protocol and the transmission of signals on the station bus according to the IEC 61850-8-1 GOOSE and MMS protocols between SIPROTEC 5 terminals. 5th series 7SA86 and 7UT85 SIEMENS relay protection and automation using the Merging Unit7SC805 equipment interface device (EID) and the PB-201 Processbus module

·Laboratory stand "Relay protection of radial lines based on Reyrolle 7S45 (Siemens) digital relays and rzasystems PC830-DT3, PC830-DZ

·Laboratory stand ‘Differential protection of power transformers based on Siemens 7UT612, ABB RET-670 digital relays’; MiCom P632, Schneider Electric

·Laboratory stand ‘Relay testing’ using the RETOM-51 relay testing device; RETOM-21;

· a set of training and laboratory stands from TUR (Germany) for testing high-voltage equipment and modern devices for assessing the condition of high-voltage electrical equipment.

-aactory relay protection racks; digital relay protection from Siemens, ABB, Schneider Electric, Rzasystems, and Mechanotronika.

-computer and television auditoriums and computer laboratory classrooms with specialised software;

-switching equipment up to and above 1000 V from ABB, Tavrida Electric, Schneider Electric, Moeller, and Siemens;

-assembly workshop for training in the profession of electrical fitter.

**Graduates work in various departments and positions**, including management, engaged in service, operational, organisational and managerial, installation and commissioning, and design activities in

power generation and distribution companies: Almaty Electric Power Plants JSC, including TPP-1, TPP-2, CHP-3; Almatytelecommunenergo LLP; Almaty Heat Networks JSC; Alatau-Zharik JSC; Atyrau CHP; AES Ekibastuz LLP (Ekibastuz GRES-1); EEK JSC (Aksu GRES); JSC ‘Zhambyl GRES named after Batur’; JSC ‘Ekibastuz GRES-2 Station’; LLP ‘MAEK-Kazatomprom’ CHPP-2, CHPP-3; Karaganda GRES-2 (Kazakhmys Corporation) ; Pavlodar CHPP-3 (Pavlodarenergo JSC); Access Energo Petropavlovsk CHPP-2 LLP; Aluminium of Kazakhstan JSC (Pavlodar CHPP-1); CHPP-2 Astana Energoservice JSC;

Management and service companies: National Dispatch Centre of the System Operator, KEGOC JSC; KOREM (Kazakhstan Electricity and Capacity Market Operator); Pool REM (Electricity Capacity Reserve Pool) institution; Komgosenegonadzor;

Design and research organisations: KazNIPI EnergoProm; KazNIPII TES Energia; Chokin KazNII Energetiki;

Oil and gas production and refining companies involved in oil and gas transportation: Tengizchevroil; Karachaganak Petroleum Operating; KazMunayGas; KazTransGas; Aktobemunaygas; Kazakhoil, Petro Kazakhstan - SHNOS;

Mining companies; enterprises engaged in the processing of ores and minerals: Transnational company Kazchrome; Donskoy Mining and Processing Plant, Aktobe Ferroalloy Plant; Aluminium of Kazakhstan JSC and its enterprises; Kazzinc JSC and its enterprises; Ust-Kamenogorsk Titanium-Magnesium Combine JSC.

### **Group: Electrical Engineering and Automation – B063**

<b>Educational programme group</b>	<b>Educational programme</b>	<b>Core subjects</b>
<b>Electrical engineering and automation</b>	<b>Automation and control</b>	<b>Physics + Mathematics</b>

**A bachelor's degree in automation and control provides the knowledge and skills necessary for work related to:**

-installation, commissioning, operation and maintenance of technical automation equipment, control and measuring instruments, industrial controllers and process control systems;

-designing, calculating and modelling automatic control systems, including linear and non-linear control systems, using modern CAD/CAE systems and mathematical modelling methods;

-development of algorithms and software for control systems based on industrial PLCs, microprocessor devices, SCADA systems, HMI interfaces and industrial communication networks;

- implementation and operation of digital and intelligent technologies of Industry 4.0, including IIoT, industrial analytics, Big Data, artificial intelligence elements, and digital control systems;

- organising and ensuring production and technological processes, controlling the parameters of technological facilities, analysing the condition of equipment, and improving the efficiency and reliability of automated systems;

- providing metrological support for production: selecting measuring instruments, performing verification, calibration, diagnostics and assessment of the quality of measurements of technological parameters;

- developing design and operational documentation for automation systems in accordance with the requirements of standards, regulatory and technical documentation and industrial safety rules;

-participation in the standardisation, certification and modernisation of equipment and automated systems, including the retrofitting of existing technological installations and their integration into the digital infrastructure of the enterprise;

-organizational and managerial activities in the field of automation and digitalization of production, including project management, economic efficiency assessment and ensuring compliance with international quality standards.

## **Material and technical resources of the Automation and Control Department:**

The material and technical base of the Automation and Control Department ensures the implementation of the modular educational programme '6B07108 – Automation and Control' and meets the requirements for training bachelors in the field of automation, digitalisation and Industry 4.0.

The department has specialised teaching and laboratory classrooms and computer classrooms equipped with modern equipment and software, including:

- **a laboratory for microprocessor technology and industrial controllers**, equipped with training stands based on microcontrollers and programmable logic controllers used in the study of the disciplines 'Microprocessor Devices in Control Systems', 'PLCs and Modern Automation Tools', 'Real-Time Operating Systems';

- **laboratory of control and measuring instruments and automation**, equipped with measuring instruments, process parameter sensors, actuators and test benches for studying the installation, adjustment, calibration and verification of measuring instruments within the disciplines of 'Control and Measuring Instruments and Automation' and 'Metrology and Measurements'. 'Installation and Adjustment of Control and Measurement Equipment';

- **process Automation Laboratory, equipped with training stands and simulators** for modelling and controlling typical technological facilities, including elements of automated process control systems (APCS), SCADA systems and human-machine interfaces;

- **modelling and digital engineering laboratory** equipped with specialised software for analysis, modelling and design of control systems, including MATLAB/Simulink, MathCAD, AutoCAD, specialised modelling environments and CAD systems used in coursework and project work;

- **computer classrooms equipped** with modern personal computers connected to a local network with Internet access, used for studying programming, databases, industrial analytics, Big Data, applied artificial intelligence, and cyber security of automated control systems;

- **for training and production stands and software and hardware complexes** studying industrial networks and data exchange protocols (Modbus, Profinet, OPC UA), data collection and processing systems, as well as digital control systems.

The department's material and technical base provides for all types of training sessions, laboratory and practical work, course and diploma projects, as well as the development of graduates' professional competencies in the design, operation and digital modernisation of automated control systems.

### **Graduates work:**

- in various departments and positions (including management) at companies that use automated and robotic processes, including:

- oil and gas production, oil refining, and transportation companies
- Tengizchevroil LLP;
- Karachaganak Petroleum Operating B.V. (KPO b.v.);

- PetroKazakhstan Oil Products LLP;
- Kazakhoil JSC;
  - KazInterGas JSC;
- KazMunayGas JSC;
- KazTransGas JSC;
- SNPS-Aktobemunaigas JSC;
- Zeinet LLP;
- KazNIPIEnergoProm JSC.
- Mining and metallurgical enterprises:
  - Kazakhmys Corporation;
  - Kazchrome Transnational Company;
  - KazZinc JSC and others.
  - Energy companies (hydroelectric power plants, thermal power plants, state district power plants, boiler houses):
    - Almaty Power Plants JSC (TPP-1, TPP-2, TPP-3);
      - AES Ekibastuz JSC (Ekibastuz State District Power Plant-1);
    - MAEK-Kazatomprom LLP (CHP-2, CHP-3) and others.
  - International and engineering companies in the field of automation and electric power:
    - Siemens AG;
    - ABB Ltd.;
    - Schneider Electric SE.
    - large manufacturing and infrastructure organisations:
      - Philip Morris Kazakhstan;
      - JSC Almaty International Airport and other airports in the Republic of Kazakhstan.
    - state institutions and financial organisations:
      - Ministry of Internal Affairs of the Republic of Kazakhstan;
      - National Security Committee of the Republic of Kazakhstan;
      - tax and financial authorities;
      - banks and financial institutions of various levels — Halyk Bank JSC, Kazkommertsbank JSC, Home Credit Bank JSC.

Graduates are successfully employed not only in the Republic of Kazakhstan, but also in neighbouring and distant foreign countries.

**Group: Mechanics and Metalworking – B064**

<b>Educational programme group</b>	<b>Educational programme</b>	<b>Core subjects</b>
Mechanics and metalworking	Electronic engineering technologies	<b>Physics</b> + <b>Mathematics</b>
	Robotics and mechatronics	<b>Physics</b> + <b>Mathematics</b>
Mechanics and metalworking	Biotechnical and medical systems and devices	<b>Physics</b> + <b>Mathematics</b>

The knowledge and skills acquired by a bachelor's degree holder in electronics and robotics enable him to competently engage in:

- installation, commissioning, and operation of modern electronic systems;
- development of new devices and implementation of modern technologies for the manufacture and operation of technical means of automation and telemechanics;
- organising and effectively conducting production control of technological processes and the quality of finished products;
- performing metrological verification of the main means of measuring the quality indicators of manufactured products.

The material and technical base of the Department of Aerospace and Electronic Engineering:

- is supported by a cooperation agreement with the Siemens representative office in Kazakhstan;
- consists of 9 laboratories representing a single production process with a central control room equipped with the latest Simatic 1200 and 1500 controllers;
- microprocessor and other electronic equipment from DEGEM System, Texas Instruments, ATMEL, National Instruments.

The professional activities of graduates of bachelor's programmes in instrument engineering include:

- electronic-mechanical, magnetic, electromagnetic, optical, thermophysical, acoustic and acousto-optical methods;
- instruments, complexes and element base of instrument engineering;

- software and information and measurement technologies in instrument engineering;
- technologies for the production of materials, components, instruments and systems;
- organisation of the work of production teams;
- planning of design and engineering work and monitoring of its implementation;
- technical equipment and organisation of workplaces;
- implementation of technical control and participation in the management of the production of instrument engineering products.

**The objects of professional activity for graduates are:**

For the Electronic Engineering Technologies programme

- electronic, electrical and microelectronic devices and systems;
- embedded and cyber-physical systems, automation and control systems;
- measuring, diagnostic and control and measuring instruments and complexes;
- hardware and software complexes based on microcontrollers, PLDs, DSPs;
- data collection, processing and transmission systems;
- technological processes for the design, manufacture, configuration and operation of electronic equipment;
- software and information support for electronic systems;
- objects of industrial electronics, energy, telecommunications, medicine and smart systems.

**For the Robotics and Mechatronics EP**

- robotic systems and complexes (industrial, mobile, service, medical);
- mechatronic systems and components (drives, manipulators, actuators);
- automatic and adaptive motion control systems;
- sensor systems, machine vision and navigation systems;
- embedded control systems for robots and mechatronic devices;
- intelligent and autonomous technical systems;
- production and technological processes using robotics;
- software and hardware complexes for modelling, control and diagnostics.

A Bachelor of Biotechnical and Medical Systems and Devices possesses the knowledge and skills necessary for work related to:

- the design, development and construction of biotechnical and medical systems, devices and equipment for diagnosis, treatment and rehabilitation;
- applying knowledge of human anatomy and physiology in conjunction with engineering disciplines (materials science, strength of materials, electrical engineering, electronics) in the creation of medical technology;
- developing, testing and implementing medical software and information systems, including systems for processing biomedical signals and medical data;
- ensuring the clinical, electrical and biological safety of medical equipment, compliance with standards, certification requirements and biocompatibility of materials;
- conducting experimental research, measurements and analysis of biomedical signals using data collection and processing systems;

modernisation, adaptation and improvement of the functionality of medical devices and equipment, taking into account modern technological and clinical requirements;

- participation in the development, support and implementation of medical devices at all stages of their life cycle — from technical specifications and design to clinical application and operation.

**Material and technical resources of the Automation and Control Department:**

- Microprocessor technology laboratory equipped with training stands for microprocessor controllers from Microchip, Siemens, ABB, and Moeller, with visualisation and interactive control software;

- laboratories of medical technology and physiological devices from Adamant Group, designed for studying the principles of operation and use of medical and biomedical devices;

modelling and digital engineering laboratory, equipped with specialised software for analysis, modelling and design of control systems, including MATLAB/Simulink.

**Group: Air Transport and Technology – B067**

<b>Educational programme group</b>	<b>Educational programme</b>	<b>Core subjects</b>
Air transport and technology	Aerospace engineering	<b>Physics + Mathematics</b>
	Drones and autonomous systems	

**Graduates of this programme possess the knowledge and skills necessary for work related to the design, calculation, testing, and operation of:**

- ground technical and launch complexes, onboard control systems for spacecraft and booster stages;
- rocket engines;
- space and geoinformation technologies and systems for their implementation;
- unmanned aerial vehicles (UAVs, drones) of various types and purposes;
- sensor systems and UAV payloads;
- software and hardware complexes for autonomous flight, monitoring and data processing.

**Field of professional activity:**

- civil and defence aerospace sector and unmanned aerial vehicle technology sector;
- aviation and rocket and space engineering;
- design and engineering bureaus and engineering centres;
- ground-based space infrastructure (mission control centres, tracking stations);
- companies in the field of satellite communications, GNSS and geomonitoring;
- startups in the field of unmanned aerial vehicles, CubeSat and New Space;
- organisations using drones for monitoring, mapping, agriculture, geodesy, logistics, inspections and search and rescue operations.

**Types of professional activities:**

- Development, modelling and design of aerospace products, unmanned aerial vehicles, autonomous systems and their components;
- organisation and support of production, assembly and testing processes for aircraft, UAVs and autonomous platforms;
- maintenance, diagnostics, reliability control and resource management of aerospace systems, unmanned and autonomous technical means;

- analysis of the characteristics and behaviour of aerospace systems, UAVs and autonomous platforms using computational and experimental methods;
- conducting applied and fundamental research in the field of aerodynamics, flight dynamics, structures and control systems.

### **Requirements for graduates of these educational programmes:**

Graduates must:

- *know*: methods of design, engineering analysis, assembly, integration, testing and production of spacecraft, unmanned aerial vehicles and autonomous systems; principles of implementation of projects for the creation of space technology, unmanned aerial vehicles and autonomous systems, their life cycle, sequence and stages; the basics of spacecraft, unmanned aerial vehicles and autonomous systems; the main types of engines and power plants; the basics of complex technical systems design and automated design methods; the principles of operation of satellite, navigation and sensor systems, including on-board systems of unmanned aerial vehicles; Earth remote sensing data formats, the basics of photogrammetric processing and methods of geospatial data analysis; current standards and regulations in the field of operation, processing and analysis of Earth remote sensing data and data obtained from unmanned platforms;
- *be able to*: work with regulatory technical and operational documentation, diagrams and drawings for technological equipment, technical systems and units; monitor orbital parameters and predict orbits; apply mathematical modelling and analysis methods when assessing data quality; participate in the preparation and conduct of negotiations, the drafting of standard contracts and orders;
- have an understanding of: the current global level of development of space technology, unmanned aerial vehicles and autonomous systems;
- have skills in: the design and operation of space technology, unmanned aerial vehicles and autonomous systems;
- be competent in: international standards, technical means and methods, and information technologies.

The structure of the educational programmes allows students to participate in research work and master the culture of research.

### **Material and technical resources of the Department of Aerospace and Electronic Engineering**

The department has the following laboratories:

- TERRA space environment simulator complex
- Mission Control Centre (MCC)
- Intelligent robotic systems
- Prototyping and UAVs named after Baikonov
- Microelectronics
- Measurement technologies
- FabLab training workshop

AutoCad, SolidWorks, Mathlab, C++ Visual Studio environment, MS Project, ENVI and other software products are used for laboratory, coursework and calculation and graphic work.

Bachelors of these educational programmes have the opportunity to continue their education in master's and doctoral programmes.

**Graduates work at:**

- National Space Agency of the Republic of Kazakhstan (Kazkosmos);
- Republican Centre for Space Communications JSC;
- Kazakstan Garysh Sapary National Company JSC;
- Institute of Space Engineering and Technology DTOO
- Kazakhtelecom, Kazakhstan's national telecommunications operator, and other telecommunications operators.

**Graduates are awarded an academic degree of Bachelor of Engineering and Technology in the educational programme 6B07128 Aerospace Engineering (or 6B07135 Drones and Autonomous Systems).**

**Agricultural Engineering – B183**

<b>Educational programme group</b>	<b>Educational programme</b>	<b>Core subjects</b>
Agricultural Engineering	Energy supply for agriculture	Physics + Mathematics
	Hybrid power supply systems for agro-industrial facilities	Physics + Mathematics

• **Field of professional activity:**

· the field of science and technology, which includes a set of technologies, means, methods and techniques of human activity aimed at creating conditions for the production, transmission, distribution and consumption of energy by agricultural enterprises and the population.

Objects of professional activity:

- enterprises for the production;
- transmission, distribution, consumption and conservation of energy in the housing and communal services sector of cities and rural areas;
- substations;
- distribution networks and their relay protection and automation;
- electricity and heat supply to industrial enterprises in the agro-industrial complex;
- energy supply to remote consumers;
- operation of electrical and technological installations in agriculture.

**Professional activities:**

- thermal and electrical power stations;
- electrical systems, substations and networks;
- electricity, heat and gas supply to enterprises and settlements in rural areas;
- electrification and automation of agricultural production;
- energy conservation and renewable energy sources;
- electromechanics;
- technological installations and systems;
- lighting and irradiation systems;
- electric drive and automation of technological complexes.

**Material and technical base:**

- educational and research laboratories for electrical machines;
- laboratories for low- and medium-voltage electrical equipment;
- pilot industrial installations of the institute's industry-specific laboratories;
- digital relay protection terminals from leading electrical equipment manufacturers;
- computer and television classrooms;
- computer laboratory classes with specialised software

**Group: Sanitary and preventive measures – B094**

<b>Educational programme group</b>	<b>Educational programme</b>	<b>Core subjects</b>
Sanitary and Preventive Measures	Life Safety and Environmental Protection	Physics + Mathematics

Graduates of the educational program “Life Safety and Environmental Protection” are versatile engineering and technical specialists capable of ensuring the safety of people, industrial operations, and the environment in the context of intensive development of industry, energy, transport, and urbanized areas.

Given the industrial profile of the economy of the Republic of Kazakhstan, the growth of the energy sector, the oil and gas industry, construction, logistics, and infrastructure projects, specialists in the field of life safety and environmental protection are among the consistently in-demand professionals.

**Scope of Professional Activity**

The professional field of graduates covers virtually all sectors of the economy and the social sphere where risks to human life, health, and the state of the environment are present:

**Industrial and Production Sector:**

- enterprises in the oil and gas, energy, mining, metallurgical, chemical, and construction industries;
- industrial and manufacturing complexes;
- energy sector facilities (thermal power plants, hydroelectric power plants, power transmission lines, gas pipelines, oil refineries).

**Public and Quasi-Public Sector:**

- state supervisory and regulatory authorities in the field of occupational health and safety, industrial safety, and environmental protection;
- emergency management departments;
- departments of natural resources and environmental management regulation;
- sanitary-epidemiological and inspection services.

**Design, Expert, and Consulting Activities:**

- design and engineering companies;
- environmental and industrial expert organizations;

- auditing and certification centers;
- companies engaged in environmental standard-setting, Environmental Impact Assessment (EIA), Maximum Permissible Emissions (MPE), Maximum Permissible Discharges (MPD), etc.

**Research and Educational Sector:**

- research institutes;
- educational institutions;
- environmental and public health monitoring centers.

**Objects of Professional Activity**

The objects of professional activity of graduates include:

- industrial and technogenic environments;
- technological processes, equipment, and engineering systems;
- sources of physical, chemical, biological, and radiation exposure factors;
- occupational health and safety, industrial safety, and environmental protection systems;
- natural and man-made emergency situations;
- systems for monitoring, control, and assessment of environmental conditions and working conditions;
- measures aimed at preventing accidents, occupational injuries, and occupational diseases.

**Future Employment Opportunities for Graduates**

Graduates of the educational program are successfully employed and may hold the following positions:

**Engineering and Technical Positions:**

- Occupational Health and Safety Engineer;
- Industrial Safety Engineer;
- Environmental Engineer;
- Safety Specialist;
- Environmental Monitoring Specialist.

**Expert and Supervisory Positions:**

- Environmental Auditor;
- Environmental and Industrial Safety Inspector;
- Occupational Health and Safety Inspector;
- Environmental Impact Assessment (EIA) Expert.

**Managerial and Project Positions (with experience):**

- Head of Occupational Health, Safety and Environmental Protection Department;
- Head of Environmental Department;
- Specialist in Design and Engineering Companies;
- HSE (Health, Safety & Environment) Coordinator.

**Potential Employers**

Major industrial and infrastructure companies of Kazakhstan:

- JSC “KEGOC”
- JSC “KazMunayGas” and its subsidiaries
- LLP “Tengizchevroil”

- JSC “AIES”
- JSC “Intergas Central Asia”
- LLP “Asian Gas Pipeline”
- LLP “Smart Engineering”
- Design and expert organizations in the oil and gas and energy sectors

**Government Bodies:**

- Departments of Emergency Situations;
- Departments of Natural Resources and Environmental Management Regulation;
- Sanitary-Environmental and Supervisory Authorities.

**Material and Technical Support of the Educational Program**

The implementation of the educational program 6B11201 “Life Safety and Environmental Protection” is supported by a modern material and technical base, focused on developing practical professional competencies that are in demand at enterprises in the energy, industrial, and environmental sectors.

Students’ practical training is carried out in specialized educational and research laboratories of the Department of “Ecology and Engineering Management,” equipped with functioning laboratory installations and stands that simulate real conditions of the industrial environment.

**Laboratory A-117 “Industrial Sanitation and Occupational Hygiene”**

This laboratory is designed for studying factors of the industrial environment, assessing working conditions, and developing skills to ensure worker safety.

**Main Laboratory Work and Equipment:**

- Study of industrial vibrations and the effectiveness of vibration isolation;
- Determination of harmful gas concentrations in the air of industrial premises;
- Protection against industrial noise;
- Study of meteorological conditions in industrial premises;
- Measurement of human body electrical resistance;
- Evaluation of the effectiveness of grounding;
- Study of protective grounding of electrical installations;
- Inspection of electrical equipment insulation;
- Assessment of dust levels in the work area;
- Study of industrial lighting characteristics.

During laboratory sessions, students master methods for measuring, analyzing, and interpreting indicators of working conditions, as well as developing measures to improve them in accordance with current regulatory requirements.

**Laboratory A-119 “Safety in Operation of Electrical Installations”**

This laboratory focuses on developing competencies in electrical safety and industrial safety, which are especially relevant for enterprises in the energy sector.

**Laboratory Equipment:**

- “Protective Grounding and Neutraling” (ZZZ1-C-R);
- “Electrical Safety in Installations up to 1000 V” (EBEU2-C-R);
- “Fundamentals of Electrical Safety” (OEB1-C-R).

The use of these installations allows students to simulate emergency and non-standard situations, analyze causes of electrical injuries, and develop measures to prevent them.

### **Academic Degree**

Upon completion of the program, graduates are awarded the academic degree: *Bachelor in Services under the educational program 6B11201 – Life Safety and Environmental Protection.*

## **5. STUDENT CODE OF HONOR**

The university has developed and implements a “**Student Code of Honor.**”

### **Brief Overview of the Document and Its Compliance:**

- **Mandatory Observance:** The document implies voluntary adherence to ethical standards based on honesty, responsibility, and respect. All students of the university are expected to comply with the Code.

- **Purpose and Content:** The Code regulates corporate principles, rules of conduct, and ethical norms. It enshrines values such as fairness, trust, and integrity.

- **Main Rules:** The document prohibits academic dishonesty (plagiarism, cheating), bribery, and disciplinary violations. It also outlines behavioral norms within university buildings: adherence to the dress code, punctuality, careful treatment of university property, and polite communication with faculty and fellow students.

- **Responsibility:** Students who violate the Code may face disciplinary measures, ranging from a warning or reprimand to expulsion from the university.

**Reference:** <https://energo.university/ru/resources/material/50/>

## **6. STUDENT ACADEMIC WORK**

A student’s academic work consists of classroom work and independent work (SRSP and SRS) for all disciplines studied concurrently during the semester. The average weekly workload should not exceed 57 hours (excluding the discipline “Physical Education”).

Attendance:

Attendance at classroom sessions is mandatory.

If a student misses laboratory classes, they are required to make them up during their free time and submit (defend) their reports to the instructor. Other types of classes, if missed, must be completed by the student at the instructor’s request.

For each discipline, the curriculum includes calculation-graphic tasks and semester assignments, and for certain disciplines — coursework or projects. Completion of these tasks is strictly mandatory. Students who fail to complete them are not allowed to take the final assessment (exam) for the discipline.

These tasks are completed by students as part of SRSP and SRS in accordance with the approved academic calendar.

While completing assignments, students have the opportunity to receive consultations from instructors according to the SRSP schedule posted at the faculty and relevant departments.

To complete all types of independent work, students may use the library's book collection, reading rooms, and computer labs of the university and departments.

Falling behind in the academic schedule, as long-term practice shows, complicates a student's further studies (including timely access to exams) and is reflected in the final grade for the discipline.

In order to monitor students' academic work in all studied disciplines during the academic period, student assessment is conducted in accordance with the academic calendar.

During the assessment, instructors evaluate a student's performance in the discipline (adherence to the academic schedule, class attendance) and report the results to the dean's office.

If a student fails to be assessed in three or more disciplines and has a significant number of unexcused absences (more than 30 classroom hours), disciplinary measures may be applied, up to and including expulsion from the university.

### **Evaluation of Student Academic Work**

In the credit-based system, the methods for assessing students' academic achievements may vary across disciplines. Therefore, students must have complete information about the content and types of classes for a specific discipline, as well as the system for evaluating their work and knowledge.

This information is provided by the instructor teaching the discipline and is reflected in the **syllabus**, which is posted on the AUES website.

In general, the quality of knowledge acquisition at the university is monitored through:

- Ongoing assessment of student work (class attendance, adherence to the academic schedule, defense of laboratory work);
- Mid-term assessment (tests, quizzes, colloquia, defense of practical exercises, calculation-graphic tasks, coursework);
- External evaluation of student achievements in the 4th year;
- Final state assessment: qualification exam and defense of the final thesis in the 4th year.

The significance of different types of student work assessment and the system for evaluating mastery of a discipline are determined by the instructor or the department.

In the final grade for a discipline, the results of ongoing assessment and mid-term evaluation (so-called *admission rating score*) account for 60% of the grade, while the intermediate assessment (final exam for the discipline) accounts for 40%.

The final control of a discipline within the intermediate assessment is organized in two stages:

First stage:

The instructor conducting the discipline holds a final mid-term (semester) assessment through student testing at the end of the academic period or immediately before the exam.

If the student achieves the established minimum score, the admission rating is calculated, and the student is allowed to proceed to the second stage of the final control (exam) for the discipline.

If the student's knowledge is below the required level, the admission rating is not calculated.

A student is allowed to take the final mid-term assessment only upon full completion of the discipline program.

Second stage:  
The exam (oral, written, or combined) is conducted by the examiner to determine the quality of knowledge mastery (Excellent, Good, Satisfactory, Unsatisfactory, i.e., from 100% to 0%).

Upon successful completion of the intermediate assessment, the exam grade is recorded in the exam sheet. The final grade for the discipline is then calculated, taking into account both the exam score and the admission rating.

In the exam sheet, instructors record the grades for the first and second stages and submit it to the office registrar for input into the university information system IS-VUZ "PLATONUS". The system calculates the final grade for the discipline, and the office registrar prints the final sheet for verification and approval by the examiner.

Based on the results of the intermediate assessment, the dean's office calculates the student's current weighted average grade (GPA) for the academic period, represented as a semester:

$$GPA = \frac{(K_1 \times I_1 + K_2 \times I_2 + \dots + K_n \times I_n)}{K_1 + K_2 + \dots + K_n}$$

where:

- $K_n$  – the credit value of the discipline;
- $I_n$  – the final grade in percentage;
- $n$  – the number of disciplines studied in the semester.

Note: Final grades for practical training and physical education are included in the GPA calculation.

A student who is not allowed to take the final assessment in a discipline due to results of ongoing and mid-term evaluations, or who receives an unsatisfactory grade on the final assessment (exam), is considered unsuccessful.

Students may eliminate existing academic debts by retaking the discipline on a paid basis during subsequent academic periods:

- For fall semester disciplines – during the spring semester (up to 4 credits);
- For spring semester disciplines and unresolved fall semester debts – during the summer (additional) semester of the current academic year. The total credit load for retaken disciplines in the summer semester must not exceed 8 credits.

The summer academic semester, lasting 4 weeks, is organized during the summer vacation period.

During the summer semester, students may:

- Retake, on a paid basis, disciplines in which they received unsatisfactory grades;
- Retake, on a paid basis, certain disciplines to improve their weighted GPA (if it is below the transferable GPA\*);
- Fulfill their need for additional learning.

Information regarding the Registrar's Office can be found at the following links:

- <https://energo.university/ru/resources/material/45/get-file/ru/>
- <https://energo.university/ru/resources/material/34/get-file/ru/>
- <https://energo.university/ru/resources/material/53/get-file/ru/>

### **Retaking Disciplines in the Spring and Summer Semesters**

Retaking disciplines in the spring and summer semesters is conducted according to a schedule developed by the Dean's Office of the Faculty of Continuing Education (FDO). Classes for retaken disciplines include lectures, laboratory and practical (seminar) sessions, other mandatory and independent work, consultations, and exams.

A student who *does not achieve the required transferable GPA (provided they have fully completed the course program)\** or fails the final assessment in disciplines that are prerequisites for the next year of study in their specialty remains enrolled for repetition of the year on a paid basis.

In this case, the student either completes their previously approved individual study plan or forms a new individual study plan, which may include:

- Disciplines in which the student failed the final assessment;
- Previously studied disciplines to improve the transferable GPA;
- Elective disciplines from the catalog that the student wishes to study additionally.

A student who has not completed the annual study program (**i.e., has academic debts**) has the right to **retake the corresponding disciplines on a paid basis in the next academic year**, provided that the disciplines in question are **not prerequisites**.

In this case, the **total duration of study** is extended proportionally to the number of credits of the disciplines with academic debts (based on the **maximum allowable annual workload of 40 credits**).

Students studying **under the state order** who must repeat the year **lose the state educational grant** for the subsequent period of study.

The **cost of retaking disciplines** is determined by the **number of credits** the student is required to study according to their individual study plan.

## **7. AUES DORMITORIES**

The dormitories of Gumarbek Daukeyev Almaty University of Power Engineering and Telecommunications (AUES) are located in the central part of Almaty, providing convenient transport access and close proximity to university

buildings and city infrastructure. For non-local students in need of housing, there is the option to stay in one of the university's three dormitories.

**Dormitory No. 1** is located at **1 Polytechnic Street**, just a **5-minute walk** from the university. This is an optimal choice for students who value proximity to classrooms and the ability to efficiently plan their time between study and leisure.

**Dormitories No. 2 and No. 3** are located at 14a Shashkina Street, approximately a 15-minute walk from the university.

The AUES dormitories provide conditions not only for living but also for an active, healthy, and vibrant student lifestyle. Facilities include fitness rooms and table tennis areas to maintain physical fitness, as well as reading rooms for completing university assignments, relaxing, and socializing with friends.

Accommodation is organized in double, triple, and quadruple rooms, each furnished with the necessary furniture for comfortable living and effective organization of personal space. Common areas and facilities are regularly maintained in proper sanitary condition.

Residents also have access to household and laundry rooms, making daily life convenient and independent.

**On the grounds of Dormitory No. 3** is the Youth Center “Entel” — a space for creativity, self-realization, and social engagement. Here, students from across the university can participate in cultural, educational, and socially significant activities, develop leadership skills, meet like-minded peers, and implement their own initiatives.

The AUES dormitories are more than just a place to live; they represent a complete student environment, where a friendly community is formed, personal growth is supported, and conditions are created for successful studies and a vibrant, fulfilling student life.

### **Accommodation Procedure**

To arrange accommodation in a dormitory, students must provide the following documents:

- Identity card — 4 copies;
- Photographs (3×4 cm) — 3 copies;
- Fluorography — valid for no more than 10 months at the time of submission;
- Medical certificate (form No. 075-U) — valid for no more than 12 months at the time of submission;
- Payment for accommodation must be made via KaspiQr from the day of arrival in the current month.

## 1. STUDENT ORGANIZATIONS

1. **AUES\_A.T.A** – the university’s promotional (agitational) team.
2. **Ulagat** – a club dedicated to promoting the native language, traditions, national culture, and values of the Kazakh people. Special attention is given to the history of the Kazakhs and their legendary figures. In today’s era of globalization, the club firmly upholds the idea of preserving the cultural heritage of the Kazakh people and ensuring its continuity from generation to generation.
3. **Jaidarman** – a place where humor and creativity meet university life! Our club brings together students who strive to develop their acting and public speaking skills.
4. **CCC (Children Charity Club)** – a charitable club that organizes events of various scales, from charity movie screenings to city-level fairs and, most importantly, visits to orphanages where we can bring a little light and joy into children’s lives.
5. **UNIX** – the club aims to develop students’ musical, vocal, and instrumental potential. Members organize musical evenings, reporting concerts, and events not only at the university level but also at the city level.
6. **AUES Dance Club** – a club for students passionate about dance, striving for creative growth, stage performance, and representing our university at various venues.
7. **Energo Debate Club** – for students who enjoy critical thinking and defending their point of view. In our club, you will develop public speaking skills, learn to build logical arguments, and confidently present your ideas.
8. **Whymper Team** – our club unites people who want to spend time outdoors, enjoy the beauty of nature, and take a break from daily routine.
9. **Energo Team** – the club organizes various events within our university: dance evenings, competitions, and student leisure activities. Here, you will discover new opportunities and gain bright, unforgettable emotions of true student life.
10. **Orta** – a student club that brings together active, creative, and initiative-driven students. We create a platform for self-realization and organize vibrant university events that become major campus highlights.

11. **Innovation Troubleshooters** – a club focused on developing the IT sphere and creating projects in this field.

12. **Enactus** – the largest global student business community engaged in implementing business projects.

13. **Kartal** – a dance club focused on developing the “Lezginka” dance style.

14. **Energo Cyber League** – a club engaged in esports activities.

### STUDENT CLUBS

No.	Name of the Student Club	Brief Information
1	<b>Whymper Team</b>	A club that organizes mountain hikes and outdoor trips.
2	<b>Children Charity Club</b>	A charitable club engaged in volunteer and charity activities.
3	<b>AUES Dance Club</b>	A dance club.
4	<b>Enactus</b>	The largest global student business community engaged in implementing business projects.
5	<b>Zhaidarman</b>	The Kazakh KVN (Club of the Funny and Inventive) League.
6	<b>Ulagat</b>	A club dedicated to preserving the Kazakh language, traditions, culture, prominent historical figures, and national values.
7	<b>UNIX</b>	Short for “Unique.” The club develops students’ musical, instrumental, and vocal potential.
8	<b>Energo Debate Club</b>	A club developing the debate movement at AUES. Students regularly represent the university at national and city-level tournaments while continuously improving their debating skills.
9	<b>Energo Team</b>	A club organizing events and student leisure activities.
10	<b>Orta</b>	A club organizing events and student leisure activities.
11	<b>Innovation Troubleshooters</b>	A club engaged in IT projects.
12	<b>Kartal</b>	A dance club focused on the “Lezginka” style.
13	<b>Energo Cyber League</b>	A club engaged in esports activities.

## **8. MILITARY DEPARTMENT**

Military training under the Reserve Officer Program includes the training of citizens as reserve officers. It is intended for students of higher education institutions (hereinafter referred to as HEIs) who study at military departments in order to form the mobilization reserve of the Republic of Kazakhstan and to staff the Armed Forces of the Republic of Kazakhstan, other troops, and military formations in peacetime.

Selection for training at the Military Department is conducted on a competitive basis in accordance with the enrollment plan submitted annually to the Military Department by the Ministry of Education and Science of the Republic of Kazakhstan no later than March 1 of the admission year.

Full-time students who are citizens of the Republic of Kazakhstan, under the age of 25 in the year of the competition, and who have no criminal record are eligible to participate in the competition.

The Military Department accepts application documents until May 20 of the admission year, and medical examination results until May 31 (inclusive) of the year in which the competition is held.

### **Selection Competition for Training at the Military Department**

The selection of students for training at the Military Department is conducted in **three stages**.

At the **Institute of Military Affairs (Military Department) of Satpayev KazNITU**, applications are accepted for participation in the competitive selection for training under the Reserve Officer Program on a **paid (tuition) basis**. Applications are accepted from **full-time students (male and female) in the 1st and 2nd year**, who are citizens of the Republic of Kazakhstan and not older than 25 years.

**Application period:** February – May (for 2018, specifically from March 1 to May 20).

#### **Required documents:**

- Military registration certificate (original and copy)
- Identity card (original and copy)
- Student ID
- Proof of residence (address certificate)

- Certificate of no criminal record
- Photograph 3×4 cm – 1 piece

**The competition is conducted in three stages:**

1. **Medical examination** in accordance with the *Rules for Conducting Military Medical Examinations* and the *Regulation on Military Medical Examination Authorities in the Armed Forces of the Republic of Kazakhstan*, approved by Order No. 373 of the Minister of Defense of the Republic of Kazakhstan dated July 2, 2015 (registered in the State Register of Regulatory Legal Acts under No. 11846).

2. **Professional and psychological testing.**

3. **Physical fitness assessment.**

Each stage of the competition may be undertaken **only once**. Applicants who fail to pass a previous stage **are not allowed to proceed to the next stage**.

**Application period for the Military Department:** February – May.

## **9. INTERNATIONAL COOPERATION**

### **Academic Mobility**

Academic mobility refers to the temporary relocation of students or teaching/research staff to another higher education institution (domestic or abroad) for a specific academic period—typically a semester or an academic year—including participation in academic or industrial internships. The completed courses and programs must be officially recognized and credited at the home university.

External (international) academic mobility refers to students of the University studying at foreign universities, as well as master’s and doctoral students studying or conducting research at international educational or scientific institutions.

Internal (national) academic mobility refers to students, master’s, and doctoral students studying or conducting research at other educational or scientific institutions within Kazakhstan.

Assignments for academic mobility are conducted in accordance with the Regulations on Academic Mobility of Satpayev KazNITU. The standard period for academic mobility is one semester or the duration of a single module. Students may participate in mobility programs during the academic year or in the summer (or winter) semester.

### **Selection Criteria for Students Participating in Academic Mobility:**

1. High academic performance.
2. High proficiency in the language of the host university or in English.
3. Alignment of the student’s study program with that of the host university.
4. Acceptance by the host university.

According to funding regulations, **budgetary funds cover the following expenses:**

- Purchase of round-trip airfare.
- Visa processing.
- Medical insurance.
- Accommodation fees.

## **International Department**

The **International Relations Department** is responsible for implementing the university's international activities and fostering international cooperation.

**Mission:**

- Promote the concept of academic mobility and fulfill the key objectives of the Bologna Process.
- Enhance the international reputation of the university as a highly professional educational and research center.
- Ensure the quality of educational and scientific activities at the university in line with modern global standards.
- Increase the university's competitiveness in the educational services market.

**2. Dual Degree Program: Energo University – North China Electric Power University (NCEPU)**

Energo University implements a bachelor's dual degree program in cooperation with North China Electric Power University (NCEPU, China) for 2nd-year students in the educational program group B062 "Electrical Engineering and Power Engineering."

North China Electric Power University (NCEPU) is one of the leading specialized universities in the People's Republic of China in the fields of electric power engineering, energy systems, smart grids, and renewable energy. The university is among the key higher education institutions in China responsible for training highly qualified specialists for the energy industry.

According to the US News University World Ranking, North China Electric Power University ranks:

- 33rd place in the world in Green and Sustainable Science and Technology
  - 40th place in the world in Energy and Fuels,
- which confirms the university's high international academic and research status in the fields of energy and sustainable development.

The dual degree program aims to:

- integrate the educational standards of Energo University and NCEPU;
- promote academic mobility for students;
- develop professional competencies in traditional and new energy technologies;
- train specialists of an international level, competitive in the global labor market.

Upon completion of the program, graduates receive two bachelor's degrees:

- **Degree from Energo University**
- **Degree from North China Electric Power University (NCEPU)**

**2. NCEPU Educational Programs**

Students at NCEPU study under the following educational programs:

1. Electrical Engineering and Automation
2. New Energy Science and Engineering

**2.1. Program: Electrical Engineering and Automation**

The Electrical Engineering and Automation program is designed to train specialists in the design, operation, and management of power systems, electrical networks, electric drives, and automated control systems.

The program is implemented in accordance with NCEPU educational standards and the coordinated curricula of Energo University, ensuring the comparability of learning outcomes and academic recognition of completed courses.

## **2.2. Program: New Energy Science and Engineering**

The New Energy Science and Engineering program aims to train specialists in renewable and alternative energy sources, sustainable development, and energy innovations. The program focuses on developing the competencies required for professional work in the fields of green energy, energy transition, and innovative energy technologies.

## **3. Structure and Organization of the Dual Degree Program**

The dual degree program is implemented using a **networked educational model** and involves **joint organization of the academic process** by Energo University and NCEPU.

Program structure:

- Years 1–2 (Semesters 1–4) – Energo University
- Years 3–4 (Semesters 5–8) – North China Electric Power University (NCEPU)

The curricula are developed based on the educational standards of Energo University and NCEPU and must be mutually approved by both universities.

Transfer of students to NCEPU is conducted on a competitive basis, taking into account:

- Academic performance results
- English language proficiency
- Entrance exam results (if applicable)
- No outstanding academic debts

Students who successfully pass the selection process are admitted to NCEPU based on a training agreement and an academic agreement between the universities.

## **4. Final Assessment and Defense of the Bachelor's Thesis**

The final state assessment is conducted in the form of a joint defense of the bachelor's thesis with the participation of representatives from Energo University and North China Electric Power University (NCEPU).

The NCEPU bachelor's degree is awarded upon successful defense of the bachelor's thesis and full completion of the dual degree program curriculum.

## **5. Required Documents for Participation in the Dual Degree Program**

1. Application for participation in the dual degree program
2. Annex to the application
3. Consent to participate in the program
4. Copy of educational certificate (diploma)
5. Copy of identity document
6. Photographs 3×4 cm (4 pieces)
7. Academic transcript
8. Certificate of English proficiency (IELTS 5.5 or TOEFL iBT 46)

## **3. Dual Degree Program with Anhalt University of Applied Sciences (Germany)**

Master's students at **Energo University** enrolled in the following programs:

1. Thermal Power Engineering

2. Electrical Power Engineering
3. Automation and Control
4. Radio Engineering, Electronics, and Telecommunications

have the opportunity to participate in a dual degree program in cooperation with Anhalt University of Applied Sciences (Germany).

The dual degree program is implemented based on an international academic cooperation agreement and aims to:

- integrate educational programs of both universities,
- promote academic mobility,
- prepare specialists with **competencies demanded in the international labor market.**

**Program structure:**

- 1st year – Energo University
- 2nd year – Anhalt University of Applied Sciences (Germany)

Upon completion of the program and fulfillment of all curriculum requirements, students receive **master's degrees from both universities.**

**Candidate requirements for participation in the program:**

- English proficiency at least IELTS 5.5 or TOEFL iBT 46
- Cumulative GPA not less than 3.0
- No outstanding academic debts

Selection of students for the program is competitive, based on academic performance, language proficiency, and compliance with the requirements of the host university.

## **10. SPORTS LIFE**

The promotion of a healthy lifestyle at the university is achieved through sports competitions, sports clubs, and the use of gyms and sports facilities, including three football fields where games are played late into the night and nearly year-round.

The university has sports clubs in various disciplines: football, futsal, volleyball, basketball, arm wrestling, weightlifting, chess, and table tennis.

Each semester, students living in dormitories compete in four sports disciplines. In addition, the university organizes a range of competitions, spartakiads, and tournaments in football, chess, table tennis, badminton, and other sports—not only among students but also among staff and faculty.

Competitions are held in all sports offered by the department. Energo University students annually participate in national and city-level university sports events.

## **11. LIBRARY GUIDE**

Welcome to your university **library and coworking space!** Here you will find everything you need for **successful studies, project work, and research.**

### **General Information about the Library:**

- Total collection: 216,152 items
- Literature in Kazakh: 86,107 items
- Literature in foreign languages: 4,417 items

Since 2022, the library has implemented the automated integrated library system “MegaPro”, which allows you to:

- Search for books and study materials online through the electronic catalog (<https://library.aues.kz/MegaPro/Web>)

- View your current and borrowed books in your personal account

Login and authorization are done using the credentials issued by the IT Department upon enrollment.

At the Circulation Desk (A236), you can register as a library user and immediately borrow study materials for home use.

Study materials are issued for the entire duration of the course or semester and must be returned before the start of summer holidays.

Additional Resources

Access to combined academic resources of university libraries is provided through the Republican Interuniversity Electronic Library (RIEL).

The national subscription also grants access to international databases, including Scopus, Web of Science, and Wiley Online Library.

Library Hours:

- Mon–Fri: 08:00 – 20:00
- Sat: 09:00 – 14:00

### **Coworking Center**

**Location:** 1st floor of the university

The coworking center is designed for study and work. Facilities include:

- Rooms that students can reserve for individual study or group projects
- Conference hall for guest lectures and events
- Computer room with internet access

The coworking center and library are equipped with everything needed for learning and research.

### **Tips for First-Year Students**

1. Register in the MegaPro system – your first step for searching literature and managing borrowed books.

2. Borrow textbooks via the Circulation Desk – remember that all materials must be returned before the summer holidays.

3. Use the coworking center for group work and exam preparation.

4. Electronic resources are accessible from anywhere via the electronic catalog, but access to Scopus and ScienceDirect requires your university login.

5. Plan your visit in advance – during peak hours, it's convenient to reserve rooms via this link: <https://t.me/TeamroomResrvationBot>

All information, news, and instructions for using the MegaPro electronic catalog can be found on the library's Instagram page: <https://www.instagram.com/energo.library/>

## Location of Energo University (AUES)

