Information Technology Management, Procedures, Information Technology Infrastructure and Electronic Service Development Mechanisms at LEPL Samtskhe-Javakheti State University

Information Technology Infrastructure has been established at Samtskhe-Javakheti State University. HEI owns 458 PCs (personal computers, laptops and tablets), including 358 PCs, 35 laptops, 61 tablets and 4 servers, of which 222 computers and 61 tablets are available for students (in laboratories, study rooms, libraries), academic and administrative staff. A total of 136 computers and 35 laptops are available.

Samtskhe-Javakheti State University has created a unified university information space (so-called intranet), in which different e-services are realized, covering all the necessary space of the university (all buildings) at various locations: Akhaltsikhe, 113 Rustaveli St. # 122a , Also Akhalkalaki, David Agmashenebeli St. # 119.

I and II building of SJSU are interconnected with the Air Grid M5 HP Wi-Fi Bridge, with a resolution of TX / RX Rate: 135 Mbps and fiber optic 60 MB / sec Internet access, IP address (31.146.82.66/28) While the University III campus in Akhalkalaki has a 5 MB / sec fiber optic Internet IP address (31.146.140.174). HEIs I and II Corps III are deployed with VPN (PPTP) type connection. The first and second educational buildings of SJSU (Akhaltsikhe, 113a and 122a Rustaveli St.) operate a unified, centralized Wi-Fi network (connection: roaming, with access point management capability) while in the third building (Akhalkalaki, David Agmashenebeli). # 119) A separate network that is fully accessible to university students and administration staff. If needed, users can access the remote VPN (PPTP) connection to the university network, which is a secure and encrypted connection to users in remote areas, allowing users to access the university's internal electronic services.

Network infrastructure is periodically optimized and upgraded, which can be attributed to both technology development and ongoing structural changes at the university. The network includes all educational computer classes, laboratories and audiences, for which intranet and internet services are available. The active part of the university is covered by a wireless network. The server infrastructure is located in one location of the SJSU: Room 402 in the first building that is provided with cooling and uninterruptible power supplies (UPS). Infrastructure servers use Linux and Microsoft Windows Server operating systems, the infrastructure is protected by firewall. The Information Technology Management Department periodically backs up servers (Back Up) and stores them on a dedicated space. HEIs are heavily involved in defense against network attacks

Mechanisms, as well as internal policies, only open ports and services that are intended for educational purposes and are essential for the smooth and safe operation of the university network. The USE uses Eset smart security antivirus software, which updates databases from a local server. Centralized management of antivirus issues is provided by the Eset Remote Administrator Console, which migrates university-based virus programs from the university network.

The information technology department pre-purchases certain spare details and stocks the warehouse for quick response in case of damage.

In the event of a power failure, the UPS is provided with uninterruptible power supply (UPS) as well as a backup power supply, which provides uninterrupted power supply to the network and server infrastructure, as well as other structural units in the building.

Video surveillance cameras (indoor and outdoor perimeter, as well as testing auditoriums) are installed in all training camps of the HEI, and information is stored on 4 (NVR) recorders. Serving the System: Information Technology Management Unit.

E-mail - University employees use the postal service.

In 2012, Moodle was introduced for distance learning at the university. Currently using Moodle 3.3.2+ (Build: 20170928) (http://31.146.82.68/?lang=ka) for university e-learning, the portal is physically located on both the local and global network of the university and serves all faculties Conduction-testing).

Since 2011, an electronic learning process management system has been operational (http://31.146.82.69/au/). Through which students complete academic registration, they can find their personal case, grades, credits available, and lectures and exams.

Since 2017 the University has been involved in electronic document circulation system eflow.emis.ge; Qualified electronic signature / stamp placement has been implemented in the same system since the end of 2018.

Since 2010 the Scientific Library of Samtskhe-Javakheti State University has been using the electronic catalog "Openbiblio", which is an integrated library system and enables: cataloging, administration and issuance of printed and digital units, i.e. electronic implementation of entire library services. It is also used to register readers, move books, and learn resources. The electronic catalog is available on the University website. An electronic catalog can be accessed from any location where the Internet is available.

Catalog of electronic literature, which is a directory of university electronic literature (scanned and electronic books) and is available on the website. The need for a catalog has led to an increase in the number of e-resource users, with the catalog changing monthly as the number of digitized books increases.

Computers are located in all three buildings of the Science Library and it can be accessed via the Internet, or access to electronic literature for all users. The literature is classified by fields and directions. On the basis of the joint work of our department and the technical director of the Scientific Library, electronic manuals are systematically added. Currently, an electronic resource is posted on the website, with a special link on the subject of copyright protection, enabling users to receive recourses electronically

The official web site of SJSU has been in operation since 2006, updated in 2018. The website has an address that contains "sjuni", the English abbreviation for "edu", and ends with an international

abbreviation denoting Georgia - "ge". The addresses as a whole have the following form: www.sjuni.edu.ge.

The official website of the University <u>www.sjuni.edu.ge</u> performs communication and information function.

All-important university information is available on the website. Including: HEI Mission, Activities, Structure, Catalog of Educational Programs, Programs and Criteria for Student Selection, Expected Learning Outcomes and Qualifications, Teaching and Assessment Procedures, Administrative / Academic / Research Staff, Library Electronic Catalog, Regulatory Doc the part of the strategic development plans, the establishment of the annual reports, financial statements, current and realized research, general statistics, available services, employment opportunities and other;

Website information is updated regularly. Website updating (uploading information materials, activities, documentation) is done daily, during the working day after obtaining the information.

The SJSU website is administered by a person designated by the administrative act. The administration of the website includes materials posted in its fields

Technical training, upgrades and systematic supervision. The supply and accuracy of materials for the website are ensured by the appropriate structural unit. The Public Relations Office is responsible for processing the material. The webmaster is responsible for posting the final version of the material.

The University website is available 24 hours a day from any Internet-connected device

- 1. An electronic system for managing the educational process of university provides support, communication, information processing and protection of the university's educational and administrative processes.
- 2. General System Functions:
- A) Automation of university process management;
- B) Automation of the financial module (reflecting the amounts paid by students);
- C) Electronically:

(Academic and administrative registration of students, entry / processing of students' academic performance information (with the development of a subsequent Diploma Supplement), hence the production of Student Study Cards), with a subsequent Diploma Supplement.

Uploading Legislative Acts Related to Changes in Student Status (Initial Registration, Suspension, Restoration, Termination, Qualification)

Accounting for academic and administrative staff

Academic staff personal data, uploads, for student academic registration.

Auditory Tables, Exam Tables.

- 3. The system uses cryptography, which encrypts the passwords of users (administration, professor / teacher, student).
- 4. System users are:
- A) Training Process Management Unit;
- B) Faculties;
- C) Professor / teacher;
- D) Student.

The University's Curriculum Management System is linked to the University's Web site at http://31.146.82.69/au/ for students to use their personal information in the Curriculum Management System (academic registration, personal information, and their own academic evaluation, auditing and exam tables).

The Student Management Information System of the Education Management System (which is a database of authorized universities in the country) (https://uni.emis.ge/Security) is maintained by the University Curriculum Management

Division (provides initial student registration, reflection of processes related to subsequent student status changes (suspension, reinstatement, termination, mobility, qualification).

Also, t the diplomas (certificates) and certificates issued after qualification.

To improve academic achievement and quality of teaching, MOODLE has launched an e-learning program at the University since 2012, which creates e-courses, uploads teaching resources and assignments, thus saving students time and improving the quality of communication with the teacher. Semester Summary Exams are conducted using the same program. There is a constant advisory service for students and academic staff on this program at the HEI;

The program is hosted on a local server with 24 hours of service and is available through the HEI Web site. Exams are conducted on the local network for greater objectivity and security, and the training is followed through the global network.

Relationships with students and academic staff and examinations are governed by the rules governing the study process, posted on the University Web site.