

# BCS Certificate in Requirements Engineering

*Duration: 1 full & 4 half days Live Online*

## Course Overview

This course will only be run as a 3 day face to face in-class event when it is confirmed safe to do so.

Expleo Academy's BCS Certificate in Requirements Engineering provides attendees with the knowledge and tools to turn a business problem into a validated specification of requirements.

This course is delivered by BCS-accredited trainers with significant experience of requirements engineering and business analysis who will guide attendees through the five-part framework for Requirements Engineering.

The collaborative training approach includes group activities, case study analysis, and practical exam-based exercises.

## Who should attend?

This Practitioner certificate is relevant to those involved in any Requirements Engineering activities. This includes Business Analysts, Product Owners, Business Change Managers, Project Managers, Quality Assurance, Systems Analysts, Business Managers, Business Representatives, or any stakeholders who value good quality requirements on business change projects.

The course is also aimed at individuals who wish to become accredited in the internationally recognised BCS Certificate in Requirements Engineering, on their path to achieving the BCS International Diploma in Business Analysis.

## Prerequisites & pre-reading guidelines

There are no prerequisites. However, attendees will be expected to have read Chapters 5, 10, 11 and 12 from the BCS publication "Business Analysis" by Paul, Yeates & Cadle (3rd Edition).

## How certification is earned

Certification is dependent on correctly answering 25 out of 40 (62.5%) multiple-choice questions in an exam. The Exam is currently delivered online, closed-book, and has a duration of 60 minutes. Additional time is available under certain circumstances, which are outlined on the BCS website. Once you have registered for this course, the British Computer Society Exams Office will contact you to explain how you can schedule your online exam.

## Course Objectives

On completion of this training, attendees will be able to:

- Apply the Requirements Engineering (RE) framework in a business context
- Use a hierarchy of requirements
- Recognise the roles and responsibilities of key stakeholders in the RE framework
- Understand the use of a range of requirements elicitation techniques and their relevance to business situations
- Document requirements
- Analyse, prioritise and organise requirements
- Identify problems with requirements and improvements for requirements documentation
- Construct and interpret data models and functional models of an information system
- Describe the principles of Requirements Management their importance
- Describe the use of tools to support Requirements Engineering
- Explain the process and stakeholders involved in Requirements Validation

## Context

Expleo's interactive training of BCS Requirements Engineering provides an essential step in your Business Analysis Learning Pathway, offering one of the certificates required to qualify for the BCS International Diploma in Business Analysis. The content is of value to any stakeholder engaged in software development projects.

## Related courses

To qualify for the BCS International Diploma in Business Analysis, you should also attend:

- BCS Certificate in Business Analysis Practice
- BCS Certificate in Modelling Business Processes
- BCS Foundation Certificate in Business Analysis

The BCS offers you full flexibility when choosing the sequence in which you achieve these certificates. In general, Expleo Academy recommends that you attend the Foundation Certificate in Business Analysis after completion of the other three BCS certificates, if intending to sit the International Diploma exam. We are happy to discuss your specific training needs to advise on your optimal learning pathway.

# Course Outline

## Introduction to Requirements Engineering

- Definition and characteristics of a Requirement
- Rationale for Requirements Engineering
- Application of the Requirements Engineering framework
- Rationale for Requirements planning and estimating
- Content of a Project Initiation Document, Terms of Reference, or Project Charter

## Hierarchy of Requirements

- Rationale for the requirements hierarchy
- Application of the requirements hierarchy
- Categorisation of requirements
- Business policy / Technical policy / Functional / Non-Functional requirements

## Stakeholders in the Requirements Process

- Definition of "Stakeholder"
- Key Project Stakeholder roles
- Key Business Stakeholder roles
- Stakeholder identification
- Stakeholder contributions

## Requirements Elicitation

- Tacit knowledge
- Identification of knowledge types
- Principles and application of elicitation techniques
- Selecting the optimal elicitation techniques for a given scenario

## Use of Models in Requirements Engineering

- The purpose of modelling requirements
- Developing a context diagram
- Types of events that initiate processing
- Use Case modelling to represent functional requirements for an information system
- Interpreting a UML Class diagram
- Using a CRUD matrix to cross-reference models

## Requirements Documentation

- Documentation at different levels of definition
- Documentation styles, including User Story, Use Case, Requirements List, and Requirements Catalogue
- Requirement attributes
- Structure and content of the Requirements Document

## Requirements Analysis

- The rationale for prioritising requirements
- Application of the MoSCoW prioritisation technique
- Assessing the quality of requirements definition
- Feasibility of requirements
- Categorisation of requirements
- Enhancing the requirement set
- Prototyping to elaborate requirements

## Requirements Validation

- Rationale for Informal and Formal approaches to requirements validation
- The validation process for requirements artefacts
- Roles and responsibilities for Validation

## Requirements Management

- Rationale for requirements management
- Elements of requirements management and the links between them
- Structure and elements of a change control process
- The benefits and types of traceability
- Rationale and approach for achieving requirements traceability

## Contact

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