Add-ON Training

Objectives

To provide trainings focused on certification to students pursuing graduation/post graduation and professionals which will give them an edge in their pursuit of challenging career opportunities In Requirement Engineering

Certification

Business Analyst – Requirement Engineering

Add-On training is the professional organization accredited with BCS (British Computer Society), The Charted Institute of IT to train individuals on Requirement Engineering. This would help an individual to understand the core of Requirement Engineering from Elicitation to Management Stage and various tools used in the project along with management skills.

Following are the **9 different Modules** as per BCS standards for Foundation in Business Analysis Certification which would be covered in **3 days**

Each of the Certification Package will include:

- ➔ Hand-Outs Material
- ➔ Book Made of 10 Referencing Books
- ➔ Mock test
- ➔ Paper based Exam
- ➔ Globally recognized Certificate from BCS, The Charted Institute of IT

Benefits

For Employees

- Gain industry recognition as a professional business analyst
- Validate your skills and knowledge of critical analytical concepts
- Publications are available that specifically support our business analysis certification
- Improve overall performance and broaden career opportunities
- Based on best practice with practical learning techniques
- BCS membership available, supporting self-initiated professional development

- Globally Recognized
- Can align their certification to IT Skills Framework (SFIAplus) which is industry recognised
- Helps them benchmark their skills against industry standards
- Continued Professional Benefits tool which enables them to keep a record of activities including training, certification
    - Record individual's experience using online CPD tool
    - Can get involved in policy and debate
    - Join our specialist groups, social network forums
    - Gain the latest industry news

<u>For employers</u>

- Professional development and advancement for employees
- Employees gain practical skills and increase their value to the business
- Aligned with SFIAplus providing a clear development path
- Greater reliability and higher quality results through use of industry standard practices
- Regular assessment process increases employee responsibility
- Supports your organisation to retain, motivate and recruit the best people in business analysis

What are the learning outcomes?

Candidates should be able to demonstrate knowledge and understanding of business analysis principles and techniques. Key areas are:

- Explain the importance of linking requirements to the Business Case
- Describe the roles and responsibilities of key stakeholders in the requirements engineering process
- Explain the use of a range of requirements elicitation techniques and the relevance of the techniques to business situations
- Analyse, prioritise and organise elicited requirements
- Document requirements

- Identify problems with requirements and explain how requirements documentation may be improved
- Create a model of the features required from a system
- Interpret a model of the data requirements for an information system
- Describe the principles of Requirements Management and explain the importance of managing requirements
- Describe the use of tools to support Requirements Engineering
- Explain the process and stakeholders involved in Requirements Validation

Structure of the Exam

- The examination consists of a one hour open Book.
- Written, based on a business scenario (The Answers are perception of Candidates and there could be several correct answers to one question. So the answers are more specific and relevant to case study)
- The exam is of 100 marks. There are 5 Scenario each Scenario of 20 marks
- Pass mark – 50%

Who is it aimed at?

The certificate is relevant to anyone requiring an understanding of Business Analysis including business analysts, business managers and their staff, business change managers and project managers.

Entry Requirements

There are no specific pre-requisites for entry to the examination

Course Content

1. Introduction to Requirements Engineering (5%)
    i. Framework for Requirements Engineering
        a. Rationale for Requirements Engineering and the problems with requirements
        b. The definition and characteristics of a requirement
        c. The characteristics of a requirements engineering process
        d. The problems of defining requirements
        e. A framework for Requirements Engineering
        f. Requirement Engineering activities – elicitation, analysis, validation, documentation and management
        g. The importance of requirements planning and estimating
    ii. The business rationale and inputs

a. The business analysis process model and the inputs into the ‘define requirements stage
b. The business case in the project lifecycle
c. Terms of Reference / Project Initiation Document / Project Charter – business objectives, project objectives, scope, constraints (budget, timescale, standards), sponsor (authority), resources and assumptions

2. Hierarchy of requirements
   i. Building the hierarchy through decomposition of requirements
   ii. Categories of requirements within the hierarchy
      a. General business requirements, including legal and business policy
      b. Technical policy requirements
      c. Functional requirements
      d. Non-functional requirements, including performance, usability, access, security, archiving, back up and recovery, availability, robustness

3. Stakeholders in the requirements process (5%)
   i. The definition of the term ‘stakeholder
   ii. Project Stakeholders: their role and contribution to the requirements engineering process
      a. Project Manager
      b. Business Analysis
      c. Solution Developer
      d. Testers
      e. Architects
   iii. Business Stakeholders: their role and contribution to the requirements engineering process
      a. Project Sponsor
      b. Subject matter expert
      c. End users and managers
   iv. External stakeholders: their role and contribution to the requirements engineering process
      a. Customers
      b. Regulators
      c. Suppliers - products and services

4. Requirements Elicitation (20%)
   i. Knowledge types – tacit and non-tacit (explicit)
   ii. Elicitation techniques

For each elicitation technique; description of the technique (what it is), conduct of the

technique (how it is performed); advantages of the technique, including situations where the technique is particularly appropriate, and disadvantages or drawbacks of the technique, including situations where the technique is not particularly appropriate

a. Interviews
b. Workshops
c. Observation
d. Formal/ informal
e. Shadowing
f. Focus groups
g. Prototyping
h. Scenarios
i. Document Analysis
j. Special purpose records
k. Questionnaires
l. Activity sampling

iii. Understanding the applicability of techniques

5. Use of models in Requirements Engineering (10%)
   i. The purpose of modelling requirements
      a. Generating questions
      b. Cross-checking for consistency and completeness
      c. Defining business rules
   ii. Modelling the business context for the system using a context diagram that identifies the inputs and outputs of the system 9
   iii. Developing a model to represent the system processing requirements Use case diagram – actors, boundaries, associations, use cases
   iv. Interpreting a data model based upon the system data requirements Class diagram – classes, simple associations, multiplicities, attributes

6. Requirements Documentation (15%)
   i. Documentation styles and levels of definition
      a. User Stories
      b. Use Cases
      c. Requirements List
      d. Requirements Catalogue
   ii. Requirements Catalogue
      a. Identifier
      b. Name
      c. Description
      d. Acceptance criteria

e. Source
f. Owner
g. Rationale/Benefits
h. Related non-functional requirements
i. Priority
j. Type (functional, non-functional, general, technical)
k. Related requirements/documents
l. Author
m. Version control/status
n. Change history
o. Resolution

iii. Requirements Document
a. Introduction and Background
b. Business Process Models
c. Function models (use case diagram) of defined requirements
d. Data model (class model) of defined requirements
e. Requirements catalogue
f. Glossary

7. Requirements Analysis (20%)
   i. Prioritising and packaging requirements for delivery
   The MoSCoW prioritisation scheme and its role/purpose in planning the delivery of a system, its iterations or releases
   ii. Organising requirements
      a. Requirements filters
      b. Characteristics of a good requirement
   iii. Prototyping requirements
   iv. Verifying requirements

8. Requirements Validation (5%)
   i. Agreeing the requirements document
   The requirements validation process; plan review, issue documentation, review documentation, collect comments, undertake actions, revise documentation
   ii. Types of reviews
      a. Informal reviews
      b. Structured walkthroughs (author-led review)
      c. Technical reviews
      d.Inspections
   iii. Stakeholders and their areas of concern

Project sponsor, end user representatives, subject matter expert (domain expert) business analyst, developers, testers, project office representatives

9. Requirements Management (10%)
    i. Dealing with changing requirements
        a. The sources of change
        b. Change Management
        c. Configuration management
    ii. The importance of traceability
        a. Vertical traceability (to business objectives)
        b. Horizontal traceability (from origin to deliver)
    iii. Traceability and ownership
    iv. Requirements Engineering support tools
        a. CARE Tools (Computer Aided Requirements Engineering)
        b. CASE Tools (Computer Aided Software Engineering)