



## Requirements Engineering

### Objectives

- Know reasons why requirements' engineering is important, yet often neglected.
- Know roles of the requirement engineer/business analyst.
- Understand the impact and causes of poor requirement.
- Understand basic glossary terms.

### Audience

- Beginners, Testers or Developers who wanted to switch to Business Analysis Profession
- Candidates preparing for CPRE Exam

### Prerequisites

- None

### Course Description

The validity and accuracy of the requirements can make or break a project, yet often insufficient time and effort is devoted to this critical part of the software development life cycle. Rather than looking at the requirements gathering as the first step in the lifecycle, we look at the requirements throughout the lifecycle as a driving force to implementing the best product. In three days, participants will learn how to perform cost & time effective tasks and to work within the development methodology that has been implemented.

This course is an excellent preparation course for the CPRE certification exam offered by IREB. It is based on IREB (International Requirements Engineering Board) bodies of Knowledge and explores not just why the requirements matter, but how to gather the right requirements and from whom, document them effectively and ensure that they are properly implemented.

### Duration

3 Days

### Agenda

#### **1.0 Introduction**

- 1.1 What is IPRE, and who is IREB?
- 1.2 Purpose of defining a body of knowledge
- 1.3 Basic terminology
- 1.4 Business analyst or requirements engineer
- 1.5 Required skills

#### **2.0 Categorizing Requirements**

- 2.1 - Functional requirements
- 2.2 - Behavioral requirements
- 2.3 - Data and information requirements
- 2.4 - Non-functional requirements
- 2.5 - Interface requirements

#### **3.0 Define the Context**

- 3.1 - Determining the scope
- 3.2 – Understanding who does what
- 3.3 – Defining and planning the project
- 3.4 – Managing requirements risk
- 3.5 – Estimating
- 3.6 - Managing scope

#### **4.0 Eliciting Requirements**



- 4.1 - Identifying the sources
- 4.2 - Finding the stakeholders
- 4.3 - Applying elicitation techniques
- 5.0 Analyzing the Requirements**
- 5.1 - Creating the business domain model
- 5.2 - Analyzing what you elicited
- 5.3 - Determining assumptions and constraints
- 6.0 Documenting Requirements**
- 6.1 - Preparing the glossary
- 6.2 - Getting ready to document
- 6.3 - IEEE guidelines
- 6.4 - Assigning attributes
- 7.0 Modeling Techniques**
- 7.1 - Data and static behavioral models
- 7.2 - Process and flow models
- 7.3 - Usage models
- 8.0 Checking & Reconciling Requirements**
- 8.1 - Preparing the requirements package
- 8.2 - Validating and verifying through reviews
- 8.3 - Obtaining approvals
- 9.0 Requirements Management**
- 9.1 - Tracking traceability
- 9.2 - Managing changes
- 9.3 - Selecting the solution
- 10.0 Tools**
- 11.0 Outlook for the Industry**