COURSE GUIDE DESCRIPTION

You must read this *Course Guide* carefully from the beginning to the end. It tells you briefly what the course is about and how you can work your way through the course material. It also suggests the amount of time you are likely to spend in order to complete the course successfully. Please keep on referring to the *Course Guide* as you go through the course material as it will help you to clarify important study components or points that you might miss or overlook.

INTRODUCTION

CBMS4303 Management Information System is one of the courses offered by the Faculty of Science and Technology at Open University Malaysia. This course is worth 3 credit hours and should be covered over 8 to 14 weeks.

COURSE AUDIENCE

This course is offered to all learners taking the Bachelor of Information Technology, Bachelor of Business and selected Science and Technology programmes. The course provides learners with a firm foundation in analysing a wide range of management information systems. This course guides learners systematically in acquiring the analytical and design skills required in grasping fundamental concepts of management information systems.

As an open and distance learner, you should be able to learn independently and optimise the learning modes and environment available to you. Before you begin this course, please ensure that you have the right course materials and understand the course requirements as well as how the course is conducted.

STUDY SCHEDULE

It is a standard OUM practice that learners accumulate 40 study hours for every credit hour. As such, for a three-credit hour course, you are expected to spend 120 study hours. Table 1 gives an estimation of how the 120 study hours can be accumulated.

Table 1: Estimation of Time Accumulation of Study Hours

Study Activities	Study Hours
Briefly go through the course content and participate in initial discussions	3
Study the module	60
Attend 3 to 5 tutorial sessions	10
Online participation	12
Revision	15
Assignment(s), test(s) and examination(s)	20
TOTAL STUDY HOURS	120

COURSE OUTCOMES

By the end of this course, you should be able to:

1.   Identify the functions and roles and types of system users;

2.   Explain the types of the management levels and their functions;

3.   Describe the types of management information systems;

4.   Explain the concept of management through Exceptional and Critical Success Factors;

5.   Describe the definition of strategic management and the Porter value model;

6.   Explain the competitive force strategy and network economy;

7.   Explain the concepts of Decision Support System (DSS), Executive Information System (EIS) and Expert System (ES);

8.   Explain the concepts of Marketing Information System, Manufacturing Information System and Human Resource Information System;

9.   Explain the importance of information system security; and

10.   Describe the phases involved in information system development, concepts of quality in software development and general causes of failures in information systems.

COURSE SYNOPSIS

This course is divided into 10 topics. The synopsis for each topic is presented below:

Topic 1 gives an overview of management information systems and computer-based information systems. It begins with an explanation of the importance of information management to an organisation in a globally-challenging scenario. It then elaborates on the types of users, types of systems, differences between data and information, types of management levels and types of management information systems.

Topic 2 introduces types of models and system elements, such as the system standard. Generally, the system standard is the performance level achieved by the system output. Managers will ensure the system standard is fulfilled by comparing the output system and the system standard. You will also be introduced to two management strategies known as management through exception and critical success factors (CSF). The system approach will also be introduced at the end of the topic.

Topic 3 discusses the relationship between business and information technology, and how IT can contribute to business competitiveness. This topic also discusses information technology management, which comprises the components and functions of the computer as well as input and output devices. In addition, the topic introduces strategic management, the Porter value chain model, supply chain management, industrial level strategies and information systems which cover competitive and network economies.

Topic 4 introduces information systems planning and the effects of information systems on the organisational structure. This topic also discusses information systems support for various levels of management and how Management Information System (MIS) and Transaction Processing System (TPS) support the management of the organisations.

Topic 5 introduces you to the Decision Support System (DSS). In this topic, we will discuss the decision-making process and how DSS helps managers make effective decisions. You will recognise DSS as a system that provides communication facilities which include information in helping consumers solve problems. You will also learn the format or structured information that results from DSS such as special reports and periodic report formats.

Topic 6 introduces you to the Executive Information System (EIS). EIS is a system that provides the updated information, history and perhaps some

anticipation about the status and environment of the company in supporting the administrative tasks and decision-making process of executives. You will learn how an EIS helps managers in their work and the decision-making process.

Topic 7 addresses one of the branches of artificial intelligence, the expert system. The expert system is also known as the knowledge-based system. An expert system can be used to solve many problems that occur in an organisation such as complex decision making. The expert system comprises many types of expert systems based on rules, frames or bases on fuzzy sets. In this topic, you will be exposed to the most popular expert system which is based on rules.

Topic 8 examines various types of functional information systems such as marketing information system, manufacturing information system and human resource information system.

Topic 9 introduces computer system security, which plays a critical role in business, government and daily life. In particular, it discusses the issues of system security, which is to ensure positive effects in the use of information technology as well as suitable security control to avoid exposure to security threats. The topic will also look into the social as well as ethical issues involved in information systems.

Topic 10 describes the phases involved in information system development. It also explains the standard related to quality of software development. It also discusses the factors which can cause failure of the system in achieving organisational objectives.

TEXT ARRANGEMENT GUIDE

Before you go through this module, it is important that you note the text arrangement. Understanding the text arrangement will help you to organise your study of this course in a more objective and effective way. Generally, the text arrangement for each topic is as follows:

Learning Outcomes: This section refers to what you should achieve after you have completely covered a topic. As you go through each topic, you should frequently refer to these learning outcomes. By doing this, you can continuously gauge your understanding of the topic.

Self-Check: This component of the module is inserted at strategic locations throughout the module. It may be inserted after one sub-section or a few sub-sections. It usually comes in the form of a question. When you come across this

component, try to reflect on what you have already learnt thus far. By attempting to answer the question, you should be able to gauge how well you have understood the sub-section(s). Most of the time, the answers to the questions can be found directly from the module itself.

Activity: Like Self-Check, the Activity component is also placed at various locations or junctures throughout the module. This component may require you to solve questions, explore short case studies, or conduct an observation or research. It may even require you to evaluate a given scenario. When you come across an Activity, you should try to reflect on what you have gathered from the module and apply it to real situations. You should, at the same time, engage yourself in higher order thinking where you might be required to analyse, synthesise and evaluate instead of only having to recall and define.

Summary: You will find this component at the end of each topic. This component helps you to recap the whole topic. By going through the summary, you should be able to gauge your knowledge retention level. Should you find points in the summary that you do not fully understand, it would be a good idea for you to revisit the details in the module.

Key Terms: This component can be found at the end of each topic. You should go through this component to remind yourself of important terms or jargon used throughout the module. Should you find terms here that you are not able to explain, you should look for the terms in the module.

References: The References section is where a list of relevant and useful textbooks, journals, articles, electronic contents or sources can be found. The list can appear in a few locations such as in the Course Guide (at the References section), at the end of every topic or at the back of the module. You are encouraged to read or refer to the suggested sources to obtain the additional information needed and to enhance your overall understanding of the course.

PRIOR KNOWLEDGE

No prior knowledge is needed for this course.

ASSESSMENT METHOD

Please refer to myINSPIRE.

REFERENCES

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McLeod, R., & Schell, G. (2007). *Management information systems* (10th ed.). New Jersey: Prentice Hall.

Turban, E., Sharda, R., & Delen, D. (2010). *Decision support systems and business intelligence systems* (9th ed.). New Jersey: Prentice Hall.

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