

# TECNIA INSTITUTE OF ADVANCED STUDIES

## GRADE 'A' INSTITUTE

Department of Management Sciences

### COURSE PLAN

ACADEMIC SESSION 2024-25 (w.e.f. 1st August, 2024)

As per Scheme of Examination & Syllabus of Masters of Business Administration for First Semester (w.e.f 2021-22 Academic Session Onwards) Guru Gobind Singh Indraprastha University, New Delhi.

|  |  |   |  |  |   |   |  |  |  |   |            |
|--|--|---|--|--|---|---|--|--|--|---|------------|
| PROGRAMME CODE:  | 039  | PROGRAMME:  | Masters of Business Administration   | SHIFT:   | 1st   | L   | 3  | T/P  | 0  | CREDITS:  | 3          |
| COURSE CODE:   | MS-109   | COURSE NAME:  | Information Technology Management  | SECTION:   | A   |   |  |  |  |   |            |
|  |  | COURSE TYPE:  | Core/ Open Elective  | FACULTY:   | Mr. Abhishek Upadhaya   |   |  |  |  |   |            |
| OBJECTIVE:   | To provide understanding on relevance & need of quantitative methods for making business decisions, to have a sound knowledge of fundamentals of statistics and statistical techniques, be able to read and interpret statistical information, be able to perform statistical analysis for effective decision making in organizations. |   |  |  |   |   |  |  |  |   |            |
| <b>COURSE OUTCOME &amp; MAPPING, COURSE ARTICULATION</b> |  |   |  |  |   |   |  |  |  |   |            |
|  |  | Demonstrate an understanding of management concepts, principles and theories, and apply them in the context of organizational work practices. | Apply analytical and critical thinking skills to analyze the dynamic business environment and identify entrepreneurial and business opportunities and risks. | Prepare business strategies, develop concomitant functional and operational strategies and implement them in an integrated manner to efficiently and effectively achieve the functional goals and the business objectives. | Demonstrate an understanding of decision making processes at various levels of the organization with respect to resources mobilization and their efficient deployment and use to achieve the set goals. | Demonstrate the ability to analyze management problems, to identify and collect relevant data and to apply a creative problem-solving approach. | Identify and recommend the information technology-based interventions to achieve organizational goals. | Benchmark organizational and managerial practices against the principles of good governance, ethical conduct, corporate social responsibility and the imperatives of long-term societal welfare. | Demonstrate effective communication and interpersonal skills as well as the ability to work with and lead teams. | Develop a lifelong learning approach manifested in their attitude to learn, unlearn and in their pursuit of excellence in professional, personal and social life. |            |
| <b>CO - PO MAPPING</b>                                   |  |   | <b>PO1</b>   | <b>PO2</b>   | <b>PO3</b>  | <b>PO4</b>  | <b>PO5</b>   | <b>PO6</b>   | <b>PO7</b>   | <b>PO8</b>  | <b>PO9</b> |
| <b>CO1</b>   | Recall the components of an Information Technology based system  | 1   | 1  | 1  | 1   | 1   | 1  | 1  | 1  | 0   | 1          |
| <b>CO2</b>   | Identify the challenges in storage and retrieval of data   | 1   | 1  | 1  | 2   | 2   | 3  | 1  | 2  | 2   | 2          |
| <b>CO3</b>   | Classify the software into various types on the basis of different criteria  | 1   | 1  | 1  | 2   | 2   | 1  | 1  | 1  | 1   | 1          |
| <b>CO4</b>   | Create and analyze the database using SQL and spreadsheet tools  | 2   | 1  | 1  | 2   | 1   | 1  | 2  | 1  | 1   | 1          |
| <b>CO5</b>   | Build an appropriate computer network as per the organizational needs  | 2   | 2  | 3  | 2   | 1   | 1  | 1  | 1  | 1   | 1          |
| <b>CO6</b>   | Develop web pages using HTML   | 1   | 2  | 2  | 1   | 1   | 1  | 1  | 1  | 1   | 1          |
| <b>CO7</b>   | Contrast the information systems for managerial decision making  | 3   | 2  | 2  | 1   | 1   | 1  | 2  | 1  | 1   | 1          |
| <b>CO8</b>   | Understand the new and emerging technologies   | 1   | 1  | 1  | 2   | 1   | 1  | 1  | 1  | 1   | 1          |
| <b>Average</b>   |  | 1.25  | 1.375  | 1.375  | 1.625   | 1.25  | 1.25   | 1.25   | 1  | 1.125   |            |



| Lecture No. | Unit No. | Topic   | Sessional Outcome   | Experiential Learning   | Participative Learning | Problem Solving Methodologies | ICT Tools & E-Resources Utilization   | Mapping with CO | Class Material (PPT Faculty+ Students) | Additional Material (Links/ Journals/ Articles/ NEWS)   | Mode of Assessment | Bloom's Taxonomy |
|-------------|----------|---|---|---|------------------------|-------------------------------|---|-----------------|--|---|--------------------|------------------|
| 1           | I        | Information Technology  | Lecture Contents  | Understand basic concepts of computer and its characteristics |                        | Demonstration                 | <a href="https://www.youtube.com/watch?v=MXZmQOOC5-A">https://www.youtube.com/watch?v=MXZmQOOC5-A</a>   | CO1             | PPT by Teachers                        | <a href="https://www.youtube.com/watch?v=AUTG5d3uuMw">https://www.youtube.com/watch?v=AUTG5d3uuMw</a>   | QA Session         | Level1,2         |
| 2           | I        | Components of IT systems, Characteristics and Classification of computers | Components of IT  | Understand the characteristics of Computer                    | Group Discussion       |                               | <a href="https://www.bdu.ac.in/cde/SLM/SLM_FULL/B.Com%20C.A%20IIP%20Year%2">https://www.bdu.ac.in/cde/SLM/SLM_FULL/B.Com%20C.A%20IIP%20Year%2</a>         | CO1             | Group Discussion(CIA)                  | <a href="https://www.youtube.com/watch?v=AUTG5d3uuMw">https://www.youtube.com/watch?v=AUTG5d3uuMw</a>   | Viva               | Level1,3         |
| 3           | I        | Computer Architecture, Computer Memory: Types of Memory                   | Characteristics of computer   | Define the Classifications of Computers                       | Group Discussion       |                               | Youtube   | CO1             | PPT                                    | <a href="https://www.youtube.com/watch?v=11sbOurqD4&amp;t=31s">https://www.youtube.com/watch?v=11sbOurqD4&amp;t=31s</a>   | QA Session         | Level1,2         |
| 4           | I        | Storage Devices, Mass Storage Systems                                     | Classifications of Computers: Micro, Mini, Mainframe and super computers.         | Classify the Block Diagram of Computer and its Architecture   |                        | Presentations by Students     | <a href="https://www.youtube.com/watch?v=L9X7XXHvDU&amp;list=PLxCzCOWdZaiHMo">https://www.youtube.com/watch?v=L9X7XXHvDU&amp;list=PLxCzCOWdZaiHMo</a>     | CO1             | PPT by Students                        | <a href="https://www.cs.umd.edu/~meesh/411/CA-online/chapter/computer-">https://www.cs.umd.edu/~meesh/411/CA-online/chapter/computer-</a>                             | QA Session         | Level1,3         |
| 5           | I        | Concept of Cloud Computing  | Computer Architecture   | Identify Hardware Units of computer                           | Tutoring               |                               | Demonstration   | CO1             |  | <a href="https://www.researchgate.net/publication/351955758_A_Bibliometric_Analy">https://www.researchgate.net/publication/351955758_A_Bibliometric_Analy</a>         | Viva               | Level 4,5        |
| 6           | I        | Data Centres and their challenges   | Input-output devices, Description of Computer Input Units, Output Units, CPU.     | State Memory Hierarchy  |                        | Group Discussion              | Youtube   | CO1             |  | <a href="https://www.youtube.com/watch?v=1JB86jsvRE">https://www.youtube.com/watch?v=1JB86jsvRE</a>   | QA Session         | Level 2,3        |
| 7           | II       | Computer Software   | Computer Memory: Memory Hierarchy   | Classify how many types of memory                             |                        |                               | Youtube   | CO1             | Debate (CIA)                           | <a href="https://www.youtube.com/watch?v=sWAsRA-9DgQ&amp;t=379s">https://www.youtube.com/watch?v=sWAsRA-9DgQ&amp;t=379s</a>   | MCQ                | Level 2,3        |
| 8           | II       | Types of Software   | Types of memory :Primary Memory – RAM and its types, ROM and its types,           | Classify the Hard Disk and its work                           | Brainstorming          |                               | Youtube   | CO1             |  | <a href="https://www.youtube.com/watch?v=wnBvCRHdfiy">https://www.youtube.com/watch?v=wnBvCRHdfiy</a>   | Viva               | Level 2,4        |
| 9           | II       | System Software: Introduction to Operating System                         | Secondary Storage Devices - Hard Disk, Compact Disk,                              | State Cloud Computing   |                        |                               | <a href="https://www.researchgate.net/publication/352477780_Research_Paper_on_">https://www.researchgate.net/publication/352477780_Research_Paper_on_</a> | CO1             |  | <a href="https://www.tutorialspoint.com/cloud_computing/cloud_computing_overvie">https://www.tutorialspoint.com/cloud_computing/cloud_computing_overvie</a>           | Assignment         | Level1,2         |
| 10          | II       | Need, Functions and Types of Operating systems                            | Concept of Cloud Computing  |   |                        | Group Discussion              |   | CO1             | Group Discussion (CIA)                 |   | Viva               | Level1,3         |
| 11          | II       | Introduction to GUI   | Tutorial  | Explain the concept of Data Centers                           |                        |                               | <a href="https://www.youtube.com/watch?v=42E--Veswhw">https://www.youtube.com/watch?v=42E--Veswhw</a>   | CO1             | Viva-Vose (CIA)                        | <a href="https://go4hosting.in/blog/6-key-challenges-faced-by-data-centers-in-india/">https://go4hosting.in/blog/6-key-challenges-faced-by-data-centers-in-india/</a> | Quiz               | Level1,2         |
| 12          | II       | Compiler, Interpreter and Assembler                                       | Data Centers & their challenges   | Explain the basic concept of Software and its types           |                        |                               | Youtube   | CO1             |  | <a href="https://www.youtube.com/watch?v=Z46RFIXN8U">https://www.youtube.com/watch?v=Z46RFIXN8U</a>   | MCQ                | Level 4,5,6      |
| 13          | II       | Types of Computer Programming Languages.                                  | Interaction with Computers: Computer Software                                     | Classify about system software                                |                        |                               | Youtube   | CO1             |  | <a href="https://www.youtube.com/watch?v=e0fir6to5Bk">https://www.youtube.com/watch?v=e0fir6to5Bk</a>   | Quiz               | Level 2,3        |
| 14          | II       | Application Software and their uses                                       | System software:  | Demonstrate the concept of an Operating System                |                        |                               |   | CO1             |  |   | Quiz               | Level 2,3        |
| 15          | II       | Features of Good Software and emerging trends in software development     | Introduction to operating system need, functions and types of an operating system | Classify the Translators                                      |                        | Group Discussion              | Youtube   | CO1,CO2         | Group Discussion (CIA)                 | <a href="https://www.youtube.com/watch?v=ij71sDmmKpe">https://www.youtube.com/watch?v=ij71sDmmKpe</a>   | MCQ                | Level 2,3        |
| 16          | II       | Spreadsheet and Presentation Software. Data Analysis using Excel          | Introduction to GUI, compiler, Interpreter and Assembler                          | Understand about the type of Computer Languages               |                        |                               | Youtube   | CO1,CO2         |  |   | Viva               | Level 2,4        |
| 17          | II       | DBMS: Traditional File concepts and Database Environment                  | Types of Computer Programming Languages   | Understand the basic concept of Application Software          | Brainstorming          |                               | Youtube   | CO1,CO3         |  | <a href="https://www.youtube.com/watch?v=ifo76VyrBYo">https://www.youtube.com/watch?v=ifo76VyrBYo</a>   | Quiz               | Level1,2         |
| 18          | II       | Database Management Systems Concepts                                      | Application Software and their uses   | Explain the use of spreadsheet                                |                        |                               | PPT   | CO1,CO3         | Debate                                 | <a href="https://www.youtube.com/watch?v=of345yRAkoM">https://www.youtube.com/watch?v=of345yRAkoM</a>   | MCQ                | Level1,3         |
| 19          | II       | Types of Data Models, ER Modeling   | Spreadsheet and Presentation software   | Understand about Excel and DBMS                               | Brainstorming          |                               | Youtube   | CO1             | PPT                                    | <a href="https://www.youtube.com/watch?v=LvjJ0WEaww">https://www.youtube.com/watch?v=LvjJ0WEaww</a>   | MCQ                | Level1,2         |
| 20          | II       | Integrity Constraints, SQL queries.                                       | Data Analysis Using Excel, Intro to DBMS, Traditional file concept                | Understand DBMS Environment                                   | Demonstration          |                               | PPT   | CO1             | PPT                                    | <a href="https://www.youtube.com/watch?v=U2T_LCdO14y">https://www.youtube.com/watch?v=U2T_LCdO14y</a>   | QA Session         | Level 4,5        |
| 21          | III      | Data Communication and Networks   | DBMS and its Environment  | Understand about the type of Data Models                      |                        |                               |   | CO1,CO2         | PPT by students                        |   | Viva               | Level 2,3        |
| 22          | III      | Concepts of Data Communication  | Types of Data Models, ER Modelling  | Define Intergirty Constant                                    |                        |                               | PPT   | CO1,CO2         | Viva-Vose (CIA)                        | <a href="https://www.youtube.com/watch?v=V2Exczh3Row">https://www.youtube.com/watch?v=V2Exczh3Row</a>   | Assignment         | Level1,2         |
| 23          | III      | Types of Data-Communication Networks                                      | Integrity Constatnt   |   |                        |                               | Youtube   | CO1             | PPT                                    | <a href="https://www.youtube.com/watch?v=nhdQpXMldxc">https://www.youtube.com/watch?v=nhdQpXMldxc</a>   | Quiz               | Level1,3         |
| 24          | III      | Communications Media  | Tutorial  | Use of SQL Commands   |                        |                               | Youtube   | CO1,CO2         | PPT                                    | <a href="https://www.youtube.com/watch?v=rXxmKFvfmY">https://www.youtube.com/watch?v=rXxmKFvfmY</a>   | QA Session         | Level1,2         |



|    |     |   |  |   |                          |   |                  |         |                 |   |            |           |
|----|-----|---|--|---|--------------------------|---|------------------|---------|-----------------|---|------------|-----------|
| 25 | III | Concepts of Computer Networks                     | SQL Queries                                      | Demonstrate the concept of DCN                        | Tutoring                 |   |                  | CO1,CO2 |                 |   | MCQ        | Level 4,5 |
| 26 | III | Primary Network Topologies                        | Data Communication & Networks                    | Demonstrate the concept Data and its Network          | Tutoring                 | Youtube   |                  | CO1,CO3 | PPT             | <a href="https://www.youtube.com/watch?v=_yog7h4BokQ">https://www.youtube.com/watch?v=_yog7h4BokQ</a>   | Viva       | Level 2,3 |
| 27 | III | Network Architectures-The OSI Model               | Concept of DCN                                   | Demonstrate the types of DCN                          | Tutoring                 | Youtube   |                  | CO1,CO2 | PPT by Students | <a href="https://www.youtube.com/watch?v=JFF2vjaNOCw&amp;list=PLxC2COWd7aiGFBD">https://www.youtube.com/watch?v=JFF2vjaNOCw&amp;list=PLxC2COWd7aiGFBD</a> | Viva       | Level1,2  |
| 28 | III | Inter-Networking devices                          | Types of Data Communication Networks             | Understand the concept of Communication media         | Presentation by Teachers | Youtube   |                  | CO1,CO2 | PPT             | <a href="https://www.youtube.com/watch?v=GflvQlamXFU">https://www.youtube.com/watch?v=GflvQlamXFU</a>   | QA Session | Level1,3  |
| 29 | III | The Internet, Intranet and Extranets              | Communication media                              | Understand th concept of Computer Networks            |                          | Youtube   | Grup Discussion  | CO1,CO2 | PPT by Students | <a href="https://www.youtube.com/watch?v=rl8Djfx1fc">https://www.youtube.com/watch?v=rl8Djfx1fc</a>   | Viva       | Level1,2  |
| 30 | III | Internet Services                                 | Concept of Computer Networks                     | Explain the Different Topologies                      |                          |   | Grup Discussion  |         |                 |   | MCQ        | Level 4,5 |
| 31 | III | World Wide Web                                    | Primary Network Topologies                       | Define the concept of OSI Model                       |                          | Youtube   |                  | CO1,CO2 | PPT             | <a href="https://www.youtube.com/watch?v=Tn9MxBdVIZ4">https://www.youtube.com/watch?v=Tn9MxBdVIZ4</a>   | QA Session | Level 2,3 |
| 32 | III | Creating Web Pages using HTML,                    | Network Architecture -The OSI Model              | Understand networking device                          |                          | <a href="https://www.researchgate.net/publication/317101504_Computer_Networki">https://www.researchgate.net/publication/317101504_Computer_Networki</a> |                  | CO1,CO2 | PPT by Students |   | MCQ        | Level1,2  |
| 33 | IV  | Functional and Enterprise Systems                 | Inner Networking Devices                         | Understand the Basic concept of Intranet and Extranet |                          |   | Grup Discussion  | CO1,CO2 | PPT             | <a href="https://ieeexplore.ieee.org/abstract/document/7003481">https://ieeexplore.ieee.org/abstract/document/7003481</a>                                 | QA Session | Level1,3  |
| 34 | IV  | Data, Information and Knowledge Concepts          | Internet, Intranet & Extranet                    | Understand the Concept of WWW                         |                          |   | Grup Discussion  |         |                 |   | QA Session | Level1,2  |
| 35 | IV  | Decision Making Process                           | Internet Services & Wrold Wide Web               | Use of Creating Web Pages                             |                          |   | Grup Discussion  | CO1,CO2 | PPT             | <a href="https://www.youtube.com/watch?v=llk7UXzV_Qc">https://www.youtube.com/watch?v=llk7UXzV_Qc</a>   | Viva       | Level 4,5 |
| 36 | IV  | Concept and Classification of Information Systems | Creating web pages using HTML                    | Describe the concept of Functional system             | Brainstorming            | Youtube   |                  | CO1,CO2 | PPT             |   | QA Session | Level 2,3 |
| 37 | IV  | Concept and Classification of Information Systems | Functional & Enterprise System                   | Explain the concept of LAN,WAN & MAN                  |                          | Youtube   | Group Discussion | CO1,CO4 | PPT             |   | MCQ        | Level 2,3 |
| 38 | IV  | Security Issues in Information Technology         | Data Information and netwrok Concepts            | Define the concept Decision Making                    |                          |   | Group Discussion |         |                 |   | MCQ        | Level1,2  |
| 39 | IV  | Emerging Trends in Information Technology         | Decision Making Process                          | Describe the concept Information system               |                          | E-Books   |                  | CO1,CO4 | PPT             | <a href="https://www.13stream.com/books/">https://www.13stream.com/books/</a>   | Quiz       | Level1,3  |
| 40 | IV  | Block Chain                                       | Concept and Classification of Information System | Discuss the security issues                           |                          | E-Books   |                  | CO1,CO4 | PPT             |   | Quiz       | Level1,2  |
| 41 | IV  | Artificial Intelligence, Machine Learning         | Security issues in Information System            | Discuss about IT                                      |                          | E-Books   |                  | CO1,CO4 | PPT             |   | QA Session | Level 4,5 |
| 42 | IV  | Internet of Things and their applications.        | Emerging trends in Information Technology        | Explain the concept of Blockchain                     |                          |   |                  |         |                 |   | Quiz       | Level 2,3 |
| 43 | IV  | Revision  | Block chain                                      | Understand Artificial Intelligence                    |                          | Presentation by students  |                  | CO1,CO4 | PPT             | <a href="https://www.youtube.com/watch?v=n0iaPtnmxQ">https://www.youtube.com/watch?v=n0iaPtnmxQ</a>   | QA Session | Level 2,3 |
| 44 | IV  | Revision  | Artificial Intelligence                          | Understand the concept of Machine Learning            |                          | Presentation by students  |                  | CO1,CO4 | PPT             | <a href="https://www.youtube.com/watch?v=ki0zbaNTMf0">https://www.youtube.com/watch?v=ki0zbaNTMf0</a>   | QA Session | Level6    |
| 45 | IV  | Previous Years Question Paper Discussion          | Machine Learning                                 | Understand and use of Applications of AI              |                          | <a href="https://open.umn.edu/opentextbooks/textbooks/1">https://open.umn.edu/opentextbooks/textbooks/1</a>   |                  | CO1,CO4 | Student ppt     |   | QA Session | Level 6   |

Note: 1 Credit (Theory)= 15 Hrs. in a Semester ; 1 Credit (Practical)= 30 Hrs. in a Semester.

**Suggested Readings : (Latest Editions)**

1. ITL Education Solutions. Introduction to Information Technology, 2/e, Pearson Education.
2. Turban, Rainer and Potter. Introduction to Information Technology, John Wiley and Sons.
3. Behl R. Information Technology for Management, McGrawHill Education.
4. Joseph A. Brady and Ellen F Monk. Problem Solving Cases in Microsoft and Excel, homson Learning.
5. Mukta Sharma and Surabhi Shankar. Computer Applications, Galgotia Publishing Company.
6. Saini A.K. and Mukta Sharma, Web Technologies, Galgotia Publishng Company.

Name of Faculty: Mr. Abhishek Upadhyay



**Journals:**

1. Journal of information Technology
2. Journal of Strategic Information Systems
3. Journal of Computer Information Systems
4. International Journal of Information Management
5. International Journal of IT/Business Alignment and Governance

  
Head of Department, Dr. Pooja Sharma  
MBA-TIAS