IT Policy

1 Overview:

Vidya Academy of Science & Technology's Information Technology Infrastructure Management Services (ITIMS), also known as ITIMS informally and operating under the CSE department, maintains the college's computing infrastructure for use in education, research, and administration.

ITIMS is in charge of overseeing the planning and coordination of central IT resources as well as the ongoing development and improvement of the campus's computer infrastructure. Each building is connected to the others, and each computer is connected to the network using Ethernet or OF cables. Intelligent switches are used to segment the network according to the institution's functional needs.

2 Core Services

- IT infrastructure design and implementation.
- IT support to all departments across the campus.
- Management of Internet connections.
- Management of Institution's Website, News and Events.
- Maintenance of ERP Server
- Maintenance of Biometric Device & Surveillance Camera Systems
- Maintenance of hosted services Koha, Moodle, DSpace
- E-Mail System Management (Google Workspace).
- Preventive Maintenance of IT equipments
- E-Waste Management

2.1 IT infrastructure design and implementation

Design and implementation of IT infrastructure is the key responsibility of ITIMS. This involves several steps and considerations to ensure that it meets the needs of the organization in terms of performance, security, scalability and reliability.

- Gather requirements from different departments to understand their needs and expectations.
- Determine the current and future needs of the organization, considering factors such as goals, growth projections, and technological advancements.
- Selection of various components of the infrastructure, including hardware, software, networking, storage, and security based on the design requirements, considering factors such as performance, capacity, reliability, and cost.
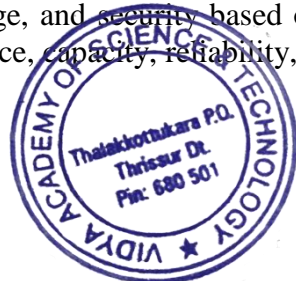
- Conduct thorough testing to ensure that the infrastructure functions as intended and meets performance, reliability, and security requirements.
- Continuously evaluate and optimize the IT infrastructure to ensure that it remains aligned with the organization's goals and objectives.

2.2 IT Support

ITIMS is the center point of contact for all the IT related services in VAST. Staff and students can approach ITIMS through the Complaint Management System (CMS) portal, through email or in person. The link to the CMS is published on the college website. A user can submit a ticket through CMS after providing some basic information like name, department, locations and complaint and also facility to attach any screenshots of the issues.

Maintenance Procedure

- The staff and students can approach the IT Desk in person, email or through CMS - IT portal.
- Once a complaint is received, The Help desk in charge assigns an IT staff for the ticket.
- The IT staff will respond to the assigned ticket as level 1 and resolve the issue.
- If the IT staff is not able to resolve the issue it will be escalated to the Help Desk in charge as level 2 and resolve the issue.
- If the level 2 can't resolve the issue then it will be escalated to the OEM / Vendor/ service centers for further support.
- If the IT equipment is not under warranty and requires a parts replacement then the Help desk in charge initiates a purchase request as per the VICT purchase Manual.

Once the IT service Desk receives a ticket it will use the following guidelines to prioritize its response to requests:

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Priority	Criteria	Response Time
Critically High	Requests for issues having a significant and immediate impact on the Institution's operations. For example: An issue affecting all or a large number of users. (E.g. Service down issues related to ERP system, email service, or Internet).	< 1 Hr
High	Requests for issues having an important impact on the Institution's operations. For example: An application error affecting a small group of users.	4 hours
Normal	Requests for issues having a limited or non-immediate impact on the Institution's operations. For example: An issue affecting one person only.	Before the end of the next working day
Low	Issues that have no material or immediate impact on the Institution's operations. For example: A "cosmetic" request, to improve a system functionality "look and feel" or a minor non-functional change to a system	More than two working days. Within a week if possible.

Contact Information

IT Help Desk Extension Number : 700
Email: ithelpdesk@vidyaacademy.ac.in
Link To CMS Portal : https://bit.ly/vastcms

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2.3 Management of Internet connections.

To meet the Internet needs of the campus, the institution has a variety of ISP connections, such as a 175Mbps 1:1 leased line from BSNL and a 175Mbps 1:1 leased line from RailTEL. These Internet resources are managed at the user, departmental, and institutional levels by the ITIMS .

2.3.1 Firewall Management

College provides secured internet service using a hardware UTM (unified threat management System) to meet its academic, research, and administrative missions. A UTM includes both the Firewall Product and additional controls to block or filter content; e.g. anti-virus email gateways, intrusion detection systems, audit and logging tools, mobile code (ActiveX, Java) monitors, integrity checkers, email content scanners and URL blockers.

2.3.2 Internet usage account

College provides internet service IDs based on their ERP IDs / EMP code received from the administrative office at the time of the joining for their academic/ official purposes. After the completion of the course / service these IDs will be disabled.

The UTM permits the following for outbound and inbound Internet traffic:

• Outbound - Allow ALL Internet traffic to hosts and services outside of college network with the exception of some of the following categories like Social Media sites, Spyware & Malware, Nudity and sexually explicit, Hacking, Criminal activity, Gambling, peer to peer & torrent, Phishing and Fraud, Anonymizers.

• Inbound - Only specific services like Moodle, library catalogue, News & Events, ERP related services will be allowed to be accessed from the Internet.

2.4 Management of Institution's Website, News and Events.

Website
A website reflects an institution's identity and is often the first point of contact for prospective students, faculty, researchers and others. The website of the institution offers powerful opportunities for expanding its global reach and reputation. The maintenance of the Institute website addressing the following:
- Renew the website hosting plan (annually).
- Renew the domain names (annually).
- Thoroughly review and test the entire website (annually or after any updates).
- Security updates and bug fixes (monthly or as patches are released).

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- Check backups (annually).
- Test browser compatibility (annually).
- Update dates and copyright notices (annually).
- Review contact information (annually or as needed).

The division / department wants to update the contents of their page, they can send the updated contents through an official email to the website maintenance team.

News & Events

A news repository in Vidya is a centralized location where events and achievements of Vidya are stored and organized for easy access. It serves as a comprehensive archive of events and achievements, allowing users to search, browse, and retrieve happenings based on various criteria such as date, topic, keyword etc. These repositories play a crucial role in preserving the historical record of events and achievements for future references. A weekly newsletter is also released which includes the latest happening in Vidya.

Maintenance of the News & Events service include the following,

- Publishing of Weekly newsletter
- Regular Backup on weekly basis

2.5 Maintenance of ERP Server

The operations of the various institutions under Vidya International Charitable Trust are automated using open source ERP framework namely OpenERP (V-7.0) and hosted on the google cloud platform. Automation has been structured to provide financial control by providing financial consolidation of the activities of the various entities under the Trust. Thereby, the various operations of the entities like Admission, Academics, Accounts, Purchase, Fixed assets, HR & Payroll process have all been automated. Being providers of higher education services, a key stakeholder is students and their parents. Thereby the automation has taken into account various student and academic centric functional features like Hostel, Transport, Academic attendance, results, etc. For the convenience of the student and parent, various aspects of the system have been automated for SMS delivery and integrated with bank systems for online payment. In fact the current system handles most aspects of a student right from admission to issue of transfer certificate upon completion of the course. Faculty & staff requirements are addressed through biometric attending logging, leave management, time-table management, etc. The module assignment process is done by the ERP development team based on the request received from the HoDs. Overall the system meets the needs of 3500+ end users, mainly staff and students.

The maintenance ERP service include the following:
- **Bill settlements (Monthly)**

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Monthly bill settlement refers to the process of paying bills on a monthly basis.

- **Taking regular backups (Daily)**

Generating database backup on a daily basis in the cloud and transferring it to the local computer for avoiding potential data loss incidents. Apart from this after any module update/release a full backup of code and database is taken.

- **Secondary backups to Google Drive (Monthly)**

Google Drive is used as a secondary backup solution which is actually an extra layer of protection for our critical information.

2.6 Maintenance of Biometric Device & Surveillance Camera Systems

2.6.1 Biometric Device

College provided Biometric devices with facial recognition in the campus for time and attendance tracking and it integrated with ERP. Administration department provides finger/ face recognition IDs based on their EMP code at the time of the joining. After the completion service these IDs will be disabled. The ITIMS is responsible for overseeing the maintenance of biometric devices, including scheduling regular maintenance tasks. All employees are responsible for reporting any malfunctions or abnormalities observed in biometric devices during regular use. Routine maintenance tasks, such as cleaning and calibration, verifying date and time, checking connectivity will be performed every six months to ensure the continued reliability of biometric devices.

2.6.2 Maintenance of Surveillance Camera Systems

In order to prevent any adverse events, the campus and hostels are monitored by CCTV 24 x 7. Currently we have 50 networked CCTV cameras placed at various locations of the campus. A system of properly installed campus security cameras ensures the safety of students, faculty, and facilities on campus. Campus security cameras help to secure the premises, watching for suspicious behavior and unauthorized access. These cameras are connected to NVR units for recording management. Footage from cameras throughout the campus other than hostels can be viewed online from any computer with an internet connection and access to the network. The footage viewing privilege is given to the Head of the institution and Director Administration.

Maintenance of the Surveillance Camera Systems are carried out every year during the vacation period and the following tasks are performed,

- Physical inspections
- Checking the view and clarity
- Checking the recording process

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Recording Process:

1. The process of recording is done automatically in each NVR unit and stored for 15 days.
2. Google drive storage is used for storing the recordings of cameras in the exam cell during the examination season for 6 months.
3. Based on requests the recording of a specified camera will be stored for 6 months in the Google Drive for further references

2.7 Maintenance of hosted services Koha, Moodle & DSpace

2.7.1 Koha
Koha is a Free and Open Source Integrated Library Management System (ILMS) which includes Circulation, Cataloguing, and Acquisition, Serials, Report generation and Online Public Access Catalogue (OPAC) with many other advanced features. VAST library is using a customized version of Koha 22.11.08.

Generating database backup on a daily basis in the hosted system and transferring it to the local computer for avoiding potential data loss incidents. Apart from this after any module update/software upgrade a full backup of code and database is taken.

2.7.2 Moodle
College maintaining Moodle service for conducting online quiz, Placement training etc. Students can access these courses by login with their student ID. This service is available in LAN and WAN. Students and staff can avail the service through the link provided in the college website. Generating database backup on a monthly basis in the server and transferring it to the local computer for avoiding potential data loss incidents.

2.7.3 DSpace
DSpace is an open-source digital repository software system to manage, preserve, and disseminate digital content such as Teaching notes, research papers, previous year question papers and other digital contents. This service is available on campus students and staff can avail the service through the link provided in the college website. Generating database backup on a monthly basis in the server and transferring it to the local computer for avoiding potential data loss incidents.

2.8 E-Mail System Management (Google Workspace).
College using Google Workspace for Education service for providing Email service for their academic / official purposes. Email IDs are generated based on their ERP IDs / EMP code received from the administrative office at the time of the joining. After the completion of the course / service these IDs will be disabled.
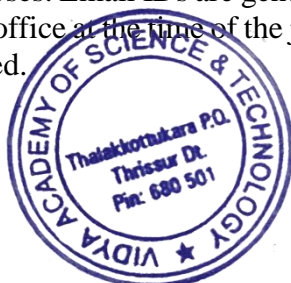
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Google Classroom

Google classrooms service is a part of the Google Workspace for Education. College provides google classrooms for each class for blended learning. Teachers and students can access their corresponding google classroom with the email ID provided by the college. Google Classroom integrates seamlessly with other Google tools, such as Google Drive, Google Docs, Google Sheets, and Google Slides, making it easy for teachers and students to collaborate and communicate within a digital learning environment.

2.9. Preventive Maintenance

Preventive maintenance is a proactive approach to maintenance that involves performing regular inspections, servicing and repairs on equipment or systems before they develop problems or fail. The goal of preventive maintenance is to prevent breakdowns, reduce unplanned downtime, extend the lifespan of equipment and ensure optimal performance. The scope of preventive maintenance may vary depending on factors such as the type of equipment or services. They are,

- **Physical inspections:** Look for signs of physical damage, loose connections, or environmental issues like excessive heat or dust. Address any identified issues promptly.
- **Software updates:** Keep the software of the device up to date. This helps address security vulnerabilities, improve performance, and ensure compatibility with the latest technologies and protocols.
- **Performance monitoring:** Monitor factors such as Memory, Disk usage, data transfer speed, packet loss and device temperature.
- **Data backups:** Taking backups of various services in regular intervals to ensure that valuable data are preserved in case of accidental deletion, hardware failure, software errors, cyber-attacks, or natural disasters.

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2.9.1 Preventive Maintenance - Schedule:

Following are the schedules for different types of IT related equipments and services,

	Items	Tasks	Schedule
1	Computers / Operating System/ I/O devices.	Physical inspections, Software updates, Performance monitoring	Yearly
2.	Projectors ,CCTV	Physical inspections, Performance monitoring	Yearly
3.	Printers / Scanners	Physical inspections, Performance monitoring	Yearly
4.	Servers	Physical inspections, Software updates, Performance monitoring, Regular Backups	Daily / Monthly

2.10 E-Waste Management

All the formalities for disposing the fixed asset of the VAST College are applicable for the disposal of E-Waste. After thorough verification by the IT Support Associate, Systems Manager shall be certified that the asset became scrap and the same shall be reported to the Executive Director and get the final orders for disposal. After obtaining the approval the disposal form shall be forward to the Project Engineer for initiating the disposal process. The scrapped items shall be kept in the concerned department till the disposal process is completed.

3. BREACH OF THIS POLICY

Where the College suspects or finds evidence of a breach of this policy, the College reserves the right to restrict a user's access to its IT resources.

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4. CHANGES TO IT POLICY

The College may modify or amend this policy at any time. Formal notice of amendments will not ordinarily be given, but the current IT policy will be available via the College website. The latest version of the policy can be accessed via the College website www.vidyaacademy.ac.in

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