



BCS FOUNDATION CERTIFICATE in **ARCHITECTURE CONCEPTS AND DOMAINS**



Objectives

DEVELOP AN UNDERSTANDING OF:

The meaning of architecture and the different levels within it.

The various subdomains of enterprise architecture and their purpose.

The key activities undertaken in each subdomain and the related artefacts.

SFIA – relevant Knowledge, Skills and Competencies

KSB13	Understanding the needs of the internal or external customer and keeping these in mind when taking actions or making decisions.
KSD01	Methods, tools and techniques to analyse and optimise processes in order to improve the quality of a product or service.
KSB05	Keeping organisational objectives and strategies in mind, and ensuring courses of action are aligned with the strategic context.
KSD06	The activities, structure, and position in the organisation of the functions or departments for which services are provided. dd in text...
KSC19	Applying standards, practices, codes, and assessment and certification programmes relevant to the IT industry, and the specific organisation or business domain.
KSC13	Current and emerging standards associated with IT practice nationally and internationally, published by authorities such as IEEE, IEC, BSI, ISO.
KSC14	The planning and management of the interaction between two or more networking systems, computers or other intelligent devices.
KSC19	Applying standards, practices, codes, and assessment and certification programmes relevant to the IT industry, and the specific organisation or business domain.

Key topics and weightings

Syllabus Area	Syllabus Weighting
1. Fundamentals of Architecture	25
2. Business Architecture	10
3. Applications Architecture	10
4. Data Architecture	10
5. Infrastructure Architecture	10
6. Software Architecture	10
7. Security Architecture	10
8. Solutions Architecture	15

Syllabus covered in Day 1

1. Fundamentals of architecture

- 1.1 Identify the meaning and levels of architecture.
- 1.2 Identify the subdomains of enterprise architecture and interactions between them.
- 1.3 Explain the purpose and role of standards and frameworks in architecture.
- 1.4 Identify relevant frameworks and professional standards which apply to architecture.
- 1.5 Explain the meaning and objectives of governance, risk, and compliance.
- 1.6 Describe an architect's contribution to a business case.
- 1.7 Explain the purpose and methods of performing gap analysis.
- 1.8 Describe a range of drivers for architecture.
- 1.9 Describe the purpose and use of an architecture description.

2. Business Architecture

- 2.1 Identify the meaning and objectives of business architecture.
- 2.2 Describe the key artefacts commonly used in business architecture.
- 2.3 Describe the key activities undertaken by a business architect.
- 2.4 Describe the structure and behaviour of a business system.

Syllabus covered in Day 2

3. Applications Architecture

- 3.1 Identify the meaning and objectives of applications architecture.
- 3.2 Describe the key artefacts commonly used in applications architecture.
- 3.3 Describe the key activities undertaken by an applications architect.
- 3.4 Describe the use and behaviour of applications in a business.
- 3.5 Explain the purpose and use of cross-reference grids.
- 3.6 Identify different kinds of application.

4. Data Architecture

- 4.1 Define the meaning and objectives of data architecture.
- 4.2 Describe key artefacts commonly used in data architecture.
- 4.3 Describe key activities undertaken by a data architect.
- 4.4 Explain the differences between data and information and how they are used.
- 4.5 Describe the data structures used by a business and/or its applications.

5. Infrastructure Architecture

- 5.1 Identify the meaning and objectives of infrastructure architecture.
- 5.2 Describe key artefacts in infrastructure architecture.
- 5.3 Describe the key activities undertaken in infrastructure architecture.

Syllabus covered in Day 3

6. Software Architecture

- 6.1 Identify the meaning and objectives of software architecture.
- 6.2 Describe the key artefacts commonly used in software architecture.
- 6.3 Describe the key activities undertaken by a software architect.
- 6.4 Describe system modelling techniques.
- 6.5 Describe the role of APIs in software architecture.

7. Security Architecture

- 7.1 Identify the meaning and objectives of security architecture.
- 7.2 Describe the key artefacts commonly used in security architecture.
- 7.3 Describe the key activities undertaken by a security architect.
- 7.4 Identify legislation and professional standards relevant to security architecture.
- 7.5 Identify the key concepts in data architecture security.
- 7.6 Identify the key concepts applications architecture security.
- 7.7 Identify the key concepts and activities in infrastructure architecture security.

8. Solution Architecture

- 8.1 Identify the meaning and objectives of solution architecture.
- 8.2 Describe the key artefacts commonly used in solution architecture.
- 8.3 Describe the key activities undertaken by a solution architect.
- 8.4 Describe different types of solution requirements.
- 8.5 Explain the purpose and stages of the solution architecture lifecycle.
- 8.6 Identify stakeholder categories in solution architecture.

Added value

- Having developed the BCS **Intermediate** level Certificate in Enterprise and Solution Architecture (which this **Foundation** level is to replace in the BCS 2023 portfolio) and run courses to it since 2009, Avancier is uniquely placed to add considerable value to the shorter syllabus of this new Foundation level certificate.
- For the time being we offer courses to both certificates – either of which serves as a stepping stone to the **Practitioner** level certificate.

Course	Mode	Class days	
Foundation	On-line	3 days	Basic terms and concepts, with some exercises (NEW)
Intermediate	On-line	4 days	More terms, concepts, principles and patterns, includes exam revision day
Practitioner	On-line	3 days	More advanced principles and patterns, with a case study.
Combined F & P	Classroom	5 days	Combination of Foundation and Practitioner courses above.
Combined I & P	Classroom	5 days	Combination of Intermediate and Practitioner courses above.

- For details, go to <http://avancier.website>