COURSE DESCRIPTIONS OF DEPARTMENTAL SPECIALIZATION COURSES (BBA)

MANAGEMENT INFORMATION SYSTEMS (MIS)

MIS 4001: Enterprise Resource Planning

Pre-requisite: BBA 3129

Today's business requires integrating information systems within and across the organization to ensure visibility, transparency, and effective decisions. This course introduces students to the main ideas and fundamental technology underlying the development, implementation, and use of integrated enterprise information systems within the value chain of organizations. Topics include SAP R/3 application modules, technical architecture of R/3, SAP application development and system management, ERP implementation issues and business engineering in R/3, accelerated SAP, going live, post-implementation issues, next-generation enterprise, and others.

MIS 4002: Database Analysis and Design

Pre-requisite: BBA 3129

The contemporary economy is heavily reliant on digital data. Data plays a crucial role in facilitating transactions, informing managerial decisions, and guiding the development of organizational strategies. Databases are a fundamental mechanism for creating, storing, organizing, and disseminating data. This module provides the essential principles required for proficiently designing and utilizing databases. This course aims to elucidate the concept of data and present modern methodologies and technologies for data storage, retrieval, utilization, and visualization. The focus is on comprehending data modeling and design methodologies and the emerging possibilities of big data, social media, data analytics, and unstructured data. The attention of both commercial and open-source database management tools is centered on the same objective**.**

MIS 4003: Object Oriented Programming

Pre-requisite: BBA 3129

The course introduces object-oriented programming for individuals possessing a procedural paradigm background. The course commences with a concise overview of statements, flow control, and data types, emphasizing pointers, array processing, and structured data types. The subsequent section of the material presents the paradigm of object-oriented programming, emphasizing the concepts of encapsulation, inheritance, polymorphism, and abstraction. Additionally, the section provides a gradual introduction to the fundamental principles of object-oriented analysis and design. Additional subject matters encompass the development of two-dimensional games utilizing object-oriented programming techniques, a comprehensive survey of programming language principles, and the management of memory.

MIS 4004: Digital Marketing

Pre-requisite: BBA 3129

Digital marketing has become essential to any firm's marketing strategy, but managers are still grappling with this continuously evolving medium. In this course, we will develop a systematic understanding of digital marketing. The starting point will be to understand certain fundamental ideas and concepts applicable to the study of digital marketing. We will then obtain a deep understanding of display advertising, search advertising, and social media marketing. Next, we will invest significant time in outcome and effectiveness measurement methods and campaign evaluation metrics. Toward the end of the course, we will discuss various topics, such as mobile marketing, media planning, privacy issues, and digital ad fraud.

MIS 4005: Data Warehouse and Data Mining

Pre-requisite: BBA 3129

The course provides an overview of the techniques and principles involved in constructing data warehouses and performing data analysis through data mining, data quality, and the methods and techniques utilized for preprocessing data, conceptualization and construction of data warehouses, study and implementation of algorithms utilized in classification, clustering, and association rule analysis and also the pragmatic application of software in the context of data analysis.

MIS 4006: Business Intelligence and Decision Support System

Pre-requisite: BBA 3129

This course introduces the technologies that are generally called business analytics. The core technology consists of DSS, BI, and various decision-making techniques. Students are provided examples of use cases and hands-on exercises to analyze and tackle multiple business situations with computerized tools and techniques.

MIS 4007: Special Topic in MIS

Pre-requisite: BBA 3129

The course provides students with advanced knowledge of applying approaches to types of Information Systems, knowledge of managerial decision-making, and administrative assistance in depth. The learners are expected to have expertise in applying different information system tools and software for various business activities and processes related to covering types of Information Systems. This course caters to management's specific needs to ensure value for IT investment' in unique kinds of systems. This course will expose students to real-life scenarios by solving relevant cases and practical interfacing situations.

MIS 4008: Web Technology

Pre-requisite: BBA 3129

This course introduces students to the technology and trends pervasive in business, delivering goods and services online. Students are familiarized with web content delivery technologies such as HTML, XHTML, XML, XSL, XSLT, XQuery, Schema, XPATH, XLINK, JavaScript, PHP, and Database Connectivity. The interplay between technologies is emphasized so that students grasp the opportunities and limitations intending to understand the prevailing trend.

MIS 4009: Business Graphics and Animation

Pre-requisite: BBA 3129

This course introduces the essential knowledge and skills required to produce commercial multimedia graphics and corporate identity and marketing assets through the MI use of standard industry software: Adobe Photoshop, Illustrator, Animate, and After Effects, following industry-standard practices on current technology.

MIS 4010: Network Resource Management

Pre-requisite: BBA 3129

This course gives a comprehensive view of data and computer communications. It explores critical issues in the field in the general categories of principles, design approaches, and business applications over networks and the Internet. Conceptual foundations of integrated office systems that include data, text, voice, and video transmission are covered in this course. Issues of network design and current trends in LAN, communication technology and its management, network protocols and computer interfaces, applications for distributed computing and office automation, network file and device management, as well as an in-depth study on the Internet communication process, transmission media, and communication technologies used over the net, are the major topics of this course.

MIS 4011: E-Commerce and E-Governance

Pre-requisite: BBA 3129

This course provides the tools, skills, and understanding of technological concepts and issues surrounding the emergence of and future directions of electronic business practices, with a strong focus on electronic commerce initiatives. The student develops an understanding of the current business models, strategies, and opportunities in electronic publishing, communication, distribution, collaboration, and online payment options. The focus is on innovative strategic thinking concerning using these techniques in successful new business ventures. This course also provides methods and techniques for the holistic design of information systems for IT applications in the public sector for e-government and public participation and IT in strategic decision-making and public governance E-procurement, Cyber Security, Legacy Automation, etc. Under this course, MIS graduates play a pivotal role in introducing e-commerce and e-governance within their organization, providing a platform to demonstrate their capabilities and secure their growth and progression.

MIS 4012: Introduction to Data Science

Pre-requisite: BBA3129

The course explores how a combination of better understanding, filtering, and application of data can help students solve their problems faster - leading to more innovative and more effective decision-making. Students learn how to process and use the processed data, which will help provide them with a productive outcome. Students will learn the essential programming language as well as their use in the practical field. This course has a weekly laboratory session; each week, the students will build on their skills and be allowed to practice what they have learned.

MIS 4013: Cyber Security

Pre-requisite: BBA 3129

This course introduces the students to real-world cybersecurity challenges that organizations face and learn to apply knowledge and skills gained through other courses to address them. The challenges will be examined from the attacker's perspective (how systems are exploited) and the defender's perspective (how to secure systems or respond to threats). Common attack and defense strategies for software, web applications, networks, operating systems, cryptographic systems, and humans will be explored. The course will also introduce cybersecurity management concepts, including security operations, risk management, security engineering, and security architecture, and guide different career paths specializing in cybersecurity. This course focuses on hands-on activities, and students are encouraged to participate in public and industry cybersecurity challenges, including capture-the-flag competitions.

MIS 4014: Blockchain Technologies in Business

Pre-requisite: BBA 3129

This course gives students a basic understanding of blockchain technology, its history, and how it relates to the new digital economy. Covering essential areas and using cases regarding blockchain technology, how it's disrupting domains such as Fintech, Digital government activities, eHealth, E-procurement, Smart Cities, etc., and how to use blockchain technology to create new business opportunities. The students will learn to analyze and quantify blockchain's changes in various industries, understanding blockchain technology, its challenges, and limitations. The teaching methodology includes business cases and lectures by industry thought leaders.