DevOps for Project Managers Training Course

Professional Development Training Course Outline

Category	Project Management	**Duration**	10 Days
Base Fee	$3,000 USD	**Delivery Mode**	Online / On-site Hybrid

Course Introduction

DevOps for Project Managers Training Course equips professionals with comprehensive knowledge and practical skills to lead and manage software development projects in DevOps environments. The course emphasizes continuous integration, continuous delivery (CI/CD), automation, and collaboration between development and operations teams. Participants will gain insights into modern DevOps practices, project management strategies, and tools that streamline workflows, enhance productivity, reduce deployment risks, and improve software quality. By understanding the intersection of Agile methodologies and DevOps culture, project managers can drive successful project delivery and operational excellence in technology-driven organizations.

This course also focuses on risk mitigation, performance monitoring, and scaling DevOps practices across enterprise environments. Participants will explore practical frameworks for pipeline management, version control, infrastructure as code (IaC), automated testing, and cloud integration. Through case studies, hands-on exercises, and scenario-based learning, project managers will learn to foster collaboration, measure project success, optimize resource allocation, and lead high-performing DevOps teams while ensuring alignment with business goals, client expectations, and regulatory requirements.

Programme Curriculum

DevOps for Project Managers Training Course

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Course Objectives

1. Understand the fundamentals and principles of DevOps culture and practices.
2. Apply Agile project management techniques within DevOps environments.
3. Implement continuous integration and continuous delivery (CI/CD) pipelines.
4. Utilize automation tools for build, testing, deployment, and monitoring.
5. Manage configuration and version control systems effectively.
6. Apply infrastructure as code (IaC) principles for scalable environments.
7. Monitor performance metrics and ensure operational reliability.
8. Reduce project risks through effective DevOps risk management strategies.
9. Foster cross-functional collaboration between development, operations, and QA teams.
10. Align DevOps initiatives with business objectives and KPIs.
11. Implement DevSecOps practices for security integration in projects.
12. Measure and report DevOps project success using appropriate metrics.
13. Develop strategies to scale DevOps processes across teams and organizations.

Organizational Benefits

- Improved software delivery speed and efficiency
- Enhanced collaboration between development and operations teams
- Reduced deployment and operational risks
- Higher software quality and fewer production issues
- Better alignment of IT projects with business objectives
- Increased automation and reduced manual errors
- Stronger monitoring and performance management
- Optimized resource allocation and cost efficiency
- Accelerated innovation and competitive advantage
- Improved project predictability and client satisfaction

Target Audiences

- Project managers overseeing IT and software development projects
- IT operations managers and team leads
- Agile coaches and Scrum masters
- DevOps engineers transitioning to managerial roles

- Quality assurance and release managers
- Technical program managers
- IT consultants and advisors
- Software delivery managers

Course Duration: 10 days

Course Modules

Module 1: Introduction to DevOps for Project Managers

- DevOps principles and culture for project leadership
- Key differences between traditional and DevOps project management
- Understanding the DevOps lifecycle and value stream
- Roles and responsibilities of project managers in DevOps teams
- Benefits of adopting DevOps in software delivery
- Case Study: Successful DevOps adoption in a global IT project

Module 2: Agile Project Management in DevOps

- Applying Scrum and Kanban in DevOps environments
- Planning and prioritizing tasks with Agile boards
- Estimation, backlog grooming, and sprint planning
- Agile ceremonies and project tracking
- Managing stakeholder expectations in Agile DevOps projects
- Case Study: Agile implementation to improve DevOps delivery timelines

Module 3: Continuous Integration & Continuous Delivery (CI/CD)

- Principles of CI/CD pipelines
- Automating build, test, and deployment processes
- Integrating CI/CD tools into project workflows
- Managing dependencies and build artifacts
- Monitoring and optimizing pipeline performance
- Case Study: Building an automated CI/CD pipeline in a software project

Module 4: Version Control and Configuration Management

- Introduction to Git and version control best practices
- Branching strategies and release management
- Collaboration and code review workflows
- Configuration management for environments
- Maintaining project documentation and audit trails

- Case Study: Implementing GitFlow for complex DevOps projects

Module 5: Infrastructure as Code (IaC)

- Principles of IaC and automation of infrastructure deployment
- Tools and frameworks for IaC (Terraform, Ansible, Puppet)
- Managing infrastructure versions and rollbacks
- Integrating IaC into DevOps pipelines
- Testing and validation of automated infrastructure
- Case Study: Using Terraform for scalable cloud infrastructure

Module 6: Automated Testing & Quality Assurance

- Types of automated testing (unit, integration, functional)
- Tools for automated test execution
- Integrating testing into CI/CD pipelines
- Monitoring test coverage and reporting results
- Ensuring reliability and repeatability of automated tests
- Case Study: Reducing defects through automated testing pipelines

Module 7: Monitoring, Logging, and Performance Metrics

- Key metrics for DevOps project performance
- Setting up monitoring dashboards and alerts
- Log management and analysis for issue detection
- Performance optimization through real-time insights
- Continuous improvement based on monitoring feedback
- Case Study: Implementing monitoring to prevent production downtime

Module 8: Risk Management in DevOps Projects

- Identifying risks in DevOps software delivery
- Risk assessment frameworks and mitigation strategies
- Contingency planning and rollback procedures
- Measuring risk impact on project success
- Managing security, compliance, and operational risks
- Case Study: Mitigating deployment risks in a financial software project

Module 9: Collaboration and Communication in DevOps Teams

- Tools for team communication and collaboration

- Breaking silos between development, operations, and QA
- Managing distributed DevOps teams
- Conflict resolution and leadership strategies
- Promoting a culture of shared responsibility
- Case Study: Transforming team collaboration in a global DevOps project

Module 10: DevSecOps – Security in DevOps Projects

- Integrating security practices in DevOps workflows
- Threat modeling and vulnerability management
- Security automation and compliance checks
- Securing pipelines, code, and infrastructure
- Monitoring and auditing security incidents
- Case Study: Implementing DevSecOps in a regulated environment

Module 11: Cloud and Containerization in DevOps

- Overview of cloud platforms and services
- Containerization using Docker and Kubernetes
- Managing cloud deployments and scalability
- Integrating cloud tools into DevOps pipelines
- Performance optimization for containerized environments
- Case Study: Deploying a multi-container application in the cloud

Module 12: Metrics, Reporting, and KPI Tracking

- Key DevOps KPIs for project managers
- Metrics for cycle time, lead time, deployment frequency
- Dashboard creation for stakeholders
- Continuous reporting and performance reviews
- Data-driven decision-making for project optimization
- Case Study: Using metrics to drive improvements in DevOps delivery

Module 13: Scaling DevOps Practices Across Teams

- Standardizing DevOps processes for multiple projects
- Tools and frameworks for scaling CI/CD pipelines
- Governance and consistency in cross-team collaboration
- Scaling automation and infrastructure management
- Knowledge sharing and community practices
- Case Study: Scaling DevOps culture across an enterprise

Module 14: Change Management in DevOps Transformations

- Managing organizational change for DevOps adoption
- Engaging stakeholders and promoting buy-in
- Overcoming resistance and cultural barriers
- Continuous training and knowledge transfer
- Measuring impact of change management initiatives
- Case Study: Successful DevOps transformation in a large IT organization

Module 15: Capstone Project and Practical Implementation

- Hands-on application of DevOps project management principles
- Designing CI/CD pipelines and automation workflows
- Implementing monitoring, metrics, and risk controls
- Collaboration and leadership exercises
- Presenting solutions and feedback for real-world scenarios
- Case Study: End-to-end DevOps project implementation by participants

Training Methodology

- Instructor-led presentations with DevOps frameworks and principles
- Hands-on exercises and pipeline configuration simulations
- Case study discussions and real-world project analysis
- Group workshops on risk management and team collaboration
- Practical exercises using CI/CD, version control, and automation tools
- Continuous feedback, Q&A sessions, and interactive learning activities

Register as a group from 3 participants for a Discount

Send us an email: info@fineskilltrainingcenter.org or call *+254769199797*

Certification

Upon successful completion of this training, participants will be issued with a globally- recognized certificate.

Tailor-Made Course

We also offer tailor-made courses based on your needs.

Key Notes

a. The participant must be conversant with English.

b. Upon completion of training the participant will be issued with an Authorized Training Certificate

c. Course duration is flexible and the contents can be modified to fit any number of days.

d. The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.

e. One-year post-training support Consultation and Coaching provided after the course.
f. Payment should be done at least a week before commence of the training, to Fineskill Training Center account, as indicated in the invoice so as to enable us prepare better for you.

Upcoming Scheduled Sessions

Start Date	End Date	Location	Price
23 Nov 2026	04 Dec 2026	Online	$2,000
23 Nov 2026	04 Dec 2026	Physical	$3,000
23 Nov 2026	04 Dec 2026	Physical	$6,000
23 Nov 2026	04 Dec 2026	Physical	$6,000
23 Nov 2026	04 Dec 2026	Physical	$12,000
23 Nov 2026	04 Dec 2026	Physical	$9,000
23 Nov 2026	04 Dec 2026	Physical	$12,000
23 Nov 2026	04 Dec 2026	Physical	$12,000

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