



BCS Higher Education Qualifications

Professional Graduate Diploma in IT

Management Information Systems

Version 3.2

July 2020

This qualification is regulated by one or more of the following: Ofqual, Qualifications Wales, CCEA Regulation or SQA.

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1. Change History

Version Number	Date	Changes Made
Version 1.0	March 2014	Released
Version 2.0	March 2016	Re-formatted with syllabus numbering – no change to content. Reading list included.
Version 3.0	December 2016	Regulation Statement Added.
Version 3.1	February 2019	Reading list updated.
Version 3.2	July 2020	Address changed

2. Rationale

This module is designed for those candidates who are, or will be, in a position to make or influence decisions related to the selection, design and support of management information systems (MIS).

3. Aims

- To understand MIS in both the wider managerial context and in the narrower confines of the selection, support, design and development of computer applications
- To focus on the concepts a manager needs to understand, in order to make effective use of, computerised information systems

4. Objectives

Upon successful completion of this module, candidates will be able to demonstrate their competence in, and their ability to:

- Understand types of MIS applications in organisations
- Discuss the development of management information systems in organisations.
- Select and design MIS systems appropriate to meet management requirements.
- Critically evaluate MIS contributions to the strategic management of organisations

5. Prior Knowledge Expected

Candidates are expected to be familiar with the following material from the Diploma: the core module on Professional Issues in Information Systems Practice, the Systems Analysis and System Design modules, and the material on Management Information Systems included in the IT Service Management module.

Candidates are required to become a member of BCS, The Chartered Institute for IT to sit and be awarded the qualifications. Candidates may apply for a four-year student membership that will support them throughout their studies.

6. Format and Duration of the Examination

The examination is a three-hour closed book examination (no materials can be taken into the examination room) based on the syllabus in this document.

Examinations are held twice a year and are undertaken in normal examination conditions with one or more duly appointed invigilators.

The pass mark is 40%.

7. Syllabus Detail

Category	Ref	Content
1 MANAGEMENT WITHIN ORGANISATIONS	1.1	Management activities, roles and levels.
	1.2	Management Planning and Control: how planning and control systems interrelate.
	1.3	Strategic Planning within an organisation: activities, techniques and results.
	1.4	The nature of decision-making: decision-making models and classification of decision-making situations.
	1.5	The nature of information: classifications and characteristics. The nature of information and decision-making at different management levels, and the MIS subtypes typically implemented at each level of management to support these information/decision-making requirements.
	1.6	Management as the direct user of an MIS vs. Intermediary use.
	1.7	Measurement of MIS performance and capabilities
2 MIS APPLICATIONS AND RELATIONSHIPS. <i>The definition, role and capabilities of the various MIS applications that may be found within organisations.</i>	2.1	Management Reporting Systems (MRS)
	2.2	Decision Support Systems (DSS)
	2.3	Group Decision Support Systems (GDSS)
	2.4	Office Information Systems (OIS) – including videoconferencing and e-mail
	2.5	Knowledge Based Systems that support management such as Expert Systems (ES) and Neural Network (NN) systems
	2.6	The application of On-Line Analytical Processing (OLAP)/Data mining/Business Intelligence (BI) tools in supporting management decision making.
	2.7	Data warehouses and data mining facilities: the relationship between data warehousing and other MIS facilities.
	2.8	The relationships of MIS to other enterprise applications, such as Transaction Processing Systems (TPS) and Enterprise Resource Planning (ERP) systems
	2.9	IS within functional areas such as Human Resources, Marketing & Sales, Production, Accounting & Finance, Customer Relationships Management (CRM), Product Supply Chain Management systems.
	2.10	The Internet and MIS provisions: Internet and the linkages to legacy MIS, Internet customer interfaces, security issues.

Category	Ref	Content
3 DEVELOPMENT OF MIS	3.1	The role of Strategic Planning and Strategic IS Planning (SISP) in identifying MIS requirements, and the MIS role in supporting Strategic Planning/SISP.
	3.2	Managing MIS projects: <ul style="list-style-type: none"> • Project management methodologies • MIS feasibility study • Assessment of economic, technical, social and political issues from an MIS perspective • Cost-Benefit Analysis Overall approaches to MIS development: traditional vs. other approaches such as evolutionary and phased.
	3.3	Techniques and methodologies for supporting MIS development: <ul style="list-style-type: none"> • Data warehouse/BI systems development methodologies and techniques • Fact finding techniques (e.g. SQIRO) • Database design techniques • OO methodologies and associated techniques • Techniques particular to MIS developments such as Value Analysis, ROMC and CSF/KPI hierarchy diagramming.
	3.4	The use of CASE tools to aid MIS development.
	3.5	The suitability of packages vs. bespoke systems development.
	3.6	End-user development of MIS and its implications.
	3.7	Outsourcing vs. insourcing of MIS development and/or operational activities.
4 TRENDS	4.1	Developments in hardware, software, Internet and communications capabilities and their implication for MIS.
	4.2	Trends in management and organisations, for example the possible movement towards flexible, virtual organisations and the role of MIS may have in this scenario.
	4.3	MIS and mobile computing.
	4.4	MIS and social media.

8. Recommended Reading List

Module Name	ISBN 10	ISBN 13
Primary Texts		
<ul style="list-style-type: none">Kenneth C. Laudon & Jane P. Laudon, Essentials of Management Information Systems, Tenth Edition, Pearson Prentice-Hall, 2012.	0132668556	978-0132668552
Other Texts		
<ul style="list-style-type: none">Terry Lucey, Management Information Systems, Ninth Edition, 2005, Thompson	1844801268	978-1844801268
<ul style="list-style-type: none">McNurlin, Sprague & Bui, Information Systems Management in Practice, Prentice Hall (8th Ed), 2013.	1292023546	978-1292023540
<ul style="list-style-type: none">Efraim Turban, Jay Aronson & Tin-Peng Liang, Decision Support Systems and Intelligent Systems, Ninth International Edition, Pearson Prentice- Hall, 2010.	013610729X	978-0136107293
<ul style="list-style-type: none">Effy Oz & Andy Jones Management Information Systems, Cengage Learning EMEA, 2008.	1473703980	978-1473703988
<ul style="list-style-type: none">Christine Fidler & Simon Rogerson. Strategic Management Support Systems, Pitman Publishing 1996.	0273614185	978-0273614180

9. Contact Points

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