Course title: Management Information System											
Course code: BSI 171	No. of credits: 2	L-T-	T-P distribution: 28-0-0		Learning hours: 28						
Pre-requisite course code and title (if any):											
<b>Department:</b> Department of Business Sustainability											
Course coordinator (s): Dr. Umesh Gulla				Course instructor (s): Dr. Umesh Gulla							
Contact details: umesh.gulla@digigyan.in											
Course type	Core		Course o	ffered in: Semes	ter 2						

### **Course description**

Managers in an infrastructure organization must be aware about making infrastructure businesses more competitive and efficient through the use of information technology. This course provides an introduction to information systems for infrastructure and is designed to familiarize students with organizational, managerial and technical foundations of information systems, the role of information systems in improving business processes, enhancing business efficiency and improve decision making across the enterprise.

### **Course objectives**

At the end of the course, it is expected that students will be are able to appreciate the uses of Information Systems in organizational management. The course will enable students to understand a digital firm, role of Internet and Internet technologies, the concept and uses of electronic Business, the components of Information Technology (IT) Infrastructure, the Wireless Technology, the Ethical and Security Issues related to Information Systems, and the Enterprise Applications.

### **Course content**

Module	Topic	L	Т	P
1.	Understanding Information System	6	0	0
1.	Course Introduction; Digital firm, Evolution of Information Systems in			
	Organizations; Decision making process and Types of Decisions; Meaning and Role			
	of Information Systems; Components of Information Systems; Classification of			
	Information Systems; Components of Information Systems, Classification of			
	Functional Information Systems, Web enabled information systems, Knowledge			
	management systems.			
2.	Enterprise Applications in Business Organizations	6	0	0
	Strategic Role of Information Systems. Integrating Information Systems with			
	Business Strategy, Competitive Advantage and Strategic Advantage, Porter's			
	Competitive Forces and Value Chain models. Business Applications using IT;			
	Enterprise information systems: Enterprise Resource Planning (ERP), Supply Chain			
	Management (SCM), Customer Relationship Management (CRM).			
3.	E-Business	4	0	0
	Understanding E-Business & E-Commerce; Types of Electronic Commerce E-			
	Commerce business models; Value Chains in Electronic Commerce; Electronic Data			
	Interchange; Intranet, Extranet and its applications in business.			
	Electronic Payment Systems, Electronic Funds Transfer.			
4.	Infrastructure for E-Business	4	0	0
	Internet & Web technology; Managing e-business infrastructure; Mobile and			
	Wireless technologies in E-Business. Software as a service (SaaS) and service			
	oriented architecture (SOA).			
5.	Security & Ethical Issues in Information Systems	4	0	0
	Security Issues in E-Business; Types of threats in Information Systems including			
	Cyber Risk; Countermeasures to security threats in Information Technology;			
	Cryptography and its applications; IT Security Audit; Ethical issues in Information			
	Systems.			
6.	Information Technology in Infrastructure sector	4	0	0
	Information Technology in Sustainable technology Infrastructure; Emerging Trends			

in Information Technology: Cloud Computing; Green computing; Smart Grids;			
Smart Cities; ICT in Governance.			l
Total	28	0	0

### **Evaluation criteria**

Term Paper/Minor Project 20%
Class Participation/Case Studies 10%
Mid-Term 30%
End-term 40%

### **Learning outcomes**

Develop an understanding of:

- a digital firm, role of Internet and Internet technologies
- the concept and uses of electronic Business
- the components of Information Technology (IT) Infrastructure, the Wireless Technology, the Ethical and Security Issues related to Information Systems, and the Enterprise Applications.

# Pedagogical approach

The course will be delivered through lectures and discussion of case studies, research papers and articles.

### Suggested Readings:-

Laudon, K., Laudon, J., & Dass, R. (2010).MIS: Managing the Digital Firm, Pearson Education.

Laudon, K. & Traver G. C (2016), E-Commerce: business, technology, society, 10/e, Pearson Education.

Dave Chaffey (2013), E-Business and E-Commerce Management: Strategy, Implementation and Practice, 5/e, Pearson Education.

### Additional information (if any)

## Student responsibilities

### **Course reviewers:**

MP Gupta IIT Delhi

A.K. Saini

IP University, Delhi