"Approved"
Rector of the Georgian Aviation University
D.T.Sc., professor

_____S. Tepnadze
___ _____ 2019
Statement_____

Georgian Aviation University

Policy of Information Technologies Management

Master copy

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i. Revisions

Implementation of any Revision can only be performed through participation of the Head of Quality Manager and Governing Board. No revision will have legal power, unless it is reviewed and approved.

Created by:	Approved by:
Head of Quality Manager	Rector
Date:	Date:

Deleted Pages				Added Pages			
Chapter	Page	Revision	Date	Chapter	Page	Revision	Date

ii. Revision Records

Revision №	Basis of a revision	Amended pages	Date	Revision initiator

iii. List of Active Pages

Paragraph	Page	Revision	Date		Paragraph	Page	Revision	Date
0	1	0	May 2019					
1	2	0	May 2019					
i	3	0	May 2019					
ii	4	0	May 2019					
iii	5	0	May 2019					
2	6	0	May 2019					
3	7	0	May 2019					
4	8	0	May 2019					
4	9	0	May 2019					
4	10	0	May 2019					
4	11	0	May 2019					
4	12	0	May 2019					
4	13	0	May 2019					
4	14	0	May 2019					

2. Documentation control

Control of documentation is provided by the rules and procedures written in the Quality Manual of Georgian Aviation University. The aim of rules and procedures is to create system to identify and use all documents easily by employees within the organization. All documentation must be created, and storage by the format and terms indicated in Quality Manual. These procedures will establish effective system to create, renew and share documentations easily.

Document distribution list

Organization	Format	Copy n:
Quality service	Hard copy	Master copy
Quality service	Electronic version	Electronic version
University web page	Electronic version	Electronic version

3. Introduction

1. Considering swiftly developing information technologies (IT) and its establishment in every sector, university refers to ample operation and constant upgrade of IT as one of critical factors for implementation of own mission, which is reflected on daily activities of the university.

2. Current document determines management policy and procedures, infrastructure and mechanism of constant development/upgrade of IT. Is oriented to students, academic/administrative personnel, invited professors and teachers and every person that might receive authorization to IT recourses of the university.

4. General Part

Article 1. Aim

1. University employs current politics as an important tool for reaching set aims, which secures ample operation of IT systems, availability of data and confidentiality. Functionality of the politics is based on following principles
   1.1. Availability – IT related software and hardware is vastly available;
   1.2. Relevance – IT responses to aims of the university and is subject to development/upgrade whenever required;
   1.3. Security – system is secure from unauthorized access and cyberattacks.
2. IT politics applies to students, academic/administrative personnel, invited professors and teachers and every person that might receive authorization to data/information/hardware

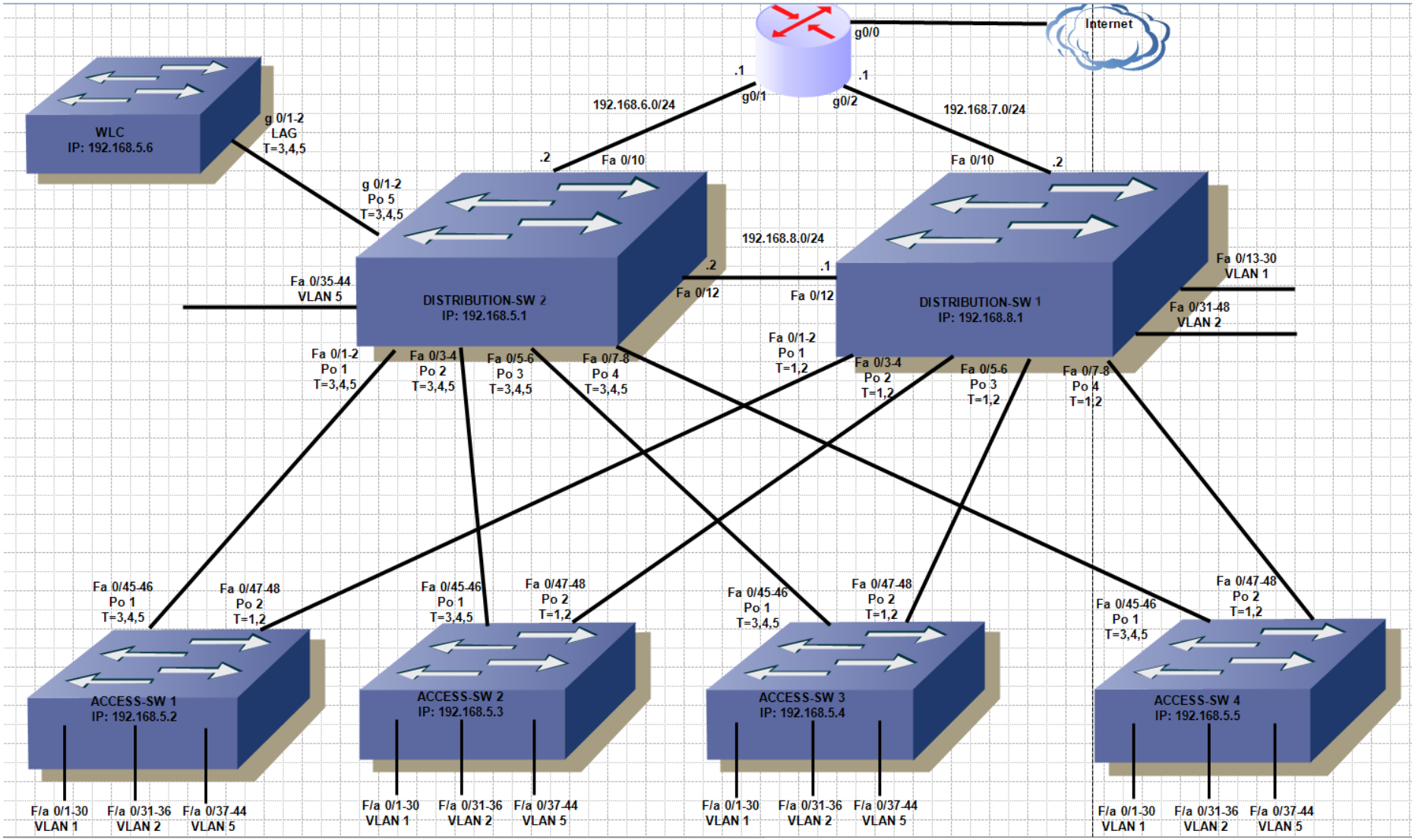
Article 2. Infrastructure

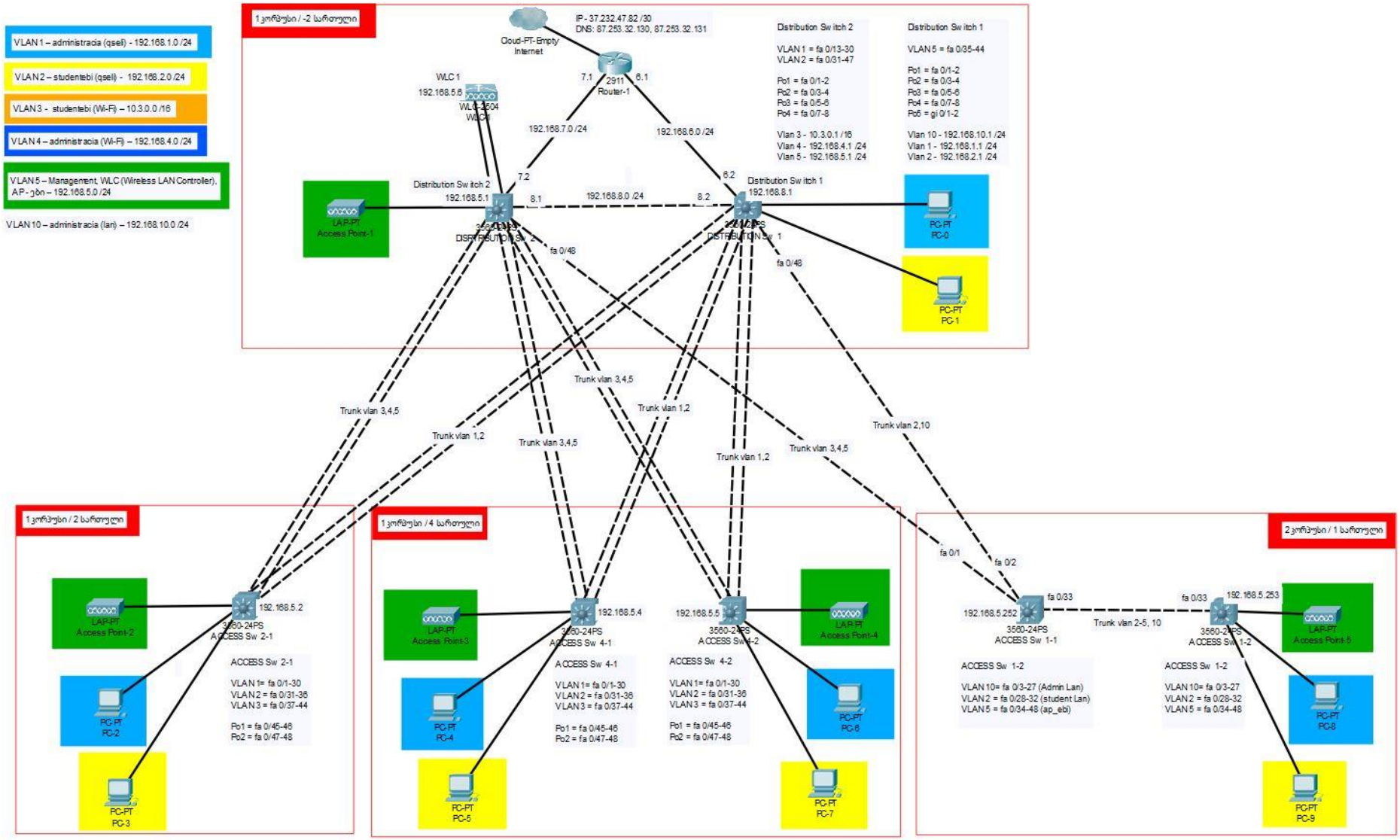
1. Computer network of the university links two building and represent unified information network with various electronic services and computer technologies integrated in. Education process management system gives opportunity to students, academic personnel and administration effectively to search and manage learning/teaching related information. Linked with domain of the university, Google platform services support secure exchange of an information within students, academic and administrative staff and reliable storage of data.
2. From one side, computer technologies ensure ample operation of university's various services, which by itself is a guarantees proper distribution of services among students. Form another side, computer technologies authorized for students, ensures acquisition of knowledge and mastering of skills/abilities determined by certain syllabuses.
3. Computer network unifies around 300 links and amid above-mentioned provides access to different electronic services like: education process management system, webpage, computer-based training, online testing system, online library etc.
4. Access to internet is provided by JSC "Silknet" through optic-fiber cable, distributing 10mb/ps speed per each link. IP is 37.232.47.82

Article 3. Educational Process Management System

1. In order to add or use relevant information program implementing personnel, administration and students are given access to data base, which represent unified information repository containing information related to students, teachers, each study course with relevant point gained by each student etc. each layer of users have their unique ID and password and are set to have access to various level of information:
2. System is protected from unauthorized access. Certain users have authorization to modify data, whereas personal information is secure, with limited access.

Article 4. Network mapping of Georgian Aviation University




VLAN 1 – administracia (qseli) - 192.168.1.0 /24
VLAN 2 – studentebi (qseli) - 192.168.2.0 /24
VLAN 3 - studentebi (Wi-Fi) – 10.3.0.0 /16
VLAN 4 – administracia (Wi-Fi) – 192.168.4.0 /24
VLAN 5 – Management, WLC (Wireless LAN Controller), AP - ები – 192.168.5.0 /24
VLAN 10 – administracia (lan) – 192.168.10.0 /24
1 კორპუსი / -2 სართული
Cloud-PT-Empty
Internet
IP - 37.232.47.82 /30
DNS: 87.253.32.130, 87.253.32.131
2911
Router-1
WLC 1
192.168.5.6
WLC-2504
WLC1
192.168.7.0 /24
192.168.6.0 /24
192.168.8.0 /24
Distribution Sw itch 2
192.168.5.1
Distribution Sw itch 1
192.168.8.1
LAP-PT
Access Point-1
PC-PT
PC-0
PC-PT
PC-1
fa 0/48
Distribution Sw itch 2
VLAN 1 = fa 0/13-30
VLAN 2 = fa 0/31-47
Po1 = fa 0/1-2
Po2 = fa 0/3-4
Po3 = fa 0/5-6
Po4 = fa 0/7-8
Vlan 3 - 10.3.0.1 /16
Vlan 4 - 192.168.4.1 /24
Vlan 5 - 192.168.5.1 /24
Distribution Sw itch 1
VLAN 5 = fa 0/35-44
Po1 = fa 0/1-2
Po2 = fa 0/3-4
Po3 = fa 0/5-6
Po4 = fa 0/7-8
Po5 = gi 0/1-2
Vlan 10 - 192.168.10.1 /24
Vlan 1 - 192.168.1.1 /24
Vlan 2 - 192.168.2.1 /24
Trunk vlan 3,4,5
Trunk vlan 1,2
Trunk vlan 2,10
1 კორპუსი / 2 სართული
LAP-PT
Access Point-2
192.168.5.2
3560-24PS
ACCESS Sw 2-1
PC-PT
PC-2
PC-PT
PC-3
ACCESS Sw 2-1
VLAN 1= fa 0/1-30
VLAN 2 = fa 0/31-36
VLAN 3 = fa 0/37-44
Po1 = fa 0/45-46
Po2 = fa 0/47-48
1 კორპუსი / 4 სართული
LAP-PT
Access Point-3
192.168.5.4
3560-24PS
ACCESS Sw 4-1
192.168.5.5
3560-24PS
ACCESS Sw 4-2
LAP-PT
Access Point-4
PC-PT
PC-4
PC-PT
PC-5
PC-PT
PC-6
PC-PT
PC-7
ACCESS Sw 4-1
VLAN 1= fa 0/1-30
VLAN 2 = fa 0/31-36
VLAN 3 = fa 0/37-44
Po1 = fa 0/45-46
Po2 = fa 0/47-48
ACCESS Sw 4-2
VLAN 1= fa 0/1-30
VLAN 2 = fa 0/31-36
VLAN 3 = fa 0/37-44
Po1 = fa 0/45-46
Po2 = fa 0/47-48
2 კორპუსი / 1 სართული
fa 0/1
fa 0/2
fa 0/33
192.168.5.252
3560-24PS
ACCESS Sw 1-1
Trunk vlan 2-5, 10
192.168.5.253
LAP-PT
Access Point-5
PC-PT
PC-8
PC-PT
PC-9
ACCESS Sw 1-2
VLAN 10= fa 0/3-27 (Admin Lan)
VLAN 2 = fa 0/28-32 (student Lan)
VLAN 5 = fa 0/34-48 (ap_ebi)
ACCESS Sw 1-2
VLAN 10= fa 0/3-27
VLAN 2 = fa 0/28-32
VLAN 5 = fa 0/34-48

Article 5. Management

1. Computer network management is organized by IT manager, responsible for network infrastructure mapping within I and II building of the university, software/hardware support, implementation of advanced technologies and upgrade/update of existing resources.

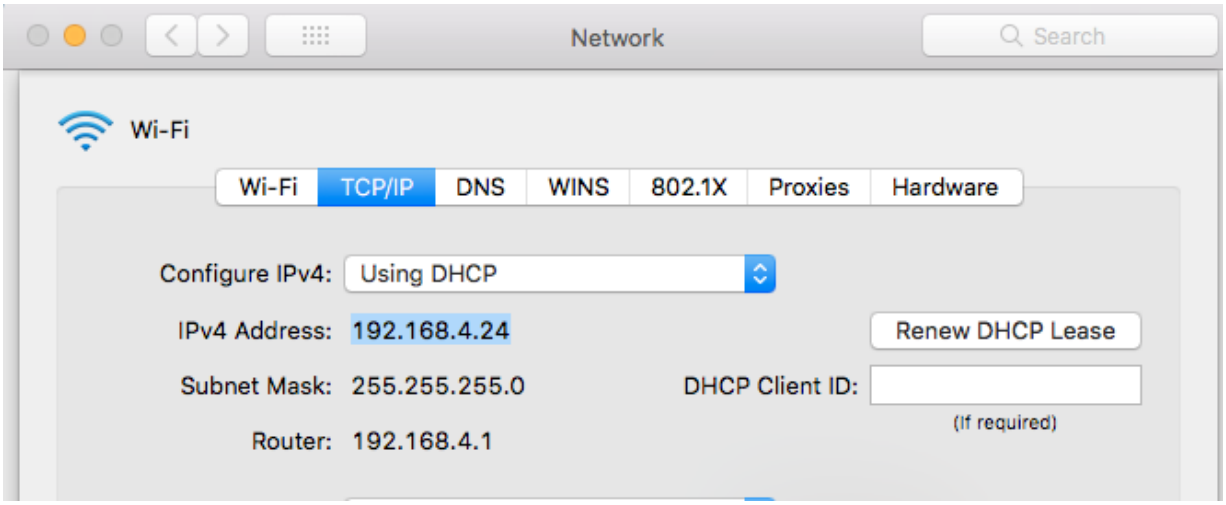
Article 6. IT Management

1. IT Manager is responsible for:
   1.1. Ensuring ample operation of computer technics and network infrastructure;
   1.2. Development and implementation of IT Management Policy;
   1.3. Searching for need relevant software and hardware, ensuring their ample operation and performing upgrade/update whenever required.
   1.4. Administering webpage of the university;
   1.5. Submitting report over performed activities;
   1.6. Securing policies of the university and legislative requirements relevant to own occupation;
   1.7. Fulfillment of tasks assigned by administration;

Article 7. Unified Network Infrastructure and Management Policy

1. Every digital device linked to network of the University, is subject so unified security policy. This policy aims to avoiding unauthorized access, optimized resource utilization, securing users from malware and limiting traffic in order to avoid unnecessary consequences;
2. Complete space of both I and II building of the university is covered with wired and wireless network that provides access to an internet. Management of network access points are centralized via relevant controllers. Referring to security considerations, access to network is divided into two types. One is for students, another one for administration and academic staff;
3. Network is built based on Cisco controllers and wi-fi access points, covers hallways, waiting areas, library, yard, classrooms and offices. Network links together static users like simulators, desktop computers, laptops belonging to the university, multi-function printers; and gust-users – laptops, tablets and smartphones.
4. For network communication standard is TCP/IP while dynamic hosting configuration protocol (DHCP) is used for IPv4 configuration. Static Hosting Configuration Protocol is applicable whenever required;

Article 8. Parameter Sample of a Network User



Article 9. Security Policy

1. Aim of the policy is to ensure security of the personal information. Every user linked with network of the university is subject to unified security policy, which aims to avoiding unauthorized access, optimized resource utilization, securing users from malware and limiting traffic in order to avoid unnecessary consequences;
2. Policy sets regulations and obliges every user of the network to follow them. This assures to avoid risk and makes network operations more reliable through following statements:
   - 2.1. Arbitrary connection into the network of the university is not acceptable;
   - 2.2. Any kind of unauthorized change to hardware/software of university is not acceptable;
   - 2.3. Phishing/Mining and distribution of financial or/and academic information is not acceptable;
   - 2.4. Arbitrary shift of preset IP address is not acceptable;
   - 2.5. Passing wi-fi access information to any third party is not acceptable;
   - 2.6. Users of Education process management system, email and computer technics of the university are, at some extent, responsible for security of information stored within their accounts, thus it is mandatory to
     - 2.6.1. Secure accounts with strong and hard to guess password;
     - 2.6.2. Secure academic information (e.g. test questions and their answers) from unauthorized possession;
   - 2.7. Study of security related incidents and relevant reaction;
   - 2.8. Application of antivirus applications to avoid spread of malware;
   - 2.9. Periodical analysis of logs and optimization, upgrade/update of hardware/software;
   - 2.10. Identification of users, assigning various permission and monitoring.

Violation of Security Policy

1. Violation of regulations set by Security Policy is subject to disciplinary sanctions. In order to avoid unauthorized activities within the network of university, IT Manager leaves right to limit access to an unauthorized device and seize its utilization;

Article 10. Mechanisms of Improvements

1. Source of development for the university is own budget, that is spent for certain needs/aims determined by strategic development plan. IT development strategy in designed in collaboration with administration of the university. Implementation of any kind of IT related novelties are subject to testing and debugging.
2. According to 2021-2027 strategic development plan, university aims to completion of following objectives:

Improving Informational Technologies

1. University considers electronic workflow management as once of the main objectives, thus in relevance with 2021-2027 strategic development plan, plans to implement most suitable software, prepare relevant guidelines and train staff;
2. Improvement of existing Education process management system, through debugging and perfecting user interface, considering problems revealed during recent years of operation. Platform is planned to be running in test mode during 2021 with relevant monitoring to determine its efficiency
3. University plans to design and implement HR management software for 2022 year, aiming to support effective scheduling and management of educational and university related various processes

Updating Web-page

1. Development of bilingual webpage, matching with modern requirements, delivering information related to educational programs offered, daily news related to university life and planned activities to local/international students and all interested parties.

Implementation of Modern Technologies Within Educational Process

Implementation of computer-based training withing higher and vocational education programs assures harmonization with European aviation safety agency (EASA) and Georgian civil aviation agency (GCAA) standards.