

# MANAGEMENT INFORMATION SYSTEM

## MULTI-FACULTY

**INTENDED AUDIENCE :** Management

**INDUSTRIES APPLICABLE TO :** All industries

**COURSE OUTLINE :** Rapidly emerging technologies and their new applications by businesses make it extremely challenging for managers to stay abreast and arrive at crucial business decisions related to investments in Information Technology and Systems. This course introduces the students to existing and upcoming technologies, wide variety of their applications for business and e-Commerce, and issues involved in their management.

### ABOUT INSTRUCTOR :

Prof. Kunal Kanti Ghosh has over three decades of experience at various levels in the automobile industry. He was the "Corporate Initiatives Head" of Tata Technologies Ltd and was adjudged the "Best Young Materials Manager" by the Indian Institute of Materials Management in 1986. He also received the "Best young Manager's Award" from All India Management Association in 1990. He was the prime architect of "Parts Supply Management System" for Nissan Plant in Australia, Melbourne. He was the project manager in charge of installation and commissioning of semi-automated (Kurimoto Presses) in Jamshedpur plant of Tata Motors in 1988. He holds B Tech (Mechanical Engineering), M Tech (IE & OR), and PhD (Automotive Design). He is a fellow member of the Institution of Engineers (India).

Prof. Saini Das is an Assistant Professor in the Business Analytics and Information Systems at the Vinod Gupta School of Management, Indian Institute of Technology Kharagpur. Prior to this she served as a faculty member at Indian Institute of Management Indore for three years. She pursued her Fellow Program in Management (FPM) from Indian Institute of Management Lucknow. Her major research interests are in managing information security risks in networks, management information systems (MIS), e-commerce technology and applications, data privacy, digital piracy and data analytics.

Prof. Surojit Mookherjee , B.Tech (Hons) , Ph.D ( Engg ) both from IIT Kharagpur. He has 14 years of industrial experience encompassing various fields like research and development, production of tungsten carbide based metal cutting tools and managing all the functional areas of a medium-scale manufacturing unit as the Head of Operations. He has further, worked for 18 year in Business and IT consulting ,managing Global Outsourcing programs and International sales with global majors like Pricewaterhouse Coopers and IBM India. post retirement from IBM , he is currently working as Visiting Faculty at VGSOM , IIT Kharagpur.

### COURSE PLAN :

**Week 1:** Introduction to Management Information systems :Types of MIS, Capabilities, Complements, CCR Framework; Role of manager with respect to IT in an organization

**Week 2:** Database management systems, Data Warehousing, Foundations of business intelligence, Data and Text Mining.

**Week 3:** Strategic Enterprise Systems - ERP, SCM, CRM, SRM.

**Week 4:** Strategic Enterprise Systems (contd..)

**Week 5:** Operational Support Systems - Manufacturing Systems, Sales and Marketing Systems, HRIS, Finance and Accounting Systems

**Week 6:** Operational Support Systems (contd..)

**Week 7:** IT Strategy and Balanced Scorecard – IT strategies, IT- business alignment, balanced scorecard, cloud and vendor strategies

**Week 8:** Mobile and E-commerce – B2C, B2B and e-procurement, C2C and mobile commerce

**Week 9:** Emerging Technologies – Cloud computing, Big Data Technologies, Internet of Things, Bring Your Own Device (BYoD,) Virtual Reality, Augmented Reality, Blockchain, Artificial Intelligence

**Week 10:** Emerging Technologies (contd..)

**Week 11:** Knowledge Management – Decision Support Systems, Expert Systems, Learning Management Systems, Executive Information Systems

**Week 12:** Social , ethical and security Issues in MIS