

## **BCS Requirements Engineering Practice + Exam**

Cursusduur: 3 Dagen Cursuscode: BCS-RE

## Beschrijving:

Deze 3-daagse BCS Requirements Engineering Practice training + examen dekt de reeks concepten, benaderingen en technieken die van toepassing zijn op het Practitioner Certificate in Requirements Engineering. Het is relevant voor iedereen die werkzaam is binnen een bedrijfsof informatiesysteemdomein, en die inzicht nodig heeft in de aard, definitie en het gebruik van requirements van goede kwaliteit. This 3-day BCS Requirements Engineering Practice training + exam covers the range of concepts, approaches and techniques that are applicable to the Practitioner Certificate in Requirements Engineering. It is relevant to anyone working within a business or information systems domain, who requires an understanding of the nature, definition and use of good quality requirements.

#### Doelgroep:

This Practitioner Certificate is designed for people who want to elicit, analyse, validate, document and manage requirements Suitable for business analysts, business managers and members of their team, business change managers and project managers

#### Doelstelling:

- You'll learn how to take a systematic approach to eliciting, analysing, validating, documenting and managing requirements. The certificate includes:
- An introduction to the requirements engineering process
- The hierarchy of requirements
- How to identify stakeholders in the requirements process
- How to elicit requirements
- Modelling, designing and analysing requirements
- Requirements management

### Examens en certificering

Type: Multiple choiceDuration: 60 minutesSupervised: YesOpen Book: No

Pass Mark: 25/40

Calculators: Calculators cannot be used during this examination.

# Cursusinhoud:

1. Introduction to Requirements Engineering 5%	4.3.11 Activity sampling.	6.3.13 Related requirements.
Candidates will be able to:	4.4 Describe the principles and application of the elicitation techniques (listed in 4.3).	6.3.14 Related documents.
1.1 Define the term 'requirements' and the characteristics of a requirement.	4.5 List the advantages and disadvantages of the elicitation techniques (listed in 4.3).	6.3.15 Comments.
		6.3.16 Rationale.
1.2 Explain the rationale for Requirements Engineering and the application of the	4.6 Discuss the suitability of the elicitation techniques (listed in 4.3) for Agile and linear	6.3.17 Resolution.
Requirements Engineering framework.	development approaches.	6.3.18 Version history.
1.3 Explain the rationale of requirements planning and estimating.	5 Use of Models in Requirements Engineering 10%	6.4 Describe the structure and contents of the requirements document:
1.4 Describe the elements that should be considered as the contents of a project	Candidates will be able to:	6.4.1 Introduction and background.
initiation document, terms of reference or project charter:	5.1 Explain the rationale for modelling the functional requirements (processing and data)	6.4.2 Business process models.
1.4.1 Business objectives.	of an information system and describe how models help the analyst to:	6.4.3 Function model (use case diagram) of defined requirements.
1.4.2 Project objectives.	5.1.1 Generate questions in order to clarify a requirement and remove ambiguity.	6.4.4 Data model (class model) of defined requirements.
1.4.3 Scope.	5.1.2 Define business rules.	6.4.5 Requirements (defined using the selected documentation style).
1.4.4 Constraints (budget, timescale, standards).	5.1.3 Cross-check requirements for consistency and completeness.	6.4.6 Glossary.
1.4.5 Authority or sponsor.	5.2 Interpret a given scenario to develop a	7 Requirements Analysis 20%
1.4.6 Resources.	context diagram.	Candidates will be able to:
1.4.7 Assumptions.	5.3 Interpret a given scenario to identify the different types of event that can initiate	7.1 Explain the rationale for prioritising requirements, using the MoSCoW
2 Hierarchy of Requirements 10%	processing (external, time based, internal).	prioritisation
Candidates will be able to:	5.4 Understand how to construct a UML use case diagram for a given scenario to	technique.
2.1 Show understanding of the rationale for the requirements hierarchy and describe how	represent the functional requirements for an information system, including the	7.2 Interpret a given scenario and apply the MoSCoW prioritisation technique.
it is applied in Requirements Engineering.		7.3 Examine individual requirements; apply filters and quality criteria to assess that they

	following notational elements:	
2.2 Explain the categories within the hierarchy:	5.4.1 System boundary.	are well defined.
2.2.1 Business policy (general) requirements.	5.4.2 Actors (user role, another system and time).	7.4 Use requirements for a given scenario to check for technical, business and financial
2.2.2 Technical policy requirements.	5.4.3 Use cases.	feasibility.
2.2.3 Functional requirements.		7.5 Assign a requirement type to an individual
2.2.4 Non-functional requirements.	5.4.4 Communication relationships (associations) between actors and use cases.	requirement.
3 Stakeholders in the Requirements Process 5%	- It should be noted that there is no requirement to understand include and extend	7.6 Organise the requirements for a given scenario by requirement type and functional
Candidates will be able to:	constructs.	area.
3.1 Define the term stakeholder.	5.5 Interpret a UML Class diagram	7.7 Within a given requirement set:
3.2 Explain the key roles of the following project stakeholders during Requirements	(comprising of classes, attributes, associations and	7.7.1 Identify and resolve duplicate requirements.
Engineering:	multiplicities) that represents the data requirements for a given scenario, and	7.7.2 Identify and reconcile overlapping requirements.
3.2.1 Project Manager.	describe the business rules that are represented.	7.7.3 Identify conflicting requirements and explain how requirements negotiation
3.2.2 Developer.	- It should be noted that there is no requirement to understand operations,	could be applied to resolve these conflicts.
3.2.3 Tester.	association classes, generalisation (and associated concepts of inheritance and	7.7.4 Identify ambiguous requirements and aspects to be defined to remove
<ul><li>3.2.4 Solution Architect.</li><li>3.3 Explain the key roles of the following</li></ul>	polymorphism), aggregation and composition.	ambiguity.
business stakeholders during Requirements  Engineering:	5.6 Explain the benefits to be derived from cross-referencing models and illustrate how	7.8 Explain the use of prototyping to elaborate requirements.
3.3.1 Project Sponsor.	this can be achieved by using a CRUD matrix (of function or event against data).	8 Requirements Validation 5%
3.3.2 Subject Matter Expert.	6 Requirements Documentation 15%	Candidates will be able to:
3.3.3 End User.	Candidates will be able to:	8.1 Describe the rationale for the following approaches to requirements validation:
3.3.4 Business Manager.	6.1 Explain the rationale for creating a requirements document and for documenting	8.1.1 Informal reviews.

3.4 Interpret a given scenario, identify stakeholders and describe their contribution to	requirements at different levels of definition, relating to:	8.1.2 Formal reviews:
Requirements Engineering.	6.1.1 The nature of the solution.	8.1.2.1 Structured walkthrough.
4 Requirements Elicitation 20%	6.1.2 The level of priority.	8.1.2.2 Prototype reviews.
Candidates will be able to:	6.1.3 The delivery approach.	8.2 Explain the steps to be followed in the validation process for requirements artefacts:
4.1 Explain different knowledge types:	6.2 Understand how to construct	8.2.1 Plan review.
4.1.1 Tacit / Non-tacit (explicit).	requirements documentation for a given scenario, using	8.2.2 Conduct review of artefacts.
4.1.2 Individual / Corporate.	the following specified styles:	8.2.3 Collect comments.
4.2 Interpret a given scenario to identify different knowledge types.	6.2.1 User story.	8.2.4 Undertake actions.
4.3 Interpret a given scenario to identify relevant elicitation techniques from the	6.2.2 Use case.	8.2.5 Revise artefacts.
following	6.2.3 Requirements list.	8.2.6 Obtain approval.
list:	6.2.4 Requirements catalogue.	9 Requirements Management 10%
4.3.1 Interviews.	6.3 Describe a requirement in terms of its characteristics or attributes and explain why	Candidates will be able to:
4.3.2 Workshops.	each of the following may be needed:	9.1 Explain the rationale for requirements management.
4.3.3 Observation.	6.3.1 Identifier.	9.2 Define the elements of requirements management and the links between them.
4.3.4 Focus groups.	6.3.2 Name.	9.3 Explain the structure and elements of a
4.3.5 Prototyping.	6.3.3 Description.	change control process.
4.3.6 Scenario analysis.	6.3.4 Source.	9.4 Explain the structure and elements of version control.
4.3.7 Document analysis.	6.3.5 Owner.	9.5 Define two forms of traceability and how projects benefit from each of them:
4.3.8 Surveys.	6.3.6 Author.	9.5.1 Horizontal (forwards from origin to
4.3.9 Record searching.	6.3.7 Type (general, technical, functional, non-functional).	delivery and backwards from delivery to
4.3.10 Special purpose records.	6.3.8 Priority.	origin).
		9.5.2 Vertical (to business objectives).

6.3.9 Business area.

6.3.10 Stakeholders.

9.6 Explain the rationale and the approach to achieving requirements traceability..

6.3.11 Associated non-functional requirements.

6.3.12 Acceptance criteria.

# Nadere informatie:

Neem voor nadere informatie of boekingen contact op met onze Customer Service Desk 030 - 60 89 444 info@globalknowledge.nl

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