DEBRA THANA SAHID KSHUDIRAM SMRITI MAHAVIDYALAYA

Gangaram Chak, Chak Shyampur, Debra, West Bengal

PROPOSED SYLLABUS (DRAFT) OF

COMMON COURSES UNDER CCFUP, 2023 FOR SEMESTER–I & II

FOR ALL UNDERGRADUATE PROGRAMMES
(w.e.f. Academic Year 2024-2025)

Based on

Curriculum & Credit Framework for Undergraduate Programmes (CCFUP), 2023 & NEP, 2020

KDatta.
26.4.2024

26/04/24

26/04/24

Course Type	Course Code	Course Title	Credit	L-T-P	Marks		
					CA	ESE	TOTAL
SEMESTER-I							
MDC	MDC01	Basics of information technology (IT)	3	3-0-0	10	40	50
SEMESTER-II							
MDC	MDC02	Digital Technologies	3	3-0-0	10	40	50

MDC-01T: Basics of information technology (IT) Credits 03 (Full Marks-50)

Course contents:

Unit-I: Introduction to Computers

Introduction, Definition, Characteristics of Computer, Evolution of Computer, Block Diagram Of a computer, Generations of Computer, Classification Of Computers, Applications of Computer, Capabilities and limitations of computer.

Unit-II: Basic Computer Organization:

Role of I/O devices in a computer system. Input Units: Keyboard, Terminals and its types. Pointing Devices. Scanners and its types, Voice Recognition Systems, Vision Input System, Touch Screen, Output Units: Monitors and its types. Printers: Impact Printers and its types. Non Impact Printers and its types. Plotters, types of plotters, Sound cards, Speakers.

Unit-III: Software:

Software and its needs, Types of S/W. System Software: Operating System, Utility Programs Programming Language: Machine Language, Assembly Language, High Level Language their advantages & disadvantages. Application S/W and its types: Word Processing, Spread Sheets Presentation, Graphics, DBMS s/w.

Unit-IV: Operating System:

Functions, Measuring System Performance, Assemblers, Compilers and Interpreters. Batch Processing, Multiprogramming, Multi Tasking, Multiprocessing, Time Sharing, DOS, Windows, Unix/Linux.

Unit-V: Data Communication:

Communication Process, Data Transmission speed, Communication Types (modes), Data Transmission Medias, Modem and its working, characteristics, Types of Networks, LAN Topologies, Computer Protocols, Concepts relating to networking.

Unit-VI: Business Data Processing:

Introduction, data storage hierarchy, Method of organizing data, File Types, File Organization, File Utilities.

Suggested Readings:

1. A. Goel, Computer Fundamentals, Pearson Education, 2010.
2. P. Aksoy, L. DeNardis, Introduction to Information Technology, Cengage Learning, 2006.
3. P. K.Sinha, P. Sinha, Fundamentals of Computers, BPB Publishers, 2007.

MDC-02T: **Digital Technologies**   Credits 03 (Full Marks-50)

Course contents:

Unit-I: Introduction and Evolution of Digital systems, Role and significance of Digital Technology, Information & communication technology & tools, Computer system & it's working, Software and its types, Operating Systems: types and functions.

Communication systems: Principles, model & transmission media, Computer networks, Internet: concept and applications, WWW, Web Browsers, search engines, Messaging, e-mail, social networking.

Unit- II: Computer Based Information system: significance and types, e-Commerce & digital marketing: basic concepts, benefits & challenges.

Digital India & e-Governance: Initiatives, Infrastructure, Services and Empowerment.
Digital financial tools: Unified Payment Interface, Aadhaar enabled payment System, USSD, Credit Debit

Cards, e-Wallets, Internet banking, NEFT/RTGS and IMPS, Online Bill Payments and PoS, Cyber Security: Threats, Significance, Challenges, Precautions, safety Measures & Tools,

Unit- III: Emerging Technologies & their applications: Overview of Cloud Computing, Big Data, Internet of things, Virtual reality, Block chain, robotics, Artificial intelligence, 3D Printing, Future of digital technologies.

Suggested Readings:

1. Fundamentals of Computers by E Nalagurusamy, ata mcgraw Hill.
2. Data Commination and Networking by Behrouz A. Forouzan, Mcgraw Hill Educaition.
3. Emerging Technologies in Computing: Theory, Practice, and Advances, by P.Kumar, A omar, and R.Sharmila, 1st Edition, 2021.
4. Essentials of cloud computingby K. Chandrasekharan, CrC press, 2014.
5. Blockchanin: Blueprint for a new economy by M. Swan, O'Reilly Media, 2015 6. Introduction to Computers by Peter Norton, Tata McGraw Hill.

MDC-02T: **Microsoft Office Essentials**   Credits 03 (Full Marks-50)

Course Description:

This course is designed to provide students with a comprehensive understanding of Microsoft Office applications including Word, Excel, and PowerPoint. Students will learn essential skills to create

professional documents, manage data effectively, and deliver impactful presentations using these software tools.

Course Objectives:

- Develop proficiency in Microsoft Word for creating, formatting, and editing documents.
- Gain proficiency in Microsoft Excel for data management, analysis, and visualization.
- Master Microsoft PowerPoint for creating dynamic and engaging presentations.
- Enhance productivity and efficiency through advanced features and techniques in all three applications.
- Apply learned skills to real-world scenarios and projects.

Course Outline:

Unit I:

Week 1-2: Microsoft Word Essentials

Introduction to Microsoft Word

Document creation and formatting

Working with text, fonts, and styles

Page layout and design

Managing references and citations

Collaboration and review tools

Week 3-4: Advanced Microsoft Word

Tables, graphs, and charts

Mail merge and templates

Document security and protection

Macros and automation

Advanced formatting techniques

Integration with other Office applications

Unit II:

Week 5-6: Microsoft Excel Fundamentals

Introduction to Microsoft Excel

Data entry, editing, and formatting

Formulas, functions, and calculations

Data analysis tools

Charts and graphs

Data validation and protection

Week 7-8: Advanced Microsoft Excel

Pivot tables and pivot charts

Advanced functions and formulas

Data visualization techniques

Macros and automation

Data importing and exporting

Collaboration and sharing features

Unit —III :

Week 9-10: Microsoft PowerPoint Basics

Introduction to Microsoft PowerPoint

Creating and formatting slides

Adding text, images, and multimedia

Slide transitions and animations

Design themes and templates

Master slides and layouts

Week 11-12: Advanced Microsoft PowerPoint

Customizing presentations with shapes and SmartArt

Incorporating charts and graphs

Interactive features and hyperlinks

Speaker notes and rehearsal tools

Collaboration and sharing options

Presentation delivery tips and best practices

Unit —IV

Week 13-14: Project Work and Review

Integration of Word, Excel, and PowerPoint

Real-world projects and case studies

Peer review and feedback sessions

Final project preparation

Course review and exam preparation

Assessment:

Quizzes and assignments (30%)

Midterm examination (20%)

Final project (30%)

Class participation and engagement (20%)

Textbook:

"Microsoft Office 365 Essentials" by Kevin Wilson (or any relevant textbook)

Additional Resources:

Online tutorials and video guides

Microsoft Office support documentation

Supplemental readings and articles

Book names:

website : address. (URL).