



Information Technology Policy-2022















Information Technology Policy-2022

Chaudhary Charan Singh University Meerut, (Uttar Pradesh), India



Chaudhary Charan Singh University Meerut (U.P.) India

MESSAGE



I welcome you all to the Information Technology (IT) policy of Chaudhary Charan Singh University, Meerut a Premier institution of higher education learning. Chaudhary Charan Singh University has a reputation for excellence in scientific research, innovation, ethics and academic excellence. The framework of Information Technology policy is needed in order to provide guidelines to the academic and administration for the enrichment of egovernance development and implantation. This will also provide platform for faculty and students for strategic assessment, initiatives and a road map for vision.

In support of our mission and vision, this policy aims to fulfill following goals: ensure scientific excellence, innovation and leadership; integrate undergraduate and graduate education, reinforce in the translation of new knowledge and innovation followed by submission of patents; faster interdisciplinary research and finally promote efficient use of advanced instrumentation resources.

I assure that this draft policy will enhance accountability and responsibility of our faculty members to quality assurance and improvement in addition to overall upliftment of society and culture.

I am confident that with the strong participation of our faculty, researchers and students in their own research activities, the basic aim enshrined in the policy will be fulfilled. The research outcome will not be an asset to the academic world but society will also be benefitted.

I wish that this Information Technology policy will be indispensable in advancing the frontiers of knowledge in Science, Arts and Social Sciences.

(Sangeeta Shukla)



Chaudhary Charan Singh University Meerut (U.P.) India

MESSAGE



I welcome you all to the Information Technology (IT) policy of Chaudhary Charan Singh University, Meerut. We in Chaudhary Charan Singh university believe to develop a social, scientific, cultural, technological and economic development and share the education with international territories as well. Our goal is to create benchmark in academics and latest technologies.

Chaudhary Charan Singh University has a reputation for excellence in scientific research, innovation, ethics and academic excellence. The framework of Information Technology policy is needed in order to provide guidelines to the academic and administration for the enrichment of e-governance development and implementation.

In support of our mission and vision this policy aims to fulfill following goals: ensure seamless flows of information with full transparency in the fast paced technology world. University is prepared to find solutions for any technology related issue and provide automated workflows with information technology.

I assure that this draft policy will enhance accountability and responsibility of our faculty members to quality assurance and improvement in addition to overall upliftment of society and culture.

In our mission to contribute to national development, we all hope that IT policy of the University will help us to fulfill the commitment towards society.

I extend my best wishes to all the stakeholders who are part of the University and to those also who intend to join us in our endeavour to liberate the humanity with the help of the powerful tool of Information Technology.

(Y. Vimala)

PREFACE

Now a days, the computers are occupying the central stage. The intranet system becomes the integral part in education institutions. Several online services are made available to academic fraternity, students and officials through this system. Realizing the importance of this system, Chaudhary Charan Singh University, Meerut took the initiative in year 1982 to establish basic network and IT infrastructure in the University Campus. The University completed the first phase of campus wise network development in year 2000 by covering all teaching departments of the campus. The second phase of IT Infrastructure development accomplishment with the networking of University administrative block in year 2003. Over the years, not only active users of the network facilities have increased many folds but also the use of web-based applications increased. Wi-Fi in the University campus was started in third phase in year 2015. Fourth phase of Internet connectivity through fibre in residential and hostels in year 2020. Presently, the University has about 1200 network connections and 5000+ users covering twenty buildings across the campus. Central library has been given the responsibility of running the University's INFLIBNET & Internet service. The University is providing internet services to its students, faculty members and administrative staff on 1gbps internet-based line connectivity of National Knowledge Network (NKN). Several e-Governance services are made available through the University web portal. These services include online admissions, results registration, various forms and fees submission etc. All these services are user friendly and student centric.

Clearly defined IT policies convince users about the steps taken for managing the network. Policy and guidelines from the foundation of the institution's IT security program are often required to mention at the time of IT audit or any litigation against institutions.

In view of above, Chaudhary Charan Singh University, Meerut proposes its IT Policy that will also work as a course of action for using University's computing facilities including computer hardware, software, email, Data science, Big Data engineering, Robotics, Software development, Web designing, Mobile internet, Nanotechnology, 3D printing and genetics & biotechnology and including artificial intelligence and intranet access. The IT policy shall articulate University's set directions and provide information about acceptable actions and prohibited actions.

(Sangeeta Shukla)

Table of Contents

S. No.		Page No.
1	IT POLICY FRAMEWORK	7
2	OBJECTIVES	7
3	GOALS	12
4	APPLICATIONS OF IT POLICY	13
5	ANNUAL MAINTENANCE CONTRACT & WARRANTY	13
6	INSTALLATION OF SOFTWARE & UPDATIONS IN OPERATING SYSTEM	14
7	HARDWARE INSTALLATION AND MAINTENANCE CONTRACT	15
8	ANTIVIRUS UPDATING AND BACKUP OF DATA	15
9	NONCOMPLIANCE	15
10	NETWORK SERVICE & WIRELESS LOCAL AREA NETWORK	16
11	USE OF POLICY & E-MAIL ACCOUNT	16
12	GREEN COMPUTING	17
	TASK GROUP MEMBERS FOR INFORMATION TECHNOLOGY POLICY	

Preamble

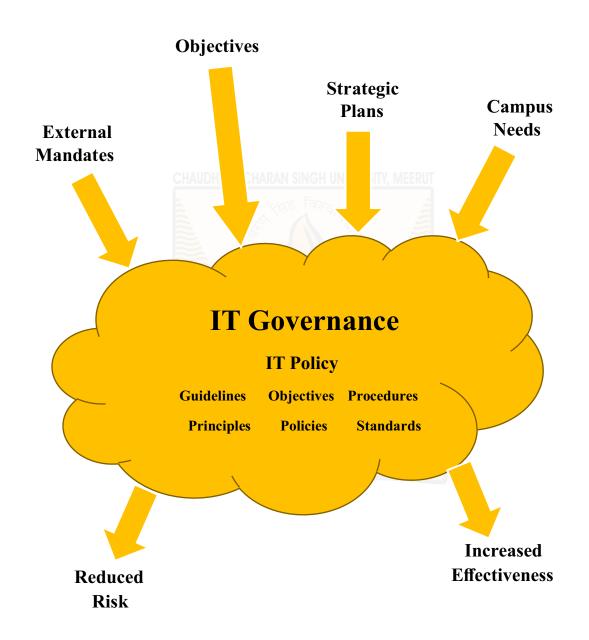
The information technology (IT) policy of the Chaudhary Charan Singh University, Meerut boosts the central approach that governs the usages for all the stakeholders of the University's information technology resources. This is made up of the IT facility allocated centrally or by individual department. Every member of the University is expected to be familiar with and hold fast to this policy. The users of the University campus network and resources are responsible to work, properly use and to protect information esources and to respect the rights of others.

Vision

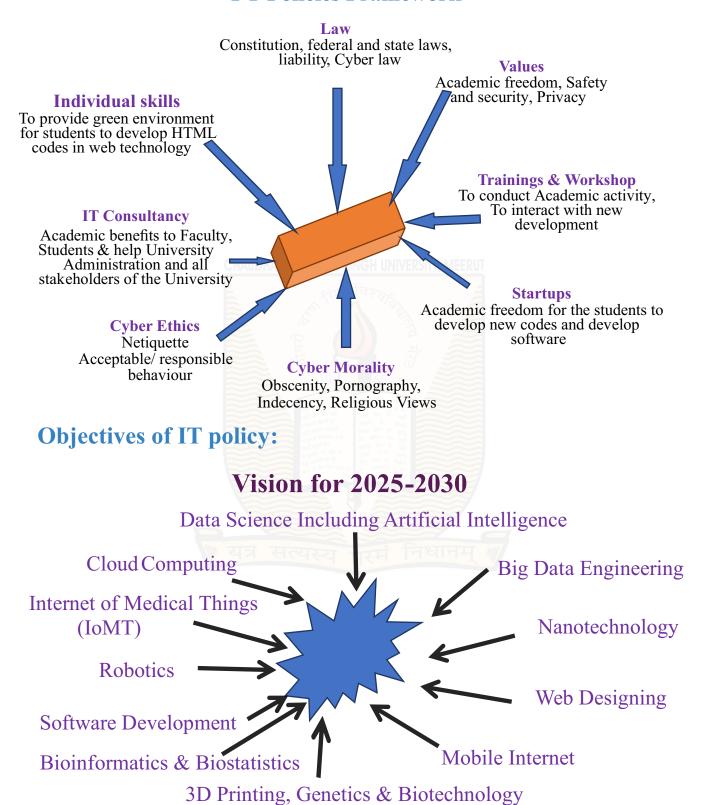
To be recognized as a leader in providing the world class Information Technology usages in the University.

Mission

To help our stakeholders (students, faculties, employees, Government and other associated organizations/people) to be informed and dedicated to providing information and IT facilities.



I T Policies Framework



Software Development Policy:

This Policy applies to all employees (i.e., faculty, staff), consultants and contractors involved in the development or modification of enterprise-level centrally-managed mission critical applications that support our University. If any provision of this Policy is found to be inconsistent with the provisions of a collective agreement, the collective agreement will prevail, unless the Policy provision is required by law, in which case the Policy provision will prevail.



Mobile Internet Policy:

To develop a robust and secure state-of-the-art telecommunication network providing seamless coverage with special focus on rural and remote areas for bridging the digital divide and thereby facilitate socioeconomic development; create an inclusive knowledge society through proliferation of affordable and high quality broadband services across the nation; reposition of the mobile device as an instrument of socioeconomic empowerment of citizens; make India a global hub for telecom equipment manufacturing; promote development of new standards to meet national requirements; attract investment, both domestic and foreign and promote creation of jobs.



The Future- 5G Technology



With 2020 crossing the threshold era, we have heard a lot about the newest kid on the block when it comes to mobile data interface—5G or 5th generation mobile networks. Its precedent, 3G, and 4G have become an immense driver to shape the way people use mobile data.5G is the new global wireless standard that virtually connects people and machines, devices, and objects. Compared to other internet standards, it is expected to deliver

higher multi – Gbps peak data speeds, relatively low latency, greater network capacity, added availability, and a more notable uniform user experience for users.

Robotics:

To engage in multidisciplinary research in the fields of robotics and automation, condition monitoring, vision system and artificial intelligence to provide solutions which will support industrial automation systems. It also focuses on providing the students with a varied academic and research experience on industrial automation and robotics, and helps the University in educating the future work force in meeting the oncoming technical challenges and advancements in the field of automation and robotics.



Web Designing:

Web design is the process of planning, conceptualizing, and arranging content online. Web design also includes web apps, mobile apps, and user interface design. Considering an academic domain, our IT Policy may focus on:

- Creating/designing and implementing various short-term Courses/ Certificate Courses in this trending area.
- Creating mobile applications and automating many of the traditional way of work.
- User friendly interactive lively and light weighted applications which may be used by students across the region for Academic/Placements/Online activities purposes.

Big Data Engineering:

Data obtained from all sources can be at single repository. This repository can be used for various purpose (view data from multi dimension) using query optimizer.

Nanotechnology:

Nanotechnology and science has introduced a new dimension to basic sciences and a range of technologies. Research from various scientific disciplines is aggressively getting involved in the relevant research as a parallel way to boost nanoscience. For years ago, it has been said that the innovation is achieved by breaking through the boundaries of existing technologies. Nanotechnology is the next industrial revolution and the telecommunications industry will be radically developed by it in the future. Nanotechnology has revolutionized the

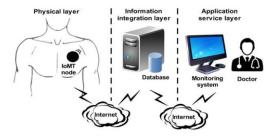
telecommunications, computing, and networking industries. In the future, nanotechnology could also enable objects to harvest energy from their environment. New nano materials and concepts are currently being developed that show potential for producing energy from movement, light, variations in temperature with high conversion efficiency.

3D Printing in Genetics & Biotechnology:

3D printing is an essential component of additive manufacturing which employs computer-automated manufacturing (CAM) processes to design or fabricate physical 3D objects layer by layer from computer-aided design (CAD) models. By using this technology, biology students can study cross-sections of different organs. Likewise, chemistry students can create 3D molecules. Engineering, designing, and architecture students can print out prototypes and 3D models of different designs etc.

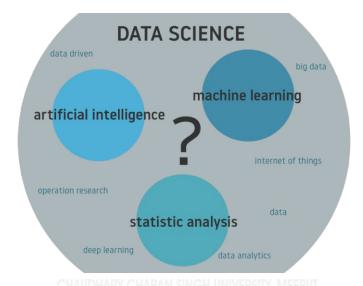
Internet of Medical Things:

The Internet of Medical Things (IoMT) is the network of Internet-connected medical devices, hardware infrastructure, and software applications used to connect healthcare information technology. Sometimes it is referred to as IoT in healthcare. IoMT allows wireless and remote devices to securely communicate over the Internet to allow rapid and flexible of medical data.



Data Science Including Artificial Intelligence Policy:

Build and scale AI with trust and transparency to drive digital transformation, deliver personalized customer experiences and make more data-backed decisions. The aim of Data Science and Artificial Intelligence is the amalgamation of motivated students with potential calibre and degree in subject other than Computer Science and wish to develop the knowledge and skills to gain employment in Data Science and Artificial Intelligence industry.



Cloud Computing:

Cloud computing is a general term for anything that involves delivering hosted services over the internet. Cloud computing can also be thought of as utility computing or on-demand computing. The name cloud computing was inspired by the cloud symbol that's often used to represent the internet in flowcharts and diagrams. Due to the need of time, the University aims to work on this and its goal is to develop cloud technology so that the data may be stored and fetched at any time.



Goals of IT Policy:

The IT infrastructure shall be developed considering various goals like information dissemination and spreading awareness about various events and activities round the year. The following are the perspective goals to be achieved using various IT platforms;

(i) Awareness

Regular data updating, event information, announcements, and notifications of the University, department and administrative are disseminated through respective websites social media platform and newsletter.

(ii) Admissions

Admissions are annual events carried out by campus and all affiliated colleges of the University.

(iii) Academics

Various IT based tools to facilitate the academic activities and meet the needs of the contemporary trends shall be procured from time to time.

(iv) Relation with Alumnus

An exclusive IT system to establish a long -lasting relationship with the alumnus shall be strengthened for regular interaction with alumnus, maintaining records of their professional growth and other support system.

(v) Dashboards and Reports

Dashboards with different data analytics support to generate reports related to alumni activities and interactions shall be made available.

Applications of IT Policy:

The University IT Policy is applicable to all University Teaching Departments, Central library, University residence, University officials, Hostel and the Computer centre where the network facilities are provided by the University. The computers owned by the individuals, or those owned by research projects of the faculty, when connected the campus network are subjected to comply all steps mentioned in the Guidelines.

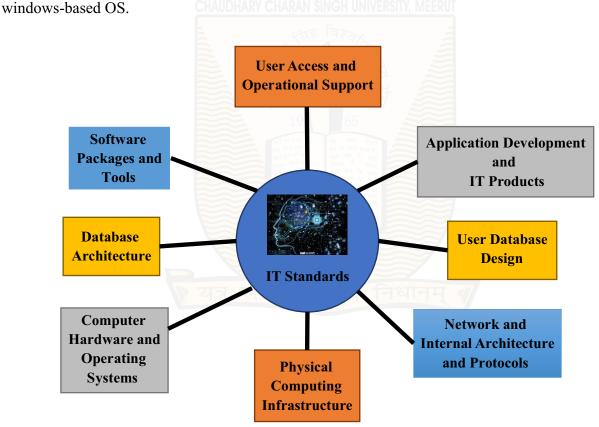
Annual Maintenance Contract and Warranty:

All Computers purchased by any Departments / Centre / engineering college / Project will be preferably with minimum 3-year on-site comprehensive warranty. After the expiry of warranty, computer must be under annual maintenance contract. Such maintenance must include OS reinstallation and checking virus elated problems.

Installation of Software and Updations in Operating System:

Any computer purchases made by the individuals department / projects will be with necessary licensed software (Operating system, antivirus software and necessary application software) installed respecting the anti-piracy laws of the country. The University IT policy does not allow any pirated / unauthorised software installation on the University owned computer and the computer connected to the University campus network. Preference will be given to install and use open-source software products wherever it is applicable.

The entire computer users are required to make sure that the respective computer system is installed with updated operating system with respective service packs, particularly with



Latest service packs are helpful in fixing the bugs and vulnerabilities in the OS that were periodically detected by the Microsoft. Free OS updates are available on official website of company. It will be users responsibility to go for updates regularly, preferably once in a week. University encourages the use of open-source software such as Linux, Open office wherever possible.

Hardware Installation and Maintenance Contract:

The University network users community will have to observe certain precautions while getting their computers or peripherals installed so that he/she may face minimum inconvenience due to interruption of services due to hardware failures.

Antivirus Updating and Backup of Data:

All Computer systems used in the University will have antivirus software installed, and it should be active at all times. The single / personal user of a computer system will be responsible for keeping the computer system compliant with this virus protection policy.

The Users are required to keep regular backups of their vital data. The virus infections often destroy data on an individual's computer. Without proper backups, recovery of destroyed files may be impossible. At the time of OS installations, it is advised that the computer's hard disk is partitioned into two volumes typically C and D.

Noncompliance:

Chaudhary Charan Singh University, Meerut faculty, staff and students do not comply with this software installations policy will leave themselves and others at risk of various infections which could result in damage or lost files in operable computer resulting in loss of productivity at individual, departments or even at the University level.



Network Services and Wireless Local Area Networking:

Individual departments / individuals connecting to the University network over the LAN may run server software, e.g., HTTP/Web server, SMTP Server, FTP server, only after bringing it to the knowledge of the IT centre in writing and after meeting the requirements of the University. Access to remote networks using University's network connection must be in compliance with all policies and rules of those networks. Each wireless access point as well as end user mobile device connected in Wi-Fi network must be registered with IT centre including point of contact information. Network access must be restricted either via authentications of MAC / IP address restrictions. Password's data must be encrypted.

Use of Policy and Email Account:

The University IT centre has installed e-mail service for its faculty, staff and the University administrators with <u>url: http://ccsuniversity.ac.in</u>. It is recommended to utilize this email service for academic and official communication. Formal official notices to faculty and staff are also circulated through this service. E-mail service will facilitate fast delivery of message and document to campus and external users' groups of individual users.

Paperless working (Green Computing):

The University has commitment in maintaining and improving on the "Green Ethos" in the campus. The green computing policy will benefit the environment conserving resources our aim is to reduce the e-waste and reduce costs through efficiencies and staff awareness. We are planning to purchase of ICT infrastructure from the green certified suppliers and improve stakeholder awareness of "Green IT issues".

Remarks:

The purpose of designing this IT policy is to guide users and IT professional to effectively use the technology for their organization. If something which is unlawful and is not specified explicitly in the policy as illegal or unauthorized, it may still be considered as breach of the University rules and provisions made in IT act. One should use own wisdom and critical; thinking in handling such situations.

Task Force Members of Information Technology (IT) Policy

- 1. **Prof. Sangeeta Shukla**, Vice-Chancellor
- 2. **Prof. Y. Vimala**, Pro Vice-Chancellor
- 3. **Prof. Mukesh Kumar Sharma**, Department of Mathematics
- 4. **Prof. Shailendra Sharma**, Department of Genetics & Plant Breeding
- 5. **Dr. Sanjeev Kumar**, Department of Economics
- 6. **Dr. Nazia Tarannum**, Department of Chemistry
- 7. **Dr. Vivek Kumar**, Institute of Legal Studies
- 8. Dr. S. K. Tyagi, Computer Centre
- 9. Dr. Vandana, Department of Computer Application
- 10. Mrs. Nidhi Bhatia, Department of Computer Application
- 11. Er. Pankaj Kumar, SCRIET
- 12. Er. Laxmi Shankar Singh, SCRIET
- 13. Sh. Sandeep Agarwal, Network Administrator

Advisory Committee of Information Technology (IT) Policy

- 1. Prof. S.V.S. Rana, Ex-Vice-Chancellor, Bundelkhand University, Jhansi
- 2. Dr. V. K. Sharma, Director General (Retd.), National Information Centre, Delhi
- 3. Prof. K. Bhatia, Department of Computer Science, G. K.V. Haridwar, U.K.
- 4. **Dr. R.S. Rathore**, System Manager, Lucknow University, Lucknow
- 5. Sh. Anil Sharma, Senior Director, Amesa CTO. Company, PepsiCo Inc.
- 6. Er. Himanshu Pandey, Member of Consulting Staff, Cadence Design Systems, NSEZ
- 7. Er. Neha Tyagi, Project Director, T.C.S., Bangolare



CHAUDHARY CHARAN SINGH UNIVERSITY MEERUT, (UTTAR PRADESH), INDIA