How to Manage Risk

BCS Foundation Award



September 2020 v1.0

This professional certification is not regulated by the following United Kingdom Regulators – Ofqual, Qualification in Wales CCEA or SQA.

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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**





Introduction

Risk is a feature of any business; it influences the decisions an organisation makes and the way in which it operates. Some organisations are more risk averse whereas others have a greater appetitite for risk depending on what they wish to achieve in the market and the level of insight they have that enable them to take risks.

This award is designed for anyone wishing to gain an understanding of the principles of risk and how to manage it within an organisation. This includes understanding what risk is, identifying different types of risk, and how risk can be measured and assessed. It will consider the principles of risk management and how a clear reporting process can enable clear decisions to be made based on the information provided.

Candidates will consider approaches to risk management and how it can be applied within their own context as well as in different situations and settings.



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 BCS Foundation Award in How to Manage Risk has been designed for individuals interested in furthering their understanding of the risks associated with digital technologies and other implications to be considered when implementing them at an organisational level. This Foundation Award is ideal for those candidates who need to further understand the impact risk has on decision making and the running of a business.

This award has been created alongside a selection of other awards 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, sustainable employers and individuals with a background in: science, engineering, knowledge engineering, finance, education or IT services.

This list is not exhaustive and many other roles may benefit.

This award represents 4 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	Independ Learning
40 hours	16 hours	23.5 hours

*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 a relevant subject.
- A minimum of 2 years' training experience or a recognised training gualification.

dent J	Assessment Qualification Time	Credits	
	0.5 hours	4	

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.

Levels of Knowledge	Levels of Skill and Responsibility (SFIA)
	Set strategy, inspire and mobilise
Evaluate	Initiate and influence
Synthesise	Ensure and advise
Analyse	Enable
Apply	Apply
Understand	Assist
Remember	Follow
	Evaluate Synthesise Analyse Apply Understand

SFIA Plus

This syllabus has been linked to the SFIA knowledge skills and behaviours required of an individual at level 3:

KSD04

The selection and application of information elicitation methods, tools and techniques which are appropriate to the information required and the sources available. Examples, but not limited to: focus groups and surveys/questionnaires.

KSC04

Applying techniques which help investigating, analysing, modelling and recording a business area or system of interest. Example, but not limited to: business environment analysis and process modelling.

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

Learning Outcomes

Upon completion of the award, candidates will be able to demonstrate:

- 1. An understanding of the definition of risk
- 2. An understanding of risk analysis
- 3. An understanding of how to measure and document risk
- 4. An understanding of how to report risk

Syllabus

1. Defining what risk is (10%) (K1)

Candidates will be able to:

- **1.1** Define risk.
- **1.2** Define risk management.
- **1.3** Recognise the principles of the ISO31000 Risk Management Framework.
- **1.4** Identify the roles in risk management.

Indicative content

- a. Project sponsor
- b. Project owner c. Risk manager
- d. Action owner

Guidance





Introduce the terms risk, and risk management exploring some of the key roles within risk management as listed. Explore the 8 principles of risk management, as outlined in the ISO 31000 Risk management framework, explaining the use/purpose of this framework - to provide guidance (but not regulations) in an organisation's approach to managing risk.

Syllabus

2. Analysing the risk (30%) (K2)

Candidates will be able to:

2.1 Illustrate an understanding of an organisation's attitude to risk.

Indicative content

Guidance

- a. Risk Appetite, Risk culture, Risk as an opportunity and/or threat
- b. Risk tolerance. Risk averse, Risk tolerant, Risk neutral, Risk seeking
- c. Suitable responses to risk; Avoid, accept, reduce, exploit

Explain the need to establish an organisation's risk appetite and risk tolerance (including definitions of these terms), and the means for doing so. Candidates should be aware that risk appetite is somewhat flexible, unlike risk tolerance. Consider the differences in the type and structure of an organisation and why this can impact their approach to risk. Explore the different responses to risk, and when each one may be adopted..

3. Accurately measuring and documenting risk (30%) (K2)

Candidates will be able to:

3.1 State risk assessment techniques for qualitative data.

Indicative content

- a. Probability impact
- b. assessment
- c. Cause Risk Effect

Guidance

impact.

Candidates will be able to:

2.2 Indicate the risk associated with implementing a digital technology based on assessment.

Indicative content

- a. Strategic risk
- b. Compliance risk
- c. Operational risk
- d. Financial risk
- e. Reputational risk

Guidance

A digital technology can be any technology implemented in a business, such as an AI application. Discuss the risks presented to an organisation in each of the risk categories listed. The aim is for candidates to be able to accurately categorise the risks associated with any IT system, and the area of the business that it may impact.

Candidates will be able to:

3.2 State risk assessment techniques for quantitative data.

Indicative content

Guidance

- a. Probability
- b. Decision trees
- c. Sensitivity analysis

As above, establish the meaning of quantitative data (as numerical, statistical data). Explore the differences in risk assessing this type of data, and the requirement for different tools and techniques, such as the use of decision trees, to visualise all possible outcomes or pathways and their likelihood.



Establish the meaning of qualitative data (as relating to non-numerical data, such as text or discussion). Explore how to risk assess data of this type, for example – by categorising as low, medium, or high probability and

Syllabus

3. Accurately measuring and documenting risk (30%) (K2)

4. Reporting on risk (30%) (K2)

Candidates will be able to:

4.1 Explain the need to report risk at a team level.

4.1.1 Operational risk 4.1.2 Individual / Personal risk

Indicative content

a. Product failure

- b. Health and safety
- c. System failure
- d. Loss of experts

Guidance

Candidates will be able to:

4.2 Explain the need to report risk at a Project level.

Indicative content

Guidance

- a. Program risk
- b. Design risk c. Information security
- d. Budget

Candidates will be able to:

3.3 Describe how to document risk within a risk register.

Indicative content

Guidance

a. Communication strategy

b. Escalation policy

c. Risk map Data visualisation Introduce the concept of a risk register – a tool used to document the identification, investigation, response to and ownership of risk in an organisation. Consider the need for access to the risk register across the organisation (who needs what?) and what it must include, for example - a risk escalation policy.

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Candidates should consider the responsibilities to report risk at a team/individual level and as part of daily operations, for example, a process not being followed, or equipment damages/failure.

As above, candidates should explore the responsibilities of reporting risk on a project level, and how this differs from simply individual responsibility. For example, the need to communicate risks with various stakeholders.

Syllabus

4. Reporting on risk (30%) (K2)

Candidates will be able to:

4.3 Explain the need to report risk at a Board level. 4.3.1 Strategic risk

Indicative content

- a. Competition
- b. Merger/Acquisition
- c. Economy

Guidance

Continuing the above, candidates must consider the additional responsibilities of the board to report risk on a strategic level, not only internally but externally to shareholders, regulatory bodies etc.

Candidates will be able to:

4.4 Recognise Stakeholder risk.

Indicative content

- a. Communication
- b. Change
- c. Cost

Guidance

Linking to the above discussion with re stakeholders, the aim here is to consider who the organisation's stakeholders are, and their interest in risks at different levels/areas of the business. Establish stakeholder rights and interests.

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.

Туре	14 Multiple Choice questions, 3 Sce
Duration	30 minutes
Supervised	Yes
Open Book	No (no materials can be taken into
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.

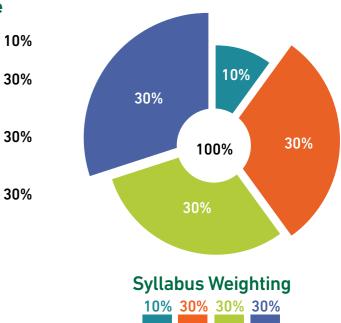
Syllabus Area	Question type
1. Defining what risk is	Multiple Choice
2. Analysing the risk	Scenario Based 3 Multiple Choice
3. Accurately measuring and documenting risk	Scenario Based 3 Multiple Choice
4. Reporting on risk	Scenario Based 3 Multiple Choice





cenario Based Questions

the examination room)



Recommended Reading

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

Title:Information Risk ManagementAuthor:David SuttonPublisher:BCSPublication Date:Nov 2014ISBN:9781780172651

Title:Information Security Management PrinciplesAuthor:David Alexander, Amanda Finch, David Sutton, Andy TaylorPublisher:BCSPublication Date:18 Jun 2013ISBN:9781780171753

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