INSTITUTE OF AERONAUTICAL ENGINEERING
(Autonomous)
Dundigal - 500 043, Hyderabad, Telangana

COURSE CONTENT

MANAGEMENT INFORMATION SYSTEMS								
II Semester: MBA								
Course Code	**Category**	**Hours / Week**			**Credits**	**Maximum Marks**		
CMBE18	**Core**	**L**	**T**	**P**	**C**	**CIA**	**SEE**	**Total**
		4	**-**	**-**	**4**	40	60	100
Contact Classes: 45	**Tutorial Classes: Nil**	**Practical Classes: Nil**				**Total Classes: 45**		
Prerequisite: Statistical Data Analysis								
SDGs Mapped: SDG 9 (Industry, Innovation and Infrastructure), SDG 4 (Quality Education)								

I. COURSE OVERVIEW:

The course focuses on the importance of management, management concepts, and management practices with the study of human behavior within organizations. The primary goal of this course is to provide knowledge on advanced leadership roles in modern organization. This course will create awareness of various information system solutions like ERP, CRM, Data warehouses and the issues in successful implementation of technologies in any organization.

II. COURSES OBJECTIVES:

The students will try to learn:

I. The knowledge to increase the effectiveness and decision making process for managers.
II. The compression between computer system and decision support system to help the department in their daily work and solve problems.
III. How to solve new and non-repeated problems in the business decision making process.
IV. MIS is helpful in controlling costs by giving information about idle time, labour turnover, wastages and losses and surplus capacity

III. COURSE OUTCOMES:

At the end of the course students should be able to:

CO1 Summarize the basic concepts of management information system process, structure, and classification in order to develop strategic and operational planning and management control.
CO2 Analyze business applications such as ERP, e-commerce, DSS, and BI systems.
CO3 Develop and manage information systems using planning, acquisition, and implementation strategies.
CO4 Apply system development models and CASE tools for effective system development.
CO5 Evaluate system analysis, design, and requirement determination methods.
CO6 Apply the concept of cybercrime, classify cyber criminals, and resolve security issues to protect an IT infrastructure.

IV. COURSE CONTENT:

MODULE - I: INTRODUCTION (08)
Management information system importance, definition, nature and scope of management information system, structure and classification of management information system, information and systems concept, types of information, information systems for competitive advantage.

MODULE - II: BUSINESS APPLICATIONS OF INFORMATION SYSTEM (08)
Electronic commerce, enterprise resource planning systems, decision support system, business intelligence and knowledge management system.

MODULE - III: MANAGEMENT OF INFORMATION SYSTEM (10)
Information System Planning, System Acquisition, Systems Implementation, System Development Models: Water Fall Model, System Development Lifecycle.

V-Model, Computer Assisted and Software Engineering Tools, Prototype Iterative Model, Evaluation & Maintenance.

MODULE - IV: BUILDING OF INFORMATION SYSTEMS (10)
System development stages, system development approaches, systems analysis and design, requirement determination, strategies for requirement determination, structured analysis tools, system design, design objectives, conceptual design, design methods and detailed system design.

MODULE - V: INTRODUCTION TO CYBER CRIME (09)
Cyber Space; Cyber Law; e-Business; e-Consumers; Spam, Phishing. Cyber Crime and Information Security: Threats and Vulnerabilities. Inter-networks Security Defenses, Other Security Measures, System Control and Audit, Blockchain.

V. TEXTBOOKS:

1. Rainer, R. Kelly, and Brad Prince, "Introduction to information systems", John Wiley & Sons, 4th edition, 2021.
2. Laudon & Laudon, "Management Information Systems", Pearson, 12th edition, 2015.
3. Murthy, "Management Information System, Himalaya", 9th edition, 2013.
4. S.A.Kelkar, Software Project Management-A Concise Study, PHI, 3rd edition, 2012.

VI. REFERENCE BOOKS:

1. Ken Laudon, Jane P. Laudon, Management Information Systems, Pearson education, 18th edition, 2025.
2. Jennifer L Bayuk, Jason Healey, Paul Rohmeyer, Marcus H.Sachs, Jeffrey Schmidt, Joseph Weiss, Cyber security Policy Guidebook, Wiley, 7th edition,2022.
3. A K Gupta, Sharma "Management of Systems" Macmillan, 1st edition, 2012.

VII. Web References:

1. http://www.ijcse.com/docs/IJCSE11-02-01-054.pdf
2. http://www.pitt.edu/~druzdzel/psfiles/dss.pdf

VIII. E-Text Books:

1. https://www.scribd.com/doc/252519209/Decision-Support-Systems-and-Intelligent-Systems-7th- Edition-Free-eBook-Download
2. http://link.springer.com/book/10.1007%2F978-3-540-48713-5
3. https://www.jerrypost.com/Books/MISBook/Bookfiles5/Chapters/MISPost-Preface-500.pdf
4. https://www.researchgate.net/profile/Javed-Saani/publication/340647719_Management_Information_Systems/links/5eb7f7fe299bf1287f782bb5/Management-Information-Systems.pdf
5. https://repository.dinus.ac.id/docs/ajar/Kenneth_C.Laudon,Jane_P_.Laudon_Management_Information_Sysrem_13th_Edition_.pdf