

BCS Higher Education Qualifications

Diploma in IT

Professional Issues in Information Systems Practice Syllabus

Version 3.0

December 2016

This is a United Kingdom government regulated qualification which is administered and approved by one or more of the following: Ofqual, Qualification in Wales or SQA.

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1. Change History

Any changes made to the syllabus shall be clearly documented with a change history log. This shall include the latest version number, date of the amendment and the changes made. The purpose is to identify quickly what changes have been made.

Version Number	Date	Changes Made
Version 1.0	Feb 2014	Previous Release
Version 2.0	May 2015	Updated to new format. Reading list added. Corrected name of Equality Act in Syllabus Detail.
Version 3.0	Dec 2016	Regulated statement added.

2. Rationale

In order to function effectively, professional Information Systems Engineers need not only appropriate technical knowledge, skills and experience, but also a broad understanding of the context in which they will be expected to work. This does not mean that they must become experts in these areas (although those who go on to assume substantial management responsibilities may later need to acquire professional knowledge and expertise in some of them).

3. Aims

To understand the context – ethical, social, legal, financial and organisational – in which professional Information Systems Engineers work.

4. Objectives

On successful completion of the module, candidates will:

- demonstrate an understanding of the role of professional codes of conduct and apply them to specific situations;
- understand the nature and legal standing of a range of organisations;
- describe and discuss the range of functions that exist in an organisation, the need for organisational structure and the characteristics of various types of structure;
- interpret, at a basic level, a balance sheet, a profit and loss account, and a cash flow statement;
- calculate and interpret, in simple cases, the basic information needed for day-to-day financial management;
- identify the main pieces of legislation that apply to the profession and recognise situations to which they are relevant;
- explain the mechanisms used to protect computer software and the reasons for such protection.

5. Prior Knowledge Expected

Certificate in IT

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

Diploma in IT

Candidates must have achieved the Certificate in IT or have an appropriate exemption to be entered for the Diploma in IT.

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.

Candidates are also expected to have an appreciation of current affairs such as may be obtained by regular reading of a serious newspaper (e.g. The Times or its equivalent in other countries) or news magazine (e.g. The Economist).

6. Format and Duration of the Examination

The examination is a two 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 PROFESSIONAL INSTITUTIONS	1.1	The role of professional institutions and their characteristics: established by Royal Charter, self-governing, controlling entry to the profession and maintaining discipline; reservation of title and reservation of function. Some familiarity with the best-known professional institutions (e.g. those governing engineering, the law, medicine and accounting) will be expected.
	1.2	The British Computer Society, its charter and its membership structure; chartered status and CITP; branches and specialist groups.
2 ORGANISATIONS AND THEIR STRUCTURE	2.1	Limited companies and the roles of directors and members; the advantages of limited company status for commercial organisations. Other legal forms of organisation. Takeovers and mergers.
	2.2	The concept of delegation and specialisation. Management structures: structure by function, by product, by market sector, and by region. Levels of management (senior, middle, junior, etc).The concept of delegation and specialisation.
3 FINANCE	3.1	The financial structure of companies. The requirements for financial disclosure imposed by statute and by stock exchanges. Capital items and depreciation. The balance sheet, the profit and loss account, and the cash flow statement.
4 MANAGEMENT ACCOUNTING	4.1	Costing: direct and indirect costs; fixed and variable costs; overheads, corporate and divisional. Treatment of overheads in costing. Costing of labour. Costing (as opposed to estimating) of IT projects. The effect of cost and other factors on the pricing of software.
	4.2	Cash flow and its importance; cash flow forecasts, the need for working capital. Discounted cash flow analysis and its use in the assessment of capital projects. Simple budgeting.
5 LEGAL OBLIGATIONS	5.1	The Data Protection Act 1998, the Computer Misuse Act 1990 and subsequent changes. The Equality Act 2010 as it applies to information systems.
	5.2	Relevant provisions of: the Health and Safety at Work Act 1974 (especially the Display Screen Equipment Regulations 1992); the Consumer Protection Act 1987; the Regulation of Investigatory Powers Act 2000; the Freedom of Information Act 2000.
6 INTELLECTUAL PROPERTY	6.1	The concept of intellectual property; software, documentation and designs as intellectual property. The mechanisms available to protect intellectual property. The Copyright, Designs and Patents Act 1988. The EC directive on the Legal Protection of Computer Programs, 91/250. The Digital Economy Act 2010.

Category	Ref	Content
7 THE INTERNET	7.1	The application of the law relating to issues such as privacy, defamation, and intellectual property rights to the Internet.
	7.2	Relevant provisions of : the Consumer Protection Distance Selling Regulations 2000, the Electronic Commerce (EC Directive) Regulations 2002, the Privacy and Electronic Communications (EC Directive) Regulations 2003) and the Communications Act 2003.
	7.3	Cross-border jurisdiction and law enforcement, with specific reference to spam, malware and obscene material.
8 PROFESSIONAL CODES OF CONDUCT AND THEIR LIMITATIONS	8.1	Professional Codes of Conduct, their strengths and weaknesses. The BCS Code of Conduct and its application in practice. The Public Interest Disclosure Act 1998.
9 HUMAN RESOURCES MANAGEMENT	9.1	The statutory framework of employment. Contracts of employment. Transfer of Undertakings (Protection of Employment) Regulations (TUPE).
	9.2	The SFIPlus™ (Skills Framework for the Information Age) model; continuing professional development.
	9.3	Techniques for recruitment and selection. Human resources planning.
	9.4	The Equality Act 2010 as it applies to employment practices.
	9.5	The effect of information systems on jobs. Job design: specialisation, rotation, enlargement and enrichment.
	9.6	Appraisal and Management by Objectives. Continuing professional development.
	9.7	Remuneration schemes, planning and control. Job evaluation.

8. Recommended Reading List

Professional Issues in Information Systems Practice	ISBN 10	ISBN 13
Primary Texts		
The following book has been written especially to support this module. To buy direct at a discount from BCS go to www.bcs.org/books/professionalissues		
<ul style="list-style-type: none">Bott M. F. Professional Issues in Information Technology, The British Computer Society, 2nd Edition, 2014.	1780171803	978-1780171807
Other Texts		
The books and articles listed below cover parts of the syllabus in more detail. They are recommended to candidates who wish to investigate individual topics in more depth.		
<ul style="list-style-type: none">Atrill, P. and McLaney, E. Accounting and Finance for Non- Specialists. (8th Edition), Pearson Education, 2012. <i>The financial material in the syllabus is well covered in this book.</i>	273778161	978-0273778165
<ul style="list-style-type: none">Holt, J and Newton, J. A Manager's Guide to IT Law, BCS, 2004. <i>This book covers some of the material relating to legal obligations, intellectual property rights, the Internet and human resource management; it is intended for practising managers but may be found helpful by students who have such experience.</i>	1902505557	978-1902505558
<ul style="list-style-type: none">Room, S. Data Protection and Compliance in Context, The British Computer Society, 2006 <i>This book covers issues relating to data protection in considerable detail.</i>	1902505786	978-1902505787
IT ethics has been much talked about and written about in the last ten or fifteen years. The syllabus is specifically concerned with the BCS Code of Conduct rather than with more general questions of professional ethics. The BCS Code of Conduct can be found on its web site; at the time of writing the url is: http://www.bcs.org/codeofconduct . Candidates should be aware that the Code has been changed quite extensively in recent years so that copies of the code in earlier books are likely to be out of date.		

9. Contact Points

Email: Customer Service team via www.bcs.org/contact

Phone: UK: 01793 417424 or 0845 300 4417 (lo-call rate)
Overseas: +44 (0)1793 417424
Lines are open Monday to Friday, 08.15 a.m. to 5.45 p.m. UK time.

Website: www.bcs.org/heq

Post: BCS, The Chartered Institute for IT
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Swindon SN2 1FA, United Kingdom