**INTERNATIONAL MANAGEMENT INSTITUTE, BHUBANESWAR**
**Post Graduate Diploma in Management [2018-2020]**
**Management Information Systems (IS502)**
**Credit: Full (2 credits)**
**Session Duration: 60 Minutes**

**TERM: II**
**Year: 2018-20**

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## Course Description:

Today, information systems have become an integral part of all business functions. Regardless of whether one is from accounting, finance, operations, marketing, human resources, information systems etc. department, the use of information systems is extensive. Infact, information systems cut across business functions and organization levels. Therefore, for organizations to survive in this competitive world need to make use of information systems.

Information systems have transformed the way organizations manage business. The whole world is making use of new emerging technologies to achieve corporate objectives. What makes MIS exciting is its evolution with continuous changes in technology, management and business processes. These innovations are enabling traditional organizations and entrepreneurs to create new products and services, develop new business models and revenue streams. In the process, some old businesses, even industries are being replaced by newer entrants. Concepts like social media, cloud computing, mobile telephony, etc., are giving rise of newer business models. Information systems and technologies are the foundation of these services.

## Learning Outcomes:

- To understand the **types of information systems** that are needed to support the **various levels** of a business enterprise
- To understand the **process of designing and developing** an information system
- To understand the **infrastructure** needed for information system.
- To understand the role of IS in **electronic business and enterprise wide computing**
- To develop an awareness of critical issues around information systems like **data security, privacy and ethical** use of information.
- To demonstrate managerial **problem-solving skills** using exercises, case scenarios and project.

## Pedagogy:

The course will have a mix of topic presentations and discussions, case discussion and presentations, project, and hands on exercises using software packages.

**Recommended Books:**

- James A. O'Brien, George M. Marakas, Ramesh Behl, Management Information Systems, Tenth Edition, McGraw Hill Education Pvt. Ltd. (RB1)
- Kenneth Laudon and Jane Laudon, Managing Information Systems, Twelfth Edition, Pearson Education Inc

**Reference Books:**

- Waman S Jawadekar, Management Information System – Text and Cases, 5th Edition, Tata McGraw Hill Publishing Company Ltd.
- Lucas Henry C., Information Technology for Management, 7th Edition, Tata Mc. Graw Hill

**Evaluation**

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|---|---|---|
| Presentation | – | 10% |
| Quiz | – | 10% |
| Project | – | 10% |
| Assignment | – | 10% |
| Mid Term | – | 20% |
| End Term | – | 40% |

**Session Plan:**

| Session | Topic | Learning outcomes | Readings/Cases/Exercise |
|---|---|---|---|
| 1-3 | **Concept of Information System** Introduction, Role of Information System (IS), Trends in IS, Types of IS, Components of IS. | Understanding the basics of IS. Difference between different Information systems used in an organization | Read Chapter 1 of RB1 **HBR Case Study:** IT Does not Matter Quiz from Case and case discussion in the class |
| 4 – 5 | **Decision Making** Decision Making Concept, Types of Decision, Pay off Analysis, MIS role in decision making concept | Understanding Decision making model and use of MIS into that model | Read Chapter 10 of RB1 **Case:** Universal foods & Drinks Limited (UFDL) |
| 6 - 7 | **Information Technologies** Computer Hardware: End user and enterprise computing, peripherals Computer Software: Application Software, System Software, Programming Languages. | Front end and Back end technologies used to create any Information System | Read Chapter 3 & 4 of RB1 |
| 8 – 9 | **Databases and** | Data storage of | Read Chapter 5 of RB1 |

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|---|---|---|---|
| | **Information Management** Databases and Data Warehousing | an Information System | |
| 10 | **Telecommunications, Networks and cloud computing** | Networking of different IS | Read Chapter 6 of RB1 |
| 11 -12 | **Designing the MIS Infrastructure** System Analysis and Design, System Development Models, agile methods, MIS Development | Understanding different model used to create an Information system | Read Chapter 12 of RB1 **Case:** MIS at Manik Manufacturing |
| 13 – 15 | **Decision Support System** DSS: concept and Philosophy, Types of models, MIS and the role of DSS, Business Analytics | Decision support system and difference between MIS and DSS | Read Chapter 10 of RB1 Exercise 1 in Computer Lab: Piedmont Trailer Manufacturing Company |
| 16 | **Enterprise Management System** Enterprise Resource Planning, Reengineering Business Process. | Understanding of ERP system | Read Chapter 8 of RB1 |
| 17 – 18 | **Electronic Business Technology and Securing Information Systems** | Understanding different threats on Internet and technologies used to protect such IS on net. | Read Chapter 9 & 13 of RB1 **HBR Case Study:** Boss, I think Someone Stole Our Customer Data Quiz from Case and case discussion in the class |
| 19 – 20 | **Managing Projects and Application of MIS into different Sectors** | Groups are formed. Group needs to identify an organization and study their real time IS and present their learnings in the class. | **Project Presentations** |

**MIS Project**

The objective of the project is to provide students with an opportunity to understand how information systems are designed, implemented and managed in organizations. Each Group must identify an organization for doing the project for this course. The organization should be a medium or large size and /or multi-location.
Some suggestive examples of such processes could be:

- Order Processing system (and its interface with inventory)
- Production Planning and Control System
- Sales and Marketing System
- Customer Relationship Management System

- Human Resource Management system
- Procurement system (and is interface with inventory)

The submission should include:

- Brief background about the organization
- Reason for selecting the organization for study
- Identification of the main functions of the organization
- Understanding the significance of the identified process to the functioning of the organization
- Identifying the key activities of the identified process
- The chosen organization should be based in/around Bhubaneswar so that group members should get a chance to directly interact with people from the organization.
- Groups can also make use of offline and online resources.

The final report should also discuss the following:

1. How business processes were handled before adoption of IT?
2. Functioning of the IS select process that has been automated
3. Technology infrastructure being used
4. Types of information systems used and decisions being taken
5. Security of the information system?
6. Overall, how has the information system helped in meeting business objectives? Explain the organizational strategy for the same.