# ProTech Professional Technical Services, Inc.



## **Rational Unified Process Overview**

## **Course Summary**

## **Description**

The Rational Unified Process (RUP) is a process product that is an implementation of Ivar Jacobson's Unified Software Development Process template and was sold as part of the IBM Rational Suite. IBM has replaced RUP with the newer Collaborative Lifecycle Management (CLM) process product and no longer officially supports the use of RUP.

This course is a overview of RUP for those who need to understand the RUP process structure, terminology, concepts and artifacts in order to support or maintain a legacy RUP based project or migrate a legacy RUP project into another process model such as an Agile process or CLM. This course is not intended to teach students how to use RUP in a new development project.

### **Objectives**

After taking this course, students will be able to:

- Describe the RUP process and why it was adopted as a software development process.
- Compare and contrast RUP to waterfall and Agile types of development processes.
- Explain the purpose and activities of each RUP discipline.
- Explain what each UML diagram describes and how the diagrams work together..
- Explain where each of the UML diagrams is used in RUP and why.
- Describe how the 4+1 architecture works and how it relates to the RUP activities.

- Describe the project phases and the state of the workflow deliverables in each phase.
- Read and understand Use Cases.
- Explain the automation of RUP using the Rational Suite.
- Plan a support activity for a RUP project.
- Plan a migration for a RUP project to Agile or CLM.
- Do a critical analysis of the strengths and weaknesses of RUP.
- Identity RUP best practices and common errors.

#### **Topics**

- RUP and the structure of Iterative process types.
- The impact of RUP on software development – why it was used and is no longer used.
- Comparing RUP, Agile and traditional waterfall processes.
- Iterative and incremental, use case driven and architecture-centric.
- RUP disciplines (workflows) and project phases and how they interact.
- Roles, activities and artifacts.
- RUP discipline deliverables by project phase.

- UML as part of RUP what each UML diagram describes.
- How to read the UML diagrams.
- Working with Use Cases.
- RUP milestones and QA concepts.
- RUP specifications and the 4+1 architecture.
- Best practices for RUP and UML.
- Automation of RUP with the Rational Suite.
- Retiring or migrating a RUP project and its artifacts.

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# **Rational Unified Process Overview**

## **Course Summary (cont.)**

## **Audience**

This course is for developers, QA staff, business analysts and anyone else who needs a basic understanding of RUP in order to work with legacy RUP applications and projects.

### **Prerequisites**

This course has no prerequisites; however, a basic knowledge of software development concepts and terminology is recommended. Experience working in a software development environment is very helpful

### **Duration**

One Day