


BANGALORE UNIVERSITY

Syllabus of **Computer Applications (a Compulsory Skill Enhancement Course)**
for I or II Semester (Vice-Versa) Under-graduate Courses, framed as per the State
Education Policy to be implemented from the Academic Year 2024-25 and onwards.

Number of Credits: 2 (One hour of Theory, and Two hours of practicals)

Unit I:

[5 Hours]

Operating Systems, types of operating systems, major functions of the operating systems, types of user interface, examples of operating systems: MS-DOS, Windows, Mac OS, Linux, Solaris, Android. Office automation tools : word processor, power point, and spread sheet.

Unit II:

[5 Hours]

Introduction to Computer Networks, Evolution of Networking, types of networks, Network devices - Modem, ethernet card, RJ45, Repeater, Hub, Switch, Router, and Gateways, Identification of Nodes in a Networked Communication, Internet, Web and the Internet of Things, Domain Name Systems. Security Aspects - Threats and Prevention, Malware - virus, Worms, Ransomware, Trojan, spyware, adware, key loggers, Modes of Malware distribution, Antivirus, HTTP vs HTTPS, Firewall, Cookies, Hackers and Crackers.

Unit III:

[5 Hours]

Database Management Systems, Relational Data Model. Introduction to e-learning platforms such as Swayam, and MOOC. Virtual Meet: Technical Requirements, Scheduling a meeting, joining virtual meet, recording the meeting, Online Forms: Creating questionnaire, Publishing Questionnaire, conducting online responses, Analysing the responses, copying graphics into powerpoint, Downloading the response to spreadsheet. Introduction to societal impacts, Digital Foot prints, Digital Society and Netizen, Data Protection, E-waste, Impact on Health.


Laboratory Activities:

[15 Hours]

Identifying the configuration of a computer system, laptop, and a mobile phone, Identifying the version and the configuration of the operating system of a computer, laptop, and a mobile phone, Identifying the network components like patch cord, switch, RJ 45 Jack, Socket, and wireless router, creating a hotspot from a mobile phone, and allowing others to use the hotspot, creating a Google form, and send it to five users, scheduling a virtual meet and invite three people to join the Google meet, record the virtual Meet, Creating an account in the railway reservation website, IRCTC, and finding trains from Tumkur to Hubli, creating a one minute video of your choice in your native tongue, and upload the video to YouTube, composing word document, creating tables, creating charts, preparing power point slides, simple computation using spread sheet.

Web Resources:

Operating Systems - https://ftms.edu.my/v2/wp-content/uploads/2019/02/csca0101_ch06.pdf
Database Concepts - <https://ncert.nic.in/textbook/pdf/kcip107.pdf>
Computer Networks - <https://ncert.nic.in/textbook/pdf/lecs110.pdf>
Security Aspects - <https://ncert.nic.in/textbook/pdf/lecs112.pdf>
Societal Impact - <https://ncert.nic.in/textbook/pdf/leip106.pdf>
Google Meet Tutorial - <https://edvance.hawaii.hawaii.edu/wp-content/uploads/Google-Meet-Tutorial-Getting-Started-and-Recording-a-Lecture.pdf>
Google Forms - https://pdst.ic/sites/default/files/Google%20Drive_L.pdf


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Teaching Modalities: Faculty of Computer Science shall teach this course

Evaluation Method

1. The evaluation method is based on descriptive question paper.
2. The question paper will have equal weightage for all three units.