

# Integrating People, Process and Technology

## *From Business Needs to Requirements to Tests*

Many organizations are challenged by developing effective software efficiently. An effective, efficient software development process ensures that business needs are met “better, faster, and therefore cheaper.” Another major focus is testing, including answering the questions “does it work” and “does it do what it is supposed to do.” We can help you narrow the gaps between what is needed and what is delivered.

### **Duration**

Half day or full day

### **Class Limit**

20 students

### **Labs**

Approximately 50% of class

### **Materials Provided**

Student manual containing the course slides and class exercises

This half- or full-day course focuses on the following mission statement:

### **The Mission: Success**

To **promise and deliver** to the business,  
on time and within budget,  
innovative software  
that meets end user needs and expectations,  
requiring minimal rework and maintenance.

### **Objectives**

- Discuss ways to enable organizations to synergistically work together to deliver better software faster with fewer bugs
- Discuss how to increase the effectiveness and efficiency of software development by integrating people, processes and technology
- Discuss how to increase the effectiveness of the requirements elicitation and requirements management processes
- Discuss how to effectively capture the needs and expectations of the business end users proactively instead of reactively
- Discuss how tools can document, sequence, validate, and leverage requirements more efficiently
- Practice instructor-led exercises on requirements elicitation techniques
- Demonstrate technologies that implement the integration of people and processes with technology

### **Prerequisite**

None

### **Intended Audience**

All stakeholders involved with achieving the mission of promising and delivering to the business, on time and within budget, innovative software that meets end user needs and expectations, requiring minimal rework and maintenance.

Stakeholders include: business analysts, business representatives, program/project managers, quality analysts, marketers, software tester, software developers, executive management, and sponsors.



## Duration

### **Option 1: Half Day with tool demonstration**

- Training session with demonstration of tools supporting training concepts

### **Option 2: Half Day with exercises**

- Training session with instructor-led exercises supporting training concepts

### **Option 3: Full Day with exercises and tool demonstration.**

## Course Topics

### ***Integrating people, process, and technology***

- The Mission: Success
- Industry Report Card
- Challenges of software development
- Causes of project challenges
- Reasons for rework
- What is needed for project success:
  - A blueprint
  - To integrate people, process and technology
  - Software requirements roadmap
  - Repeatable software requirements process

### ***Business Requirements and Prioritization***

- Vision and scope
- Prioritization of customer needs:
  - Customer feature preferences
  - Value, cost and risk assessment
- Balancing cost, features and schedule
- Conduct feasibility assessment
- Conduct trade-off analysis

### ***The path to excellent requirements***

- Use case: The great communicator
- Derive software requirements from use case
- From needs and preference to code and tests

### ***Collaborative technology enables efficiency***

- Technology is available
- Use case diagram and workflow
- Basic flow with extensions
- When to start test planning activities
- The testing "V"
- Test generation from use case
- Collaborative simulation

### ***Conclusion: Evolving to "better, faster and therefore cheaper" software development***

- Mature organization characteristics
- Remember the mission

## About Orasi

*Orasi provides comprehensive consulting and training services to support proven processes and best-of-class technologies. At Orasi, our experienced trainers and consultants enable customers to realize the benefits of effective processes supported by trained personnel and the right technology. We help organizations build higher quality products, from needs assessment and strategic consulting to technical implementation.*

*Whether you want to improve current processes and workflows or bring employees up to speed on proven practices and technology, Orasi helps you manage your people, processes and technologies to ensure success. With Orasi, you'll gain a competitive advantage and realize a return on your technology investments throughout the development cycle.*

