Requirements Analysis Techniques

1 Day | Virtual and Face-to-Face

Requirements Analysis is the process of breaking down complex topics into lower-level components to expose the details and gain a better understanding of the parts that make up the whole. By breaking it down, you are better able to analyze and discuss different aspects of a topic with your stakeholders, confirm your understanding, and communicate the needs to others in a more logical and thorough manner. Team members need to look at the requirements from different perspectives as well as with varying levels of detail, therefore it's critical to have strong requirements analysis skills within the team.

Poor requirements analysis results in solving the wrong problem, missing requirements, or ineffective communication with critical stakeholders. Excellent requirements analysis provides an effective communication vehicle and allows for collaboration among stakeholders to find and fill-in gaps, clarify requirements, examine alternative solutions, and ultimately develop an excellent product or solution.

Participants also learn where AI may assist business analysis work, such as helping organize information, generate draft content, or review a work product. The emphasis is on using AI thoughtfully while building the judgment needed to evaluate and improve the results.

Interactive workshops allow students to practice the techniques as they learn. This course is taken as part of our 4-day Essential Skills for Business Analysis course and supports the standards outlined in both the *IIBA's BABOK®* and *PMI's PBA*.

Learning Objectives

- Simplify your requirements into four core components that are easier to "consume"
- Still writing requirements? Instead, identify the most effective diagramming techniques and modeling options to support your software development approach (waterfall, iterative, and agile) and project type
- Compare and contrast analysis techniques in order to select the technique(s) that will most appropriately:
- support your understanding, critical thinking and problem solving
- communicate information to stakeholders to enable review and their understanding of requirements
- Minimize confusion and development errors by developing excellent requirements that can be easily understood by distributed or outsourced teams
- Improve your models and diagrams during analysis by asking the right questions

Intended Audience

This course is designed for individuals from any discipline who are performing requirements analysis activities; business analysts, project managers, business systems analysts, product managers, product owners, system architect, process engineers, requirements engineers, or any other project team member.

Prerequisites

None

Learning Topics

Introduction to Requirements Analysis Techniques

- Describe requirements and the importance of requirements analysis
- Understand how requirements analysis techniques apply within any methodology
- Compare and contrast the requirements analysis perspectives: What vs. How
- Understand common categories of requirements
- Distinguish different levels of requirements categories and explain their purpose
- Discuss how AI-assisted requirements may mix business needs, requirements, and solution ideas

Breaking Down Requirements into Core Components

- Define the four core components that make up all requirements
  - Data
  - Process
  - People & Systems
  - Business Rules
- Describe what the core components represent
- Identify the importance of core components to your audience
- Understand the characteristics of excellent requirements
- Use AI to help identify or sort requirements information by core component

Using Analysis Techniques to Your Advantage

- Describe how particular analysis techniques:
  - Drive quality analysis
  - Communicate requirements perspectives effectively
- Go beyond documenting requirements solely with text – describe how diagrams and models can also be used for analysis
- Compare and contrast the different requirements analysis techniques when preparing to communicate with your audience:
  - User stories
  - Context diagram
  - Entity Relationship Diagram (ERD)
  - Entity & attribute metadata

- Decomposition diagram
- User story map
- Business process template
- Process One-Pager
- Flowchart
- Prototype
- Use case diagram
- Use case description
- Gherkin
- System interface specification
- Business rule techniques: structured text, decision trees, decision tables, and decision models

- Discuss where AI may assist with drafting, organizing, or reviewing selected analysis work products
- Review AI-assisted models and requirements for accuracy, omissions, ambiguity, and usefulness to the intended audience
- Practice identifying appropriate requirements analysis techniques for various types of projects
- Confirm the analyzed requirements with stakeholders

Course Summary

- Bringing it all together
- Develop an Action Plan with next steps on the student's current project

Appendix – Job Aids

- Discuss various methodologies for application development and their history.
- Learn which models are used in each methodology:
  - Waterfall
  - Agile
  - Iterative
  - Prototyping
  - Incremental Development
  - Spiral/RUP
  - RAD
  - Extreme Programming (XP)
  - Object Oriented Methodologies
  - IDEF

This class is a part of the **B2T Training Business Analyst Certification Program**. For more information on the program, please see our Certification page.