

INFORMATION TECHNOLOGY (IT) POLICY



GAUHATI UNIVERSITY

Information Technology (IT) Policy

Gauhati University

1. Preamble

Gauhati University (referred as GU), is an Affiliating State University located in Guwahati, Assam, India, established in 26 January 1948 under the provisions of an Act enacted by the Assam Legislative Assembly. It has 325 affiliated colleges offering undergraduate and post graduate courses in the faculties of Arts, Science, Commerce, Law, Medicine, Engineering and Technology. Gauhati University is committed to provide equal opportunities to all sections of the University fraternity. In order to empower the IT guidelines and practices, the University has formulated a policy which will serve as a blueprint helping the University to implement IT security measures as well as maintain IT diligence which are often necessary in the event of an IT audit or litigation.

Gauhati University started using computers in 1985, first in its academic activities and gradually in the administration. The Department of Computer Science was founded with an aim to evolve as a centre of excellence by contributing scientific and knowledge based education in the fields of Computer Science and Information Technology with deep passion, culture and ethical values towards the betterment of the society. A one-year Post Graduate Diploma Course in Computer Science and Applications was offered when there were only a few institutions in the entire country offering post graduate courses in Computer Science. The Ph.D program in the department also started immediately after its inception. In January 2001 the department started a two-year MSc program in Computer Science. In 2005 the Department started a second M.Sc. program - MSc in Information Technology together with the existing M.Sc. programme in Computer Science. Over the years the University has grown substantially in terms of departments and academic programmes as well as in infrastructure. The Department of Information Technology under the Faculty of Technology, GU was established to facilitate state of the art infrastructure for different Undergraduate, Postgraduate, and Research programs in the field of Computer and Information Technologies. Gradually, the number of user departments of the computer increased. A computer centre was set up at the KK Handique Central Library which is accessible by students, research scholars as well as teachers. GU has also implemented a campus LAN with optical fiber backbone connecting the academic as well as administrative departments. Internet connectivity is provided throughout with a 1Gbps fibre link of NKN (National Knowledge Network) and 2Mbps ERNET Leased Line. Wireless LAN has also been set-up to extend the LAN connectivity to the few Hostels and the residential areas. It also maintains the proxy

server, web server, mail server, administrative database server, library server of the University. In addition, it also maintains the computing resources used by the faculty and the administration.

For most of the academic programmes in the University computer laboratory facility is essential. With the growth of the University, therefore, the requirements for computing resources of departments have also increased. Accommodating the requirements of different departments in the time slots of central computer centre is becoming difficult with time. Moreover, the distance of the central computer centre from many of the user departments is also becoming a hindrance to the use of the centre. As a result the centralization of the computing facilities is viewed as a major drawback by a section of the user community. This has led to a trend of procuring computers for general use by different departments of the University and setting up computer laboratories of their own. Maintenance of these computing resources has become a cause for serious concern over the years. With the increase in the size of the computing resources in the University a need has also arisen for streamlining the process of procurement, maintenance and disposal of the computing resources in the University. A policy document in this regard has therefore become necessary in the University.

2. The IT Policy

The IT policy shall include the following aspects:

- Services to be provided by the computer centre
- Addressing the problem of accessibility of the computer centre
- Departmental computing facilities
- Procurement of computing resources
- Maintenance of computing resources
- Networking (Intranet & Internet) Use Policy
- Development, maintenance and upgradation of the software used in the administration of the University
- Green Computing Practices
- Printers & printer usage
- Upgrading and disposal of obsolete or unusable IT Infrastructure
- Access control and usage of IT Infrastructure
- Risk Management of IT Infrastructure
- E-mail Account Use Policy
- Web Site Hosting Policy
- University Database (of eGovernance) Use Policy

1. Services to be provided by the Computer Centre

To ensure the efficient use of the computer services, the Computer Centre will:

- Maintain the common computing facility for use by the students of the different academic programmes
- Provide computing resources to the Faculty Members, Departmental Offices, Library and the Administration
- Develop, procure and maintain software required for administrative and other purposes of the university
- Set-up and maintain the Campus LAN and WiFi
- Provide Internet, email, database services etc. to the users
- Maintain the University website
- Provide and maintain the MMPs (Microprogrammable Multi-Processor) in the common auditoriums/ conference halls, class-rooms in each department.
- Assist the Administration in the process of Selection and Procurement of Computing Resources
- Organize training programmes for the faculty and staff from time-to-time
- Run extension programmes like computer training programmes for unemployed youth
- Maintain the Intercom facility of the University

2. Addressing the Accessibility Problem

To address the problem of accessibility of the computers, GU shall set up a few computer laboratories at different academic buildings in the University. The objectives of having these laboratories are:

- Making resources available at the nearest locations to the user departments
- Providing services, like email, Web service, File service etc, to the users through the terminals available in the nearest Unit of the CC
- Conducting computer lab sessions of user departments at the nearest Unit of the CC
- Conducting Skill Tests for recruitments
- Providing resources for conducting online examinations like – NET, GATE and Recruitment tests
- Organizing lab sessions for Refresher Courses and Workshops for the user departments at the nearest unit

The Units of the CC will normally remain open from 7-00 hrs. to 20-00 hrs. An adequate number of personnel shall be employed on shift duty for this purpose. Student Assistants with appropriate remuneration may also be engaged to maintain the laboratories beyond office hours and on holidays. The working hours shall be reviewed based on the

availability of manpower. There shall be an effort to keep at least the central hub open for 24 hours.

3. Departmental Computing Facilities

The individual departments shall be allowed to set-up computing laboratories only where specialized computing resources are necessary. Permission for setting-up of such a facility shall be given by the Vice Chancellor on recommendation by the concerned Faculty on receiving proper justification from a department.

Such specialized Labs may be funded by other funding agencies through research projects, or through departmental plan grants. Such Labs will be maintained either by technical staff of the department, a third party, or by personnel employed under the concerned projects. The computer centre shall not be responsible for procurement and maintenance of these resources. If at any time a department is not in a position to continue maintenance of such resources it may offer these to the CC to be included in the common resource pool of computing resources of the University.

The department shall consult the computer centre regarding the requirements for maintenance of the computing resources obtained through research projects at the proposal preparation stage. The computer centre shall provide maintenance support for computing resources under research projects if it is small in number. For computing resources of substantial size the project should provide for its maintenance.

4. Procurement of computing resources

The computing resources may be procured centrally or by the individual departments for their own laboratories. The process of procurement of the computing resources centrally shall be as follows:

- The specifications for the computing resources shall be worked out by the Computer Centre
- Obtain quotations and get rates approved for the items as per the Tender Committee norms. Rates shall normally remain valid for a period of six months
- The Professor in-charge of the Computer Centre will be authorized to place the purchase order after obtaining the necessary financial sanction
- The specifications for the computing resources for the specialized laboratories of the individual departments shall be worked out by the respective departments and purchase orders for these resources shall be placed by the Head of the Department after obtaining T&PC approval and financial sanctions.

5. Maintenance of computing resources

The post-warranty maintenance of the Servers and the UPSs shall be carried out through AMC. The PCs in the Computer Centre (CC) and those provided to the

departments/ sections by the Computer Centre shall be maintained by the Technical Staff of the CC. An adequate stock of spares shall be maintained for the purpose. The maintenance of the peripheral devices will be done through AMC, a third party or by the staff depending upon the cost and critical nature of the device. A small buffer of PCs, UPSs, and printers shall be maintained for temporary replacement in critical usage cases.

6. Networking

The Campus LAN and WiFi facility shall be maintained by the computer centre. The LAN shall cover all the academic departments, offices, hostels, and the residential area. The WiFi facility shall be provided to the entire campus in a phased manner. Appropriate technologies shall be used for the networking. While the procurement, installation, administration and maintenance of the networking equipment shall be the responsibility of the computer centre, it shall not be responsible for the computing resources in the hostels and the residential areas except in cases identified by the competent authority.

7. Development, Maintenance and Upgrading of Software

There shall be a designated Software Team (ST) comprising the System Analysts, the Junior Programmers and two Faculty Members of the Department of Computer Science & Information Technology. One of the faculty members shall act as the Chairperson. The user departments will submit a Software Requirement Note (SRN) describing any need for

- i. new software
- ii. upgradation of existing software, or
- iii. maintenance

and the stipulated time frame for the service (i.e. urgency). The ST will consider the SRN and either recommend third party service or take up the task for in-house service. For in-house tasks the ST members may directly carry out the task, or engage other GU members, including students. Optionally, external professionals may also be hired for in-house software tasks. A Software Quality Assessment Committee (SQAC) comprising two members of the ST, two faculty members of the Department of Computer Science & Engineering, and one member of the user department shall oversee the quality of the in-house work as well as the procured software & service.

The ST shall also be responsible for maintaining the university website. One of the ST members shall act as the Web Master.

Software procured or developed should be properly documented and maintained in-house. Tailored software, developed by third parties must provide the full source code of the software.

The source codes of software developed in-house both by the software professionals or students must be available and maintained by the computer center personnel.

Every upgrading of software packages must be supported by proper documentation and justifications. Licensed software procured must be upgraded to new versions, if the user requirement assessment recommends such upgrading.

The software packages that have already been procured or developed in-house will be distributed to different user departments based on the user requirement assessment. Wherever possible these software packages shall be integrated under a suitable framework to enhance sharing of resources and utilization taking into consideration the security concerns. While developing new software, its feasibility for integration must be studied.

8. Green Computing Practices

Due to growing concern in environmental responsibility, the computing resources should be used efficiently. The following green computing practices shall be adopted.

- Obsolete equipment disposal by following “Upgrading and disposal of obsolete or unusable IT infrastructure” policy
- Use of certified energy efficient and environment friendly equipment
- Sharing printers over a network
- Keeping monitors in sleep mode or turn-off mode when not in use
- Activating power management features on computers and peripherals
- Use of email for circulation of office documents and memos
- Reduction of paper waste by printing as little as possible
- Use of double sided printing
- Refilling of toner cartridge wherever possible and buy back of batteries by authorized vendors

9. Printers & Printer Usage

Getting documents printed is an important part of computing activity. However, it can be also quite costly as printing stationery is often expensive. Therefore, it is necessary to be prudent in the supply and usage of printers. The policy on the supply of printers shall be as follows:

1. One laser printer shall be provided to each of the following:

Vice Chancellor, Deans, Heads of Departments, Registrar, Controller of Examinations, Librarian, Treasurer, University Engineer, Department Offices, Wardens offices, Administrative Sections.

2. Depending upon the size of the faculty each department shall be provided one (for faculty up to 10) or two (for faculty more than 10) networked laser printers for exclusive use of the faculty members. These shall be placed in the department in an area that is easily accessible to the faculty members.
3. DMPs shall be provided wherever there is need for printing receipt vouchers.

The departments shall procure printer cartridges and paper through the departmental contingency fund. There shall be a limit of pages at minimal cost prints to a faculty member per year. The accounts for this shall be maintained by the concerned departments.

Printers shall be made available in the computer centre units for taking prints by the students and scholars. Students and scholars shall be allowed laser prints at minimal cost as tabulated.

In addition, the final year students and the research scholars shall be allowed to take a laser print of one copy of his/ her thesis/ project dissertation at a minimal cost.

Private parties shall be allowed to set up print shops within the university campus to enable students to take additional printouts. Restricted access to the network shall be provided to these print shops for transferring of files.

10. Upgrading and disposal of obsolete or unusable IT infrastructure and associated resources

There shall be a four member committee comprising the Professor in-charge of the department, a Faculty Member of the Department of Computer Sc. & Information Technology, a Computer Engineer, and the Deputy Registrar (Stores & Purchase) to assess the status of the IT resources. A member of the concerned department shall be a special invitee. The Professor Incharge of the Computer Centre shall Chair the Committee. The committee shall assess the status of the resources periodically and shall be empowered to declare a computing resource as obsolete and to recommend its disposal. The resources tagged as obsolete will be replaced by state-of-the-art resources, subject to availability of funds, without affecting the users.

The obsolete resources may be given to Hardware Labs, exchanged with state-of-the-art systems under buy-back options. The University may also decide to donate such systems to organizations such as schools, if the organization finds them usable. The

obsolete resources which are declared as e-waste should be disposed by following the guideline set by E-Waste Management committee of the University.

11. Access Control and Usage of IT infrastructure

In respect of access control and usage of IT infrastructure the University policy shall be as follows:

1. The University shall have the right to control the access to the various computing resources and databases in the University.
2. As required by the Govt. of India IT Laws the University shall maintain a log of the emails sent and received by the users.
3. Accessing undesirable/illegal/harmful/copyright infringing materials using the University computing resources is prohibited. The access to those materials/websites shall be blocked to the extent possible. Log of accesses to websites of doubtful nature shall be maintained and scanned from time to time.
4. The users shall maintain discipline and shall not cause any damage to any resource of the computer centre.
5. The users shall not bring any food item to the computer centre.
6. Every user shall sign a document assuring the University that they will abide by the above rules at the time of applying for a login account. Disciplinary action shall be initiated against a user violating any of these rules and his/her access to the resources in the computer centre shall be blocked.

12. Risk Management of IT infrastructure

With growing dependency on IT infrastructure, the threats and vulnerability to IT infrastructure are of great concern today. IT infrastructure faces several risks and the risk exposure may vary from time to time. It is necessary to perform IT infrastructure risk assessment at regular intervals and there shall be an Incident Response and Disaster Recovery Team for the University. The University shall follow the risk management policies as given below:

- Periodic and scheduled backup of data in geographically separated location
- Keeping IT infrastructure under surveillance
- Use of fire alarm, smoke alarm and fire extinguisher
- Earthquake resistant buildings
- Physical security for theft control
- Use of anti-virus tools for protecting servers, desktops and network devices from malwares
- Regular updating of software with security patches
- Regular updating of firewall

13. Computer Centre Committee

There shall be a Computer Centre Committee consisting of one representative from each of the user departments with the Vice-Chancellor as the Chairperson and the Professor in-charge of the centre as its Convener. The committee shall meet at least once in a semester to review the functioning of the IT infrastructure and to take major operational and policy decisions.

** The above policy is approved by the competent authority of the University subject to ratification by the Executive Council (which is the highest decision making authority of the University).*



(Dr. H. K. Nath)
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