



www.iconATG.com

+1 866 ICON US1
+1 636 530 7776
info@iconATG.com

Iterative Project Management with the Unified Process

Iterative development using the Unified Process provides many competitive benefits: major risks are resolved early in development; requirement changes and new stakeholder requests (which are inevitable in any project) are accommodated smoothly; skill and resource utilization is maximized; progress and quality are continuously assessed. To obtain these advantages, the Project Manager must overcome many challenges: projects are started with incomplete and changeable requirements; documentation and artifacts evolve throughout the lifecycle; finalized sign-off of one stage does not occur before the next stage begins. This course presents proven techniques and concepts, balanced with real-world labs and exercises, for planning and managing an iterative project. Project Managers will learn the key skills required to successfully plan and manage iterative projects. Techniques discussed have been developed and successfully applied on actual software projects.

NOTE: If you are a Project Management Professional (PMP)[®] certified by the Project Management Institute (PMI), you can earn Professional Development Units (PDUs) by attending this IconATG course.

Objectives:

- < Understand the concepts of the Unified Process and iterative development that impact software project management
- < Gain practical experience in planning and tracking, resource management, risk management, and scope management for iterative development using the Unified Process

Topics covered:

- < Iterative project planning: phase planning, iteration planning and resource management
- < Ongoing project management: scope management, and progress and quality assessment
- < Communicating progress in an iterative project: setting expectations of customers and stakeholders, and demonstrating that objectives are being met
- < Estimating iterative projects

Audience:

This course is intended for professionals currently involved in, or soon to be responsible for, managing or coordinating iterative development projects.



www.iconATG.com

+1 866 ICON US1
+1 636 530 7776
info@iconATG.com

Prerequisites:

Introduction to Rational Unified and/or general Project Management experience.

Duration:

2 days

Outline:

1. Project Initiation
 - Project lifecycle and the benefits of partitioning into phases
 - Key activities of project initiation for the project manager and those that support project management – develop vision, identify stakeholders, specify scope, identify risk, develop business case, and develop Software Development Plan (SDP)
 - Essential artifacts: software development plan, vision, business case, risk list
 - Steps taken to develop these essential artifacts
 - Risk, its causes, assessment and mitigation
2. Project estimation
 - Difficulties and pitfalls in estimation
 - Good estimation guidelines
 - Estimation technique: COCOMO
 - Estimation technique: Use case complexity
 - Lab: Estimating a project
3. Phase planning
 - Focus and milestone objectives of the four phase
 - Different phase strategies and the “Rubber Profile”
4. Iteration planning
 - Estimating (how many and what type of) iterations for each phase to meet milestone objectives
 - Adjusting scope to fit funding, schedule and resources
 - Tasks and schedule of a project plan given the focus and milestones of each phase
 - Lab: Developing a project plan and schedule
5. Disciplines, skills and resources
 - Development strategies for iterative projects
 - Prioritizations of use cases to mitigate risk, address architecture, address difficulty, and validate components
 - Building an iteration plan – considerations for scope and size
 - Contents of the plan based on phase
 - Planning time for each activity
 - Assigning responsibilities
 - Fitting the iteration plan into the project plan
 - Content of tasks over the project lifecycle
 - Lab: Developing an iteration plan and schedule
5. Disciplines, skills and resources
 - Skills necessary for each discipline
 - Types of resources needed
 - Roles and responsibilities for each discipline



www.iconATG.com

+1 866 ICON US1
+1 636 530 7776
info@iconATG.com

- Evolution of the artifacts through each phase
6. Scope management and change control
 - Scope creep and the necessity for change management
 - Benefits of configuration management
 - Change control board, change control implementation, and the change evaluation process
 - Lab: Evaluating change requests
 7. Monitoring progress, quality assurance, assessments reviews and metrics
 - Quality assurance and its task over the phases
 - Project assessment, available tools, tests
 - Reviews, their types, and their uses on projects
 - Project health indicators, and monitoring strategies for project management
 - Measuring work complete, not just use time elapsed.
 - Lab: Updating a plan
 8. Communication in an iterative project
 - Setting expectations for partially completed artifacts
 - Communicating with the team – assignments, responsibilities, etc.
 - Elevating problems and gaining resolution
 - Health indicators in status reports (red, yellow, green) and what they mean
 9. Best practices for project management
 - Value of best practices
 - Airlie Council's nine best software management practices
 - Rational's six best practices