EXIN BCS Practitioner Certificate in Requirements Engineering – Including Exam

Durée: 3 Jours   Réf de cours: BCS-RE

Résumé:

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.

Public visé:

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

Objectifs pédagogiques:

- 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

Test et certification

- Type: Multiple choice
- Duration: 60 minutes
- Supervised: Yes
- Open Book: No
- Pass Mark: 25/40
- Calculators: Calculators cannot be used during this examination.

Contenu:

1. Introduction to Requirements Engineering 5%

Candidates will be able to:

1.1 Define the term 'requirements' and the characteristics of a requirement.

1.2 Explain the rationale for Requirements Engineering and the application of the

Requirements Engineering framework.

1.3 Explain the rationale of requirements planning and estimating.

1.4 Describe the elements that should be considered as the contents of a project

initiation document, terms of reference or project charter:

1.4.1 Business objectives.

1.4.2 Project objectives.

1.4.3 Scope.

1.4.4 Constraints (budget, timescale, standards).

1.4.5 Authority or sponsor.

1.4.6 Resources.

1.4.7 Assumptions.

2 Hierarchy of Requirements 10%

Candidates will be able to:

2.1 Show understanding of the rationale for the requirements hierarchy and describe how

it is applied in Requirements Engineering.

4.3.11 Activity sampling.

4.4 Describe the principles and application of the elicitation techniques (listed in 4.3).

4.5 List the advantages and disadvantages of the elicitation techniques (listed in 4.3).

4.6 Discuss the suitability of the elicitation techniques (listed in 4.3) for Agile and linear

development approaches.

5 Use of Models in Requirements Engineering 10%

Candidates will be able to:

5.1 Explain the rationale for modelling the functional requirements (processing and data)

of an information system and describe how models help the analyst to:

5.1.1 Generate questions in order to clarify a requirement and remove ambiguity.

5.1.2 Define business rules.

5.1.3 Cross-check requirements for consistency and completeness.

5.2 Interpret a given scenario to develop a context diagram.

5.3 Interpret a given scenario to identify the different types of event that can initiate

processing (external, time based, internal).

5.4 Understand how to construct a UML use case diagram for a given scenario to

represent the functional requirements for an information system, including the

6.3.13 Related requirements.

6.3.14 Related documents.

6.3.15 Comments.

6.3.16 Rationale.

6.3.17 Resolution.

6.3.18 Version history.

6.4 Describe the structure and contents of the requirements document:

6.4.1 Introduction and background.

6.4.2 Business process models.

6.4.3 Function model (use case diagram) of defined requirements.

6.4.4 Data model (class model) of defined requirements.

6.4.5 Requirements (defined using the selected documentation style).

6.4.6 Glossary.

7 Requirements Analysis 20%

Candidates will be able to:

7.1 Explain the rationale for prioritising requirements, using the MoSCoW prioritisation

technique.

7.2 Interpret a given scenario and apply the MoSCoW prioritisation technique.

7.3 Examine individual requirements; apply filters and quality criteria to assess that they

2.2 Explain the categories within the hierarchy:

2.2.1 Business policy (general) requirements.

2.2.2 Technical policy requirements.

2.2.3 Functional requirements.

2.2.4 Non-functional requirements.

3 Stakeholders in the Requirements Process 5%

Candidates will be able to:

3.1 Define the term stakeholder.

3.2 Explain the key roles of the following project stakeholders during Requirements

Engineering:

3.2.1 Project Manager.

3.2.2 Developer.

3.2.3 Tester.

3.2.4 Solution Architect.

3.3 Explain the key roles of the following business stakeholders during Requirements

Engineering:

3.3.1 Project Sponsor.

3.3.2 Subject Matter Expert.

3.3.3 End User.

3.3.4 Business Manager.

following notational elements:

5.4.1 System boundary.

5.4.2 Actors (user role, another system and time).

5.4.3 Use cases.

5.4.4 Communication relationships (associations) between actors and use cases.

- It should be noted that there is no requirement to understand include and extend

constructs.

5.5 Interpret a UML Class diagram (comprising of classes, attributes, associations and

multiplicities) that represents the data requirements for a given scenario, and

describe the business rules that are represented.

- It should be noted that there is no requirement to understand operations,

association classes, generalisation (and associated concepts of inheritance and

polymorphism), aggregation and composition.

5.6 Explain the benefits to be derived from cross-referencing models and illustrate how

this can be achieved by using a CRUD matrix (of function or event against data).

6 Requirements Documentation 15%

Candidates will be able to:

6.1 Explain the rationale for creating a requirements document and for documenting

are well defined.

7.4 Use requirements for a given scenario to check for technical, business and financial

feasibility.

7.5 Assign a requirement type to an individual requirement.

7.6 Organise the requirements for a given scenario by requirement type and functional

area.

7.7 Within a given requirement set:

7.7.1 Identify and resolve duplicate requirements.

7.7.2 Identify and reconcile overlapping requirements.

7.7.3 Identify conflicting requirements and explain how requirements negotiation

could be applied to resolve these conflicts.

7.7.4 Identify ambiguous requirements and aspects to be defined to remove

ambiguity.

7.8 Explain the use of prototyping to elaborate requirements.

8 Requirements Validation 5%

Candidates will be able to:

8.1 Describe the rationale for the following approaches to requirements validation:

8.1.1 Informal reviews.

3.4 Interpret a given scenario, identify stakeholders and describe their contribution to

Requirements Engineering.

4 Requirements Elicitation 20%

Candidates will be able to:

4.1 Explain different knowledge types:

4.1.1 Tacit / Non-tacit (explicit).

4.1.2 Individual / Corporate.

4.2 Interpret a given scenario to identify different knowledge types.

4.3 Interpret a given scenario to identify relevant elicitation techniques from the following

list:

4.3.1 Interviews.

4.3.2 Workshops.

4.3.3 Observation.

4.3.4 Focus groups.

4.3.5 Prototyping.

4.3.6 Scenario analysis.

4.3.7 Document analysis.

4.3.8 Surveys.

4.3.9 Record searching.

4.3.10 Special purpose records.

requirements at different levels of definition, relating to:

6.1.1 The nature of the solution.

6.1.2 The level of priority.

6.1.3 The delivery approach.

6.2 Understand how to construct requirements documentation for a given scenario, using

the following specified styles:

6.2.1 User story.

6.2.2 Use case.

6.2.3 Requirements list.

6.2.4 Requirements catalogue.

6.3 Describe a requirement in terms of its characteristics or attributes and explain why

each of the following may be needed:

6.3.1 Identifier.

6.3.2 Name.

6.3.3 Description.

6.3.4 Source.

6.3.5 Owner.

6.3.6 Author.

6.3.7 Type (general, technical, functional, non-functional).

6.3.8 Priority.

8.1.2 Formal reviews:

8.1.2.1 Structured walkthrough.

8.1.2.2 Prototype reviews.

8.2 Explain the steps to be followed in the validation process for requirements artefacts:

8.2.1 Plan review.

8.2.2 Conduct review of artefacts.

8.2.3 Collect comments.

8.2.4 Undertake actions.

8.2.5 Revise artefacts.

8.2.6 Obtain approval.

9 Requirements Management 10%

Candidates will be able to:

9.1 Explain the rationale for requirements management.

9.2 Define the elements of requirements management and the links between them.

9.3 Explain the structure and elements of a change control process.

9.4 Explain the structure and elements of version control.

9.5 Define two forms of traceability and how projects benefit from each of them:

9.5.1 Horizontal (forwards from origin to delivery and backwards from delivery to

origin).

9.5.2 Vertical (to business objectives).

6.3.9 Business area.

6.3.10 Stakeholders.

6.3.11 Associated non-functional requirements.

6.3.12 Acceptance criteria.

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

Autres moyens pédagogiques et de suivi:

• Compétence du formateur : Les experts qui animent la formation sont des spécialistes des matières abordées et ont au minimum cinq ans d'expérience d'animation. Nos équipes ont validé à la fois leurs connaissances techniques (certifications le cas échéant) ainsi que leur compétence pédagogique.
• Suivi d'exécution : Une feuille d'émargement par demi-journée de présence est signée par tous les participants et le formateur.
• En fin de formation, le participant est invité à s'auto-évaluer sur l'atteinte des objectifs énoncés, et à répondre à un questionnaire de satisfaction qui sera ensuite étudié par nos équipes pédagogiques en vue de maintenir et d'améliorer la qualité de nos prestations.

Délais d'inscription :

• Vous pouvez vous inscrire sur l'une de nos sessions planifiées en inter-entreprises jusqu'à 5 jours ouvrés avant le début de la formation sous réserve de disponibilité de places et de labs le cas échéant.
• Votre place sera confirmée à la réception d'un devis ou """"booking form"""" signé. Vous recevrez ensuite la convocation et les modalités d'accès en présentiel ou distanciel.
• Attention, si cette formation est éligible au Compte Personnel de Formation, vous devrez respecter un délai minimum et non négociable fixé à 11 jours ouvrés avant le début de la session pour vous inscrire via moncompteformation.gouv.fr.

Accueil des bénéficiaires :

• En cas de handicap : plus d'info sur globalknowledge.fr/handicap
• Le Règlement intérieur est disponible sur globalknowledge.fr/reglement