

NIRMA UNIVERSITY

Institute:	Institute of Commerce
Name of Programme:	B.Com (Hons.) Programme
Course Code:	
Course Title:	Fundamentals of Information Technology
Course Type:	Common Course
Year of introduction:	2022 (Semester-I)

L	T	Practical component				C
		LPW	PW	W	S	
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Course Learning Outcomes (CLO):

At the end of the course, the students will be able to:

1. Analyze the important trends in computer hardware, software and database management systems. BL-2
2. Assess the importance of internet and associate technologies on contemporary business organizations their socio-economic impact. BL-3
3. Elaborate on contemporary technological innovations and their applications across different domains. BL-6

Syllabus:

Total Teaching hours: 30

Unit	Syllabus	Teaching hours
I	Computer Hardware <ul style="list-style-type: none"> • Computer organization and Architecture • Generation of Computers • Computer Memory - Primary Memory and Secondary Memory • Peripheral Devices • Computer Applications in Various Industries 	08
II	Computer Software and Databases <ul style="list-style-type: none"> • Computer Software - Machine Language and High Level Language • Application Software • Operating System including Mobile OS • Overview of DBMS and RDBMS • Computer Arithmetic- Binary, Octal and Hexadecimal Number Systems • Algorithm and Flowcharts • Basics of programming • Contemporary software trends – In-memory databases, Big Data, Industry 4.0 • Software development methodologies and evolution to Agile and DevOps 	10
III	Computer Networks <ul style="list-style-type: none"> • Components and Types of Networks (LAN Vs WAN) • Internet Evolution, building blocks and Applications • Digital Commerce & Technology Convergence 	12

	<ul style="list-style-type: none"> • Mobile Commerce Fundamentals • Network Security Fundamentals • Contemporary technologies (5G, Analytics, IoT, SAAS, Cloud, AI & ML, Metaverse etc.) and Digital Transformation 	
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Self Study:	
Suggested Readings/ References:	<ol style="list-style-type: none"> 1. Laudon K. C., Laudon J. P., Management Information Systems, Pearson Education Inc, New Delhi. 2. O'Brien J., Marakas G.M; and Behl R., Management Information Systems, McGrawhill Education Pvt Ltd, New Delhi,.
Suggested List of Experiments:	
Suggested Case List:	

L = Lecture, T = Tutorial, P = Practical, C = Credit

w.e.f. academic year 2022 - 23 and onwards