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AIOps Foundation℠

VERSION 1

Global Best Practice

For organizations and professionals aiming
to modernize IT operations with AIOps!

Course Description

PeopleCert

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AIOps Foundation℠ course description

Overview

This AIOps Foundation℠ course covers the origins of AIOps, including the history behind the term, patterns that preceded it, and the technological context in which it has evolved. Learners will gain an understanding of the processes of combining Big Data analytics, Machine Learning algorithms, Generative AI, automation, and optimization into a single platform.

This course introduces key principles and foundational concepts, along with the core technologies of AIOps: Big Data and Machine Learning. The course provides learners with an understanding of how and why digital transformation, together with the evolution of Machine Learning and Generative AI, have brought about the rise of AIOps as an indispensable tool in today's IT Operational landscape.

Core technologies of Big Data, Machine Learning and Generative AI are discussed, as well as the basic concepts of artificial intelligence, different types of Machine Learning models that can be implemented, the relationship between AIOps and MLOps, as well as DevOps and Site Reliability.

This foundation course provides the learner with a solid understanding of the benefits of implementing AIOps in the organization, including common challenges and key steps in ensuring valuable and successful integration of artificial intelligence in the day-to-day operations of information technology solutions.

Practical, real-world exercises are used to apply the concepts covered in the course and sample documents, templates, tools, and techniques will be provided to use after the class.

This course positions learners to successfully complete the AIOps Foundation℠ certification exam.

Course objectives

The **learning objectives** for the AIOps Foundation℠ course include a practical **understanding** of:

- the basic concepts, industry contexts, and key principles of AIOps
- the concepts and principles of core technologies required for AIOps implementation
- the changes in organizational mindset and required skill sets for deploying AIOps
- how to evaluate the performance of an AIOps implementation using industry standard metrics
- the challenges and opportunities that arise when looking to deploy AIOps in the organization
- key considerations and strategies required to succeed in promoting and delivering AIOps in your organization.

Audience

The target audience for the AIOps Foundation[SM] course are professionals including:

- anyone focused on IT Operations
- anyone interested in software in today's IT landscape
- AIOps architects and engineers
- business managers, stakeholders
- cloud engineers
- data engineers and scientists
- DevOps engineers and practitioners
- IT directors
- IT managers
- IT security analysts
- IT team leaders
- product owners
- Scrum masters
- software engineers
- Site Reliability Engineers
- system integrators
- AIOps platform and tool providers.

Official Training Materials (OTM) | Learner

- Learner Workbook (excellent post-class reference)
- Quick Reference Guide (QRG)
- Sample documents, templates, tools and techniques
- Access to additional value-added resources and communities
- Glossary of terms

Prerequisites

Familiarity with IT terminology and IT-related work experience are recommended.

Certification exam

Successfully passing (65%) the 60-minute examination, consisting of 40 multiple-choice questions, leads to the AIOps Foundation[SM] certificate. The certification is governed and maintained by PeopleCert.

Course outline

- **Introduction**
- **Module 1: AIOps Foundation**
  - History and predecessors
  - Core technologies and basic concepts
  - AIOps capability chain
- **Module 2: AIOps in the organization**
  - Drivers and influences
  - AIOps and DevOps
  - AIOps and Site Reliability Engineering
  - AIOps and security
- **Module 3: Core technologies: Data**
  - What is Big Data?
  - Five Vs of Big Data
  - AIOps data sources and types
  - From source to AIOps
- **Module 4: Core Technologies: Machine Learning (ML) and Generative AI (GenAI)**
  - AI, ML, and GenAI
  - How ML models learn
  - Supervised versus unsupervised
  - Analytics versus AI
  - AIOps and the future of AI
- **Module 5: AIOPs and operations metrics**
  - Metrics and operations
  - Key metrics to track across systems
  - Agreements, objectives, and indicators
- **Module 6: AIOps use cases and organizational mindset**
  - Shifting from reactive to proactive
  - Deterministic to probabilistic
  - Deep dive into use cases
- **Module 7: Evaluating AIOps' impact**
  - AIOps and operations metrics
  - AIOps, DevOps, and SRE
  - Improving AI accuracy
  - AIOps system visibility
- **Module 8: Implementing AIOps in the organization**
  - Avoiding common challenges
  - Ethics and ML
  - Path to implementation

Notes

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