



# **Practical DevOps and Agile IT Management Training Course**

**Ref: #IT6060**



## **Course Introduction / Overview:**

In the fast-paced world of technology, organizations need to be able to deliver software and services quickly and reliably. This Practical DevOps and Agile IT Management Training Course is designed to equip professionals with the methodologies and mindset to do just that. The program goes beyond simply explaining what DevOps and Agile are, it shows how to integrate these practices to create a more efficient and collaborative IT environment. We will cover key concepts like continuous integration, continuous delivery (CI/CD), infrastructure as code, and automated testing. Participants will learn how to break down silos between development and operations teams, improve communication, and accelerate the delivery of value to the customer. This course draws on foundational principles and real-world applications outlined in books like "The Phoenix Project: A Novel about IT, DevOps, and Helping Your Business Win" by Gene Kim, Kevin Behr, and George Spafford. BIG BEN Training Center believes that mastering these principles is essential for any organization aiming to stay competitive and responsive to market demands.

## **Target Audience / This training course is suitable for:**

- IT Managers and Team Leaders.
- DevOps Engineers and Practitioners.
- Software Developers.
- System and Network Administrators.
- IT Architects.
- Project and Product Managers.

## **Target Sectors and Industries:**



- Technology and software.
- Financial services.
- E-commerce and retail.
- Telecommunications.
- Government agencies and public sector.
- Consulting firms.

### **Target Organizations Departments:**

- Information Technology.
- Software Development.
- Operations.
- Quality Assurance.
- Project Management.
- Site Reliability Engineering.

### **Course Offerings:**

By the end of this course, the participants will have able to:

- Implement a DevOps culture within their teams.
- Apply agile principles to IT operations.
- Automate key processes using continuous integration and delivery (CI/CD).
- Break down silos between development and operations teams.
- Use tools and metrics to improve workflow and performance.
- Manage and monitor a resilient and scalable IT infrastructure.
- Lead a digital transformation initiative with agile methods.

### **Course Methodology:**



The training methodology for this course at BIG BEN Training Center is a practical, hands-on approach to learning. We use a combination of interactive workshops, real-world case studies, and practical exercises to reinforce key concepts. Participants will work in teams to simulate DevOps projects, from initial planning to automated deployment. The course includes interactive sessions on using a variety of tools, and feedback loops are built into every unit to ensure a deep understanding of the material. This approach is designed to be highly engaging and practical, preparing attendees to apply the principles of DevOps and Agile immediately in their work. Our goal is to empower IT professionals to become more collaborative, efficient, and effective in their roles.

## **Course Agenda (Course Units):**

### **Unit One: Foundations of DevOps and Agile.**

- Defining DevOps and Agile methodologies.
- The cultural shift required for success.
- The five principles of DevOps.
- Understanding the continuous delivery pipeline.
- Breaking down silos between teams.
- The role of automation in the DevOps lifecycle.
- Value stream mapping.

### **Unit Two: Continuous Integration and Delivery (CI/CD).**



- Setting up a CI/CD pipeline.
- Automated build and testing.
- Managing code version control.
- Using containerization (Docker, Kubernetes).
- Deployment automation.
- Continuous testing strategies.
- Monitoring and feedback loops.

### **Unit Three: Infrastructure as Code (IaC) and Cloud.**

- Principles of Infrastructure as Code.
- Managing cloud resources with code.
- Configuration management and automation.
- Using tools for IaC (Terraform, Ansible).
- Leveraging public and hybrid cloud platforms.
- Securing infrastructure.
- Scalability and reliability.

### **Unit Four: IT Operations and Site Reliability.**

- The principles of Site Reliability Engineering (SRE).
- Monitoring and logging for performance.
- Incident response and management.
- High availability and disaster recovery.
- Automated system health checks.
- Capacity planning.
- Blameless postmortems.

### **Unit Five: Leading Transformation.**



- The role of leadership in a DevOps environment.
- Managing change and overcoming resistance.
- Building cross-functional teams.
- Communicating value to stakeholders.
- Metrics for a successful DevOps transformation.
- Scaling agile practices.
- Fostering a culture of continuous improvement.

## **FAQ:**

### **Qualifications required for registering to this course?**

There are no requirements.

### **How long is each daily session, and what is the total number of training hours for the course?**

This training course spans five days, with daily sessions ranging between 4 to 5 hours, including breaks and interactive activities, bringing the total duration to 20 - 25 training hours.

### **Something to think about:**

How can IT leaders effectively balance the speed and agility of DevOps with the critical need for security, compliance, and stability in a highly regulated industry?

### **What unique qualities does this course offer compared to other courses?**



This training course is a comprehensive and practical guide to implementing DevOps and Agile principles, moving beyond theoretical concepts to focus on real-world applications. While many courses focus on a single tool or framework, this one provides a holistic view of the entire DevOps lifecycle. We emphasize the cultural and organizational changes required for success, not just technical skills. The curriculum is designed to help professionals at all levels understand their role in a collaborative, fast-paced IT environment. The course includes hands-on exercises and case studies that allow participants to build and manage a complete CI/CD pipeline, giving them a tangible set of skills, they can apply immediately. BIG BEN Training Center's approach is to empower attendees to become strategic leaders who can drive innovation and efficiency within their organizations.