

# Roadmap to Success: Foundation for Requirements Development and Management (Self-paced eLearning)

## COURSE DESCRIPTION

The *Roadmap to Success: Foundation for Requirements Development and Management* eLearning curriculum is a series of eight self-paced courses that teaches you the fundamentals of business analysis: requirements development and management. You will learn how to develop and manage requirements, tips for eliciting and documenting requirements, how to use the Requirements Roadmap to analyze requirements, and steps for adapting and improving your requirements practices to *your* project.

You can learn whenever and wherever it is most convenient for you. This practical, engaging curriculum features easy-to-use navigation, content-rich audio and animation components, downloadable tools and templates, real-life scenarios, interactive questions to check your learning, and more. Designed for business analysts, project managers, business owners, testing/QA staff, developers, and other individuals who develop and manage requirements, *Roadmap to Success: Foundation for Requirements Development and Management* self-paced eLearning is appropriate for anyone who needs a solid foundation in the basics of requirements—the foundation for product success.

## AUDIENCE

This course is valuable for business analysts, subject matter experts, business rule analysts, application analysts, data or object analysts, data architects, data administrators, project managers, project leaders, and application designers—anyone who is involved in discovering, analyzing, specifying, verifying, validating, and translating business requirements into software requirements and analysis models.

## CURRICULUM LENGTH

8-12 hours (depending on learner experience and familiarity)

## CURRICULUM OVERVIEW AND OBJECTIVES

### Course 1: Introduction to Requirements

Before you can successfully develop the requirements for the software product you want to build, you must understand the processes, terms, and roles in requirements development and management. **Course 1: Introduction to Requirements** will help you master the basics of requirements and requirements engineering for software products.

#### Objectives

After completing this course, you'll be able to:

- Describe requirements engineering and the activities involved in it.
- Understand the basic processes of requirements development and management.
- Identify the important players and their roles in requirements engineering.

### Course 2: Setting the Stage for Developing Requirements

Before your team begins developing user requirements, you must define the product's business requirements.

**Course 2: Setting the Stage for Developing Requirements** will help you understand how to prepare for requirements development. You'll learn how to define a product vision, create a glossary, and develop a strategy for managing requirements risks.

#### Objectives

After completing this course, you'll be able to:

- Explain why good preparation is important for effective requirements and software development.
- Describe the activities involved in setting the stage for requirements development, including defining a product charter and product vision, creating a glossary, and developing a requirements risk management strategy.
- Understand how to create a strategy for mitigating requirements risk and describe the benefits of this strategy.

### Course 3: Requirements Development: Elicitation

To define software requirements, you must identify the sources for your requirements and then elicit the requirements from them. **Course 3: Requirements Development: Elicitation** will help you understand the requirements elicitation process and learn about tools and techniques you can use to elicit requirements. You'll learn how to create lists of requirements sources, stakeholder category charts, stakeholder profiles, and stakeholder elicitation plans. You'll also learn the steps and key practices for a variety of elicitation techniques, including user task analysis, facilitated workshops, exploratory prototypes, surveys, and more.

#### Objectives

After completing this course, you'll be able to:

- Understand the requirements elicitation process and the challenges it presents.
- Describe a variety of tools and techniques used in the requirements elicitation process, and understand their purposes and benefits.
- Understand the importance of stakeholder elicitation planning and describe methods for creating a stakeholder elicitation plan.

### Course 4: Requirements Development: Analysis

Requirements analysis is essential for understanding and prioritizing requirements. **Course 4: Requirements Development: Analysis** will help you understand requirements analysis by guiding you through its multiple steps. Requirements analysis is the critical second phase of requirements development. You'll gain an understanding of how to use the Requirements Roadmap tool to articulate multiple requirements models. You'll also learn how to create user requirements models and effectively prioritize and verify requirements.

#### Objectives

After completing this course, you'll be able to:

- Describe the requirements analysis process and its importance in developing excellent user requirements.
- Understand the basics of requirements analysis, including requirements modeling, prioritization, and verification.
- Use the Requirements Roadmap and other useful tools to select requirements models during analysis.

### Course 5: Requirements Development: Specification

This course covers techniques for writing clear requirements statements and creating a user requirements document and software requirements specification (SRS) document. **Course 5: Requirements Development: Specification** will help you understand how to elaborate, refine, and organize user and software requirements into requirements specifications that completely and accurately describe the software product.

#### Objectives

After completing this course, you'll be able to:

- Describe the purpose of the user requirements document and the software requirements specification (SRS), and describe the contents of each type of document.
- Understand why requirements specification is important to successful software development.
- Use templates (simple syntax and Planguage) to write effective functional requirements and high-quality attributes (nonfunctional requirements).

### Course 6: Requirements Development: Validation

Requirements validation ensures that your requirements are necessary to meet user needs and are sufficiently specified so that product design and development can begin. **Course 6: Requirements Development: Validation** will help you learn about the requirements validation process. You'll master several validation techniques, including reviews, user acceptance tests, model validation, and operational prototypes.

#### Objectives

After completing this course, you'll be able to:

- Understand the importance of validating requirements.
- Describe the requirements validation process.
- Select and use specific validation techniques.

Templates, Examples, Checklists

**Course 7: Requirements Management**

Requirements management is the process of monitoring the status of requirements and controlling changes to the requirements baseline.

**Course 7: Requirements Management** will help you understand this process. You'll learn how to baseline requirements, define requirements attributes, establish requirements change control, and trace requirements. You'll also learn about tools that can help with requirements management.

**Objectives**

After completing this course, you'll be able to:

- Understand the importance of managing requirements and controlling changes to them.
- Describe the activities involved in requirements management and the purpose and benefits of each.
- Understand the importance and purpose of having a requirements baseline.

**Course 8: Adapting Requirements Practices**

Each project and each product is unique, so you must adapt your requirements practices to best meet the needs of your situation. **Course 8: Adapting Requirements Practices** will help you navigate a process for adapting or customizing your requirements practices based on your project's needs. You'll also explore a variety of techniques and processes you can use to improve and adapt your requirements practices. You'll learn how to conduct requirements retrospectives, use the goal-question-metric tool, conduct force field analysis, and more.

**Objectives**

After completing this course, you'll be able to:

- Understand the importance of adapting requirements practices to fit your project and product.
- Describe a process for adapting requirements practices and activities.
- Understand the importance of mitigating requirements risks and describe methods for this task.
- Use process improvement approaches for requirements development.

- Project Charter Template
- User Requirements Template
- SRS Template
- Glossary Template
- In-Out of Scope Table Example
- In-Out of Scope Table Template
- Vision Statement Template
- Vision Statement Example
- Requirements Risk List
- Risk Analysis Worksheet
- Tips for Creating Surveys
- Observation Techniques
- Tips for Writing Interview Questions
- Interface Reports Tips and Template
- Interface Screens Tips and Template
- Interface System-To-System and Template
- Elicitation Plan Template
- Influence-Importance Matrix
- Tips for Writing Functional Requirements
- Tips for Writing Unambiguous Quality Attributes
- SRS Checklist
- Questions for Eliciting Nonfunctional Attributes
- Force Field Analysis Template
- Problem Analysis
- Opportunity Analysis
- Requirements Retrospectives Questions
- Good Practices Checklist
- Implementing Requirements Action Plan