Module 1: Requirements, Projects, and Lifecycles

Kinds of Requirements
- A Multilevel View of Requirements
- Business Requirements
- Functional Requirements
- Technical Requirements

Project Types
- Three Dimensions

Lifecycles
- Waterfall
- Iterative
- Agile
- DevOps

Requirements Before Design
- Architectural Requirements
- Project Requirements

Module 2: Kinds of BI and Analytics Requirements

The Scope of Requirements
- An Overview
- Business Perspective
- Project Perspective

Classifying Requirements
- Business Capability Requirements
- Business Value Requirements
- Governance Requirements
- Data Management Requirements
- Business Services Requirements
- Business Applications Requirements
- Data Preparation Requirements
- Service-Level Requirements
- Technology Requirements

A Requirements Checklist
- Summary

Scenario
- for Exercises 1 through 4

Exercise One
- Business Capabilities
Module 3: Project Requirements Gathering

Requirements Challenges
- Setting the Scope
- Aligning to the Lifecycle
- Asking the Right Questions

Requirements Questions
- Surveying the Landscape
- Making It Personal
- The Current State - Data and Analysis
- The Current State - Existing Reports
- The Future State

BI and Analytics Products
- Business Capabilities
- BI Product Example

Exercise Two
- BI Products

Iterative BI Requirements Gathering
- Product Components
- From PBS to Specification
- A Functional Checklist
- A Technical Checklist

Exercise Three
- Product Breakdown Structure

Agile BI Requirements Gathering
- Backlog, Stories, and Discussions
- Checklists

Analytics Requirements Gathering
- Modeling Lifecycle (CRISP-DM)
- Requirements Framework

Module 4: Requirements Gathering Techniques

Requirements as a Human Process
- People and Requirements Gathering
- Roles and Skills
- Identifying Stakeholders
- Busy People vs. Involved Participants
- Some of the Challenges

Ten Techniques
- An Overview
- Brainstorming
- Interviewing
• Requirements Workshops
• Group Facilitation
• User Stories and Storyboarding
• Prototyping
• Surveys and Questionnaires
• Observation
• Current State Analysis
• Reverse Engineering
• Summary

Module 5: Requirements Mgmt Techniques
Requirements as a Systems Process
• The "Why" and "What" of Requirements Mgmt

Documenting Requirements
• Specifications
• Models
• Stories

Testing Requirements
• Clarity, Correctness, and Measurability
• Completeness

Exercise Four
• Requirements Specification

Managing Requirements
• Scope, Impact, Feasibility, and Change
• Summary

Module 6: Summary and Conclusion
Summary of Key Points
• A Quick Review

References and Resources
• To Learn More

Close the Class
• Evaluations, Thanks, etc.