Understanding Ethical Principles in the IT Profession

BCS Foundation Award

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Document 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 changes made. The purpose is to identify quickly what changes have been made.

Version Number	Changes Made
V1.0	Document Creation

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Introduction

The BCS Foundation Award in Understanding Ethical Principles in the IT Profession is designed for individuals seeking to understand the purpose and value of ethics in a modern workplace.

Ethics is the cornerstone of society; it helps to shape organisational culture and it influences decision making. As the use of digital technology is now integrated into virtually every aspect of everyday life, ethics in IT is becoming more important than ever.

This Award is designed to enable individuals to explore ethics in relation to their own role and the ethical principles upheld within the IT profession. It aims to show them how to identify common threats to their ethical behaviour and the safeguards that can help to minimise these threats. It also considers the role of legislation and corporate governance in ensuring ethical standards are promoted and maintained.

Qualification Suitability and Overview

There are no specific entry requirements for this award. However, some professional experience in a business or IT environment may be advantageous.

The award is suitable for any individual working in an IT role, from a CIO to a service desk operative and all that is in between.

This award has been created alongside a selection of other awards available from BCS which offer candidates a clear pathway of progression into other disciplines of IT. This makes it ideally suited for those looking for a change in career, an upskilling workforce, and sustainable employers.

This award represents 5 credits that can count towards the credits required for a BCS Foundation Certificate or Diploma in a relevant discipline.

Candidates can study for this award by attending a training course provided by a BCS accredited Training Provider or through self study.

Total Qualification Time	Guided Learning Hours	Independent Learning	Assessment Qualification Time	Credits
50 hours	16 hours	33.5 hours	0.5 hours	5

*Examples of Independent Learning include reading of articles or books, watching videos, attendance of other types of training or work shadowing.

Trainer Criteria

It is recommended that to effectively deliver this award, trainers should possess:

- BCS Foundation Certificate in Artificial Intelligence
- A minimum of 2 years' training experience or a recognised training qualification.

SFIA Levels

This award provides candidates with the level of knowledge highlighted within the table, enabling candidates to develop the skills to operate successfully at the levels of responsibility indicated.

Level	Levels of Knowledge	Levels of Skill and Responsibility (SFIA)
K7		Set strategy, inspire and mobilise
K6	Evaluate	Initiate and influence
K5	Synthesise	Ensure and advise
K4	Analyse	Enable
K3	Apply	**Apply**
K2	**Understand**	**Assist**
K1	**Remember**	**Follow**

SFIA Plus

This syllabus has been linked to the SFIA knowledge skills and behaviours required at level 3 for an individual working in an analytical role.

KSC19

Applying standards, practices, codes, and assessment and certification programmes relevant to the IT industry and the specific organisation or business domain

Further detail around the SFIA Levels can be found at www.bcs.org/levels.

Learning Outcomes

This award provides candidates with the level of knowledge highlighted within the table, enabling candidates to develop the skills to operate successfully at the levels of responsibility indicated.

1. An understanding of The Importance of Ethics to Society, Business and IT Professionals
2. Knowledge of The Ethical Behaviour Required by IT Professionals.
3. An understanding of The Role of Corporate Governance
4. An understanding of Relevant Legislation
5. An understanding of Ethical Dilemmas And Safeguards

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Syllabus

1. The importance of ethics to society, business, and IT professionals (20%) (K1/2)

Candidates will be able to:

1.1 Explain the impact of ethical principles of society.
1.2 Explain the impact of ethical principles on organisations.
1.3 Explain the values and behaviours to be demonstrated by IT professionals.

Indicative content

a. A world without ethics.
b. Trust.
c. 7 Deadly sins.
d. Profit first.
e. Culture.
f. Attitudes.
g. Behaviour.

Guidance

The aim is for candidates to understand the meaning and impact of "ethics" – the values and integrity we display as individuals, organisations, and society. Unlike laws or regulations, we have no legal obligation to operate ethically – so why do we and why should we? Consider a business operating with no regard for truth, or for privacy for example.

Syllabus

2. Ethical behaviour required by IT professionals (20%) (K1/2)

Candidates will be able to:

2.1 Explain the difference between a rules-based system and principles based system.

Indicative content	Guidance
a. Consequences b. Intention c. Internal d. External	Explore the differences between a rules-based system (limited flexibility, prescriptive, consistent, little room for judgement) and a principles based system (increased flexibility, generally accepted ways of working, room for individual judgement). Consider the consequences of each approach – room for error, level of consistency.

Candidates will be able to:

2.2 Recognise the key elements of the BCS code of conduct.

Indicative content	Guidance
a. Public interest b. Professional competence c. Integrity d. Responsibility e. Professional behaviour	Introduce candidates to the BCS code of conduct. Explore the expectation of an IT professional to comply with both the legal requirements and ethical responsibilities, to promote safety and integrity in IT, and maintain the value of the profession(s).

Candidates will be able to:

2.3 Describe the key points of the ethical standard ISO26000.

Indicative content	Guidance
a. Corporate Governance b. Tools and Techniques c. Values, philosophy, and culture d. 7 principles of social responsibility	Introduce candidates to ISO26000 – Social Responsibility, the purpose of which is to provide guidance and understanding to organisations to operate in socially responsible manner with regards to human rights, community, and environment (and more). Explore the 7 principles of the standard and how these translate into organisational operations.

Candidates will be able to:

2.4 Identify ethical behaviours required to deal with different situations.

Indicative content	Guidance
a. Professional competence b. Integrity c. Professional behaviour d. Confidentiality e. Reporting f. Code of conduct	The aim is for candidates to understand that each situation, project etc. will present its own ethical challenges and as an individual, team, organisation, one must consider the behaviours needed to handle it successfully and ethically. To link back to previous discussion, if – as a BCS member – you became aware of a peer compromising confidentiality, would you have a duty to report?

Syllabus

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3. The role of corporate governance (10%) (K1/2)

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4. Legislation (20%) (K1/2)

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Candidates will be able to:

3.1 Describe the role of corporate governance in an organisation.

Indicative content

a. Shareholders, directors,
b. executives, workers
c. Committees (including audit and risk)
d. Objective of corporate governance including people, process, performance, and purpose
e. The role of the chairman

Guidance

Candidates should be introduced to corporate governance as the processes, rules etc that provide the foundation to support and deliver the organisation's strategy. Explore the role of the board in establishing a governance framework to ensure the organisation is compliant with all necessary laws etc, accountable for their actions and considering the impact on various stakeholders when doing so. Explore the 4Ps of corporate governance and what sits within each objective.

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Candidates will be able to:

4.1 List basic business laws and standards that influence the way an organisation operates.

Indicative content

a. Health and safety
b. Human Rights Act
c. EU AI Rules
d. British Standards

Guidance

Introduce candidates to a common range of laws and standards that they should be familiar with. Briefly explore their key points and their impact on organisational activities.

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Candidates will be able to:

3.2 Identify ways to monitor corporate governance.

Indicative content

a. Audit
b. Reporting

Guidance

Following on from previous discussion, consider how corporate governance is monitored and controlled. Audits may be completed internally or externally by various committees and/or regulatory bodies. Various reporting responsibilities should also have been established – again, both internally and externally, for example, with shareholders.

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Candidates will be able to:

4.2 Identify elements of data privacy laws that organisations must operate within.

Indicative content

a. Data Protection

Guidance

Extending the previous conversation, explore the detail around data protection legislation applicable to businesses. Consider the key principles of data protection, and the roles, responsibilities and rights of individuals and businesses, for example – the role of the data protection officer, the data controller, right of access etc.

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Syllabus

5. Ethical dilemmas and safeguards (40%) (K1/2)

Candidates will be able to:

5.1 Identify potential ethical dilemmas facing IT professionals and safeguards that can be implemented.

Indicative content

a. Human centred design
b. Not considerate of human, focus on profit
c. E-waste
d. Unconscious bias
e. Tracking an individual (unbeknownst to them) e.g. facial recognition. Openness and transparency. Non invasive
f. Safeguards. Reporting. Code of conduct. Governance.

Guidance

Further to earlier discussion (LO 2.4) consider ethical dilemmas which a candidate may face and their reactions/responses. For example, in the workplace, is it ethically sound to monitor websites accessed by a user outside of working hours, or if law enforcement requests user information, despite this not being its specified or agreed use. Explore the measures in place to support these dilemmas – including relevant policy, codes of conduct and reporting measures.

Candidates will be able to:

5.2 Explain the term "Sustainability" in relation to IT professionals

Indicative content

a. ISO14000 Green sustainability standard.
b. Social, environment, economic
c. Continuing to the future

Guidance

Candidates should be introduced to ISO14000 – a group of environmental sustainability standards. Link these to the role of an IT professional by considering the concept of "Green IT"

Candidates will be able to:

5.3 Describe the key components of the triple bottom line and the impact of this on IT professionals.

Indicative content

a. Economic, environmental, social impact

Guidance

Introduce the "triple bottom line" – the theory that equal consideration/value should be placed upon environmental and social measures as is on finance. (3Ps – people, profit, planet) Link to IT professionals by considering the social impact of their activity – financials aside, what was the impact – positives and negatives.

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Examination Format

This award is assessed through completion of an invigilated online exam which candidates will only be able to access at the date and time they are registered to attend.

Type	16 Multiple Choice questions, 2 Scenario Based Questions
Duration	30 minutes
Supervised	Yes
Open Book	No (no materials can be taken into the examination room)
Passmark	13/20 (65%)
Delivery	Digital format only.

Adjustments and/or additional time can be requested in line with the BCS reasonable adjustments policy for candidates with a disability, or other special considerations including English as a second language.

Question Weighting

Each major subject heading in this syllabus is assigned a percentage weighting. The purpose of this is:

1. Guidance on the proportion of content allocated to each topic area of an accredited course.
2. Guidance on the proportion of questions in the exam.

Syllabus Area	Question type	
1. The Importance of Ethics to Society, Business and IT Professionals	Multiple Choice	**20%**
2. Ethical Behaviour Required by IT professionals	Multiple Choice	**20%**
3. The Role of Corporate Governance	Multiple Choice	**10%**
4. Legislation	Multiple Choice	**10%**
5. Ethical dilemmas and safeguards	Scenario Based Multiple Choice	**40%**

Syllabus Weighting
20% 20% 10% 10% 40%
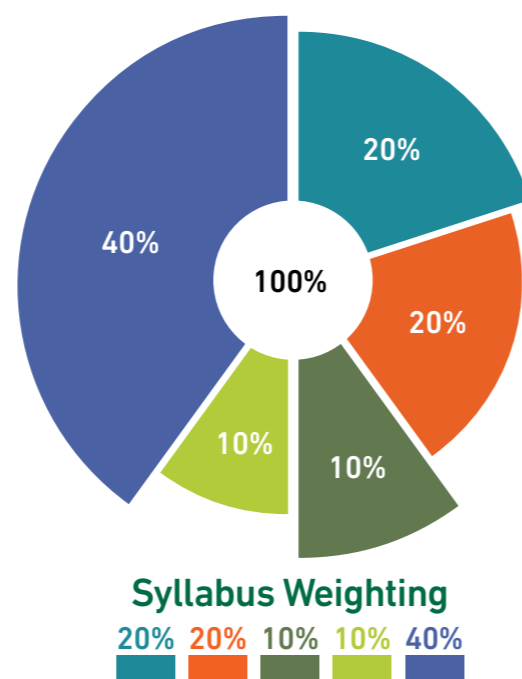
Recommended Reading

The following titles are suggested reading for anyone undertaking this award. Candidates should be encouraged to explore other available sources.

Title:	Ethics in Computing, Science and Engineering
Author:	Barry Blundell
Publisher:	Springer; 1st edition
Publication Date:	5 Feb. 2020
ISBN:	978-3030271251

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CONTACT

For any queries relating to this document or the delivery of this award, please contact;

T: 01793 417445

E: bcssales@bcs.uk

If you have any queries relating to the online assessments, please contact;
Service Delivery – eprofessional@bcs.uk

For further information please contact:

BCS
The Chartered Institute for IT
3 Newbridge Square
Swindon
SN1 1BY

T +44 (0)1793 417 445

www.bcs.org