Importance of DevOps

DevOps is an emerging cultural and professional movement that advocates improved communication, collaboration and integration between development and IT operations in an organization. This results in seamless workflow and provides businesses the flexibility to change quickly. DevOps has flourished over the last 4 to 5 years, and enterprises are keen to add this methodology to their enterprise culture to gain a better understanding of development and operations together to optimize their IT services and significantly improve their ROI.

Get Invensis Learning Advantage

- EXIN accredited DevOps Master certification exam training
- Expert trainer, interactive sessions with case studies
- DevOps Master mock sample tests
- Classes across 108+ locations worldwide
- Exam fee included in the training course
- 24 PDUs certificate provided
- Instructor-led training that is always on schedule
- Global approval and accreditation
Key Benefits of DevOps for Businesses

- Delivers better software at a faster pace to enable sustained innovation
- Creates broader enterprise security strategies
- Control of business-critical data through multiple layers of data security
- Enhanced application quality and time-to-market
- Increases agility and stability of business-critical processes

About EXIN DevOps Master Training Course

EXIN DevOps Master is an advanced-level course is ideal for individuals and organizations who are looking a comprehensive understanding of DevOps principles, knowledge, and practical skills. As a DevOps Master professional you will be able to showcase your understanding of DevOps adoption in an organization; planning and design; development and deployment; operation and scaling; and end-of-life. With this credential, you clearly demonstrate that you are ready to take your career to the next-level in the field of software development and Agile Project Management.
Target Audience for DevOps Master Certification

Job roles that can benefit from DevOps Master Certification include, but are not limited to:

- Application Developers
- Service Developers
- Product Owners
- Agile Scrum Masters
- Project Managers
- Test Managers
- IT Service Managers
- Process Managers
- Lean IT Practitioners

About Invensis Learning

Invensis Learning is a leading certification training provider for individuals and enterprises globally. Our expertise in providing globally-recognized IT & Technical certification courses has enabled us to be one of the trusted certification training partners for many Fortune 500 organizations and Government institutions worldwide. Invensis Learning has trained and certified thousands of professionals across a wide range of categories such as IT Service Management, Project Management, Quality Management, IT Security and Governance, Cloud Computing, DevOps, Agile Project Management, and Digital Courses. Invensis Learning's certification training programs adhere to global standards such as PMI, TUV SUD, AXELOS, ISACA, DevOps Institute, EXIN, and PEOPLECERT.
DevOps Master Course Overview

DevOps Adoption

- DevOps Mindset and Benefits
  - Analyze DevOps anti-patterns in a scenario
  - Explain the benefits of DevOps
  - Explain why DevOps fits the current software development process so well
  - Explain why DevOps needs a specific mindset to work
  - Explain how DevOps fits with Lean and Agile Scrum practices

- Organizational Culture
  - Explain why the 4 Pillars of Effective DevOps (Collaboration, Affinity, Tools, and Scaling) are so important
  - Analyze a scenario for missing parts of the DevOps mindset
  - Explain how to create a team from a group of people, through fostering collaboration, a DevOps mindset, and empathy and trust
  - Analyze a situation where there is a misconception regarding collaboration and identify the correct troubleshooting method
  - Analyze a situation where there is a need for conflict management and identify the best solution
  - Explain how human resource management can foster diversity and which benefits this brings to the organization

- DevOps Principles and Concepts
  - Explain the use and usefulness of different software development methodologies (Waterfall, Agile, Scrum, etc.) and their basic principles
  - Explain the use and usefulness of different operations methodologies (IT Service Management)
  - Explain the use and usefulness of the Lean systems methodology
Planning, Requirements, and Design

• Application or Service Lifecycle Management
  • Explain how DevOps adds value to modern Application Lifecycle Management
  • Explain why DevOps improves customer experience when used for Service Lifecycle Management

• Project Charter and Visual Control
  • Explain how a DevOps project’s scope should be determined
  • Explain why Visual Control over a DevOps project facilitates DevOps practices

• Infrastructure and Architecture Design
  • Explain how DevOps changes or influences the design of IT infrastructure and architecture
  • Explain why Cloud computing and virtualization techniques make integrating Dev and Ops easier

• Service Level Requirements and Agreements
  • Explain how DevOps changes Service Level Requirements and Agreements

• Implementing a Testing Strategy
  • Explain why and how the Testing Strategy needs to be changed when transitioning to DevOps
  • Analyze User Stories for completeness

Development and Deployment

• Continuous Delivery and Continuous Integration
  • Explain why Continuous Delivery is essential for Effective DevOps
  • Analyze how to integrate Continuous Delivery in a scenario
  • Analyze how to solve problems with Continuous Delivery in a scenario
  • Explain why Continuous Integration is essential for Effective DevOps
  • Analyze how to achieve Continuous Integration in a scenario with a distributed team or a distributed version control system
- Analyze how to solve problems with Continuous Integration in a scenario
- **Deployment Pipeline**
  - Explain the logic of the anatomy of a DevOps deployment pipeline
  - Explain how to use build and deployment scripting
- **Continuous Deployment**
  - Explain why the iteration plan and the release plan should be changed for effective DevOps
  - Analyze how to implement Continuous Deployment in a scenario
- **Ji-Kotei-Kanketsu, Rhythm, Work-in-Progress, and One-piece-flow**
  - Explain the concepts Ji-Kotei-Kanketsu, Rhythm, Work-in-Progress, and One-piece-flow
  - Analyze a scenario for a problem with Ji-Kotei-Kanketsu, Rhythm, Work-in-Progress or One-piece-flow and find a suitable solution
- **Automation, Tools, and Testing**
  - Explain why automation is important for effective DevOps
  - Explain how to use tools to facilitate DevOps in general
  - Explain how to use tools to support DevOps mindset and culture
  - Explain why it is important that DevOps testing is automated
  - Analyze a scenario and choose the correct way of automating an acceptance test

**Operation and Scaling**

- **Managing Data; Infrastructure and Environments; and Components and Dependencies**
  - Explain which problems can be encountered when managing data in databases within DevOps
  - Analyze a scenario where a database is used in DevOps and provide the best solution to a problem
  - Analyze a scenario and identify the best way to prepare an infrastructure environment for deployment or manage it after deployment
• Analyze a scenario and suggest a commonly used strategy to manage components
• Explain how to manage dependencies
• Configuration Management and Version control
  • Explain why version control is a key to effective DevOps
  • Explain how to keep version control over data, infrastructure, and components
  • Analyze a scenario and suggest the best strategy to manage a configuration problem
• Cloud and Immutable Infrastructure
  • Explain when it is and when it is not necessary to move to Cloud-based infrastructure for effective DevOps
  • Explain how Cloud-based infrastructure should be managed within DevOps
• Business Continuity
  • Explain how DevOps can facilitate Business Continuity practices
• Scaling
  • Analyze a scenario, explain if and why it is important to scale up or down in that situation and identify the best way to do that
  • Analyze a scenario for what went wrong with scaling, and identify a good way to solve the problem
  • Explain how social policy and hiring practices support scaling DevOps

End-of-Life
• Conditions for End-of-Life of a product or service
  • Explain which conditions should be met before terminating service or product