

# **Diploma in IT Syllabus**

## **IT Service Management**

### **Rationale:**

Services Management, and indeed management at all levels in the Information Technology industry, requires a specific set of competencies. The management competencies include skills required in general services management and more specific competencies associated with, and specific to, Information Systems and Technology. The Diploma syllabus is designed to develop an awareness of the variety of skills necessary to manage successfully in an Information Systems environment.

### **Aims:**

- To examine the relationship between computer based information systems, management and organisations
- To review concepts of management and organisation in the context of Information Technology
- To describe traditional information support systems for managers
- To understand the major issues concerning the management, development and operation of computer based information systems

### **Objectives:**

- Explain systems and management concepts and their relevance for information systems
- Understand the importance and the need for professionalism in managing computer based systems
- Explain the strategic use of information technology and the effect of advances in telecommunications and other equipment
- Discuss the need for special types of MIS and describe their components
- Describe the issues of planning the development of computer based applications
- Understand the need for control and maintenance of information systems
- Understand the importance of managing remote and network services
- Examine the operational issues concerned with the management of information systems

### **Prior Knowledge Expected:**

Candidates are expected to be familiar with the material covered in the Certificate syllabuses.

### **Content:**

#### **INFORMATION SYSTEMS**

Information systems components

Organisations and management

The information system as a sociotechnical system

The strategic use of Information Technology

## MANAGEMENT INFORMATION SYSTEMS

Informational needs of organisations

Capabilities of information systems from an organisational perspective

Information requirements for management

Levels of planning and control with MIS

MIS support for business functions

Management reporting systems and transaction processing systems

## SYSTEMS AND MANAGEMENT CONCEPTS

Systems approach, organisational design, MIS in organisational control e.g. feedback etc.

Management theory and management functions

Concepts of planning

Role of information systems in the planning process (e.g. modelling and forecasting)

Using MIS to enhance management control: performance reports, break-even analysis, calculation of financial ratios e.g. return on investment

## MANAGERIAL DECISION MAKING

Decision-making

Components of Decision Support Systems

Types of DSS

Building a DSS

Executive Information Systems

Organisational aspects of DSS and EIS

## CULTURAL DIMENSION OF INFORMATION SYSTEMS DEVELOPMENT

Factors of organisational complexity in relation to information systems development

Human aspects of information systems

Contribution of system development approaches (such as Soft Systems Methodology and ETHICS)

Measures of performance to cover performance factors and service level agreements

Departmental and project budgets, including specific reference to training costs

### PRINCIPLES OF PROFESSIONALISM

Professional concepts in relation to professional practices e.g. the BCS Code of Conduct.

Business ethics.

### ACQUISITION OF SOFTWARE, HARDWARE, MEDIA AND CONSUMABLES

Specification of hardware and software configurations and systems

Implications of throughput, resilience and reliability

Alternatives, costs and solutions

Selection criteria, acquisitions, purchase, hire or lease, facilities management

### INSTALLATION AND SITE PLANNING, SECURITY AND EXTERNAL THREATS

Planning, scheduling and co-ordinating contractors, suppliers and services

Progress control and monitoring

Installation, test planning, acceptance criteria and trials

Implications of throughput, resilience and reliability

Workload

External threats and strategies to limit their effect

Security

### APPLICATIONS AND SYSTEM REQUIREMENTS

Distributed, intelligent systems, electronic mail

Communication Networks

Intelligent office

Characteristics of telecommunication systems

Software production

Control of data

Operating system facilities

**Primary Texts:**

McNurlin & Sprague, Information Systems Management in Practice, Prentice Hall (7th Ed), 2005, ISBN: 0131968777

Fidler C. & Rogerson S., Strategic Management Support Systems, Financial Times Management, 1996, ISBN: 0273614185

**Other Reading:**

Bott M. F., Professional Issues in Information Technology, The British Computer Society, 2005, ISBN: 1902505654 and 9781902505657

Holt, J and Newton, J., A Manager's Guide to IT Law, BCS, 2004, ISBN: 1902505557 and 9781902505558

BS ISO/IEC 17799 Information Technology, Security Techniques: Code of Practice for Information Security Management, British Standards Institute, ISBN: 0580462625

Carroll J.M., Computer Security, Butterworth-Heinemann, 1996, ISBN: 0750696001 (only available to order via publisher)