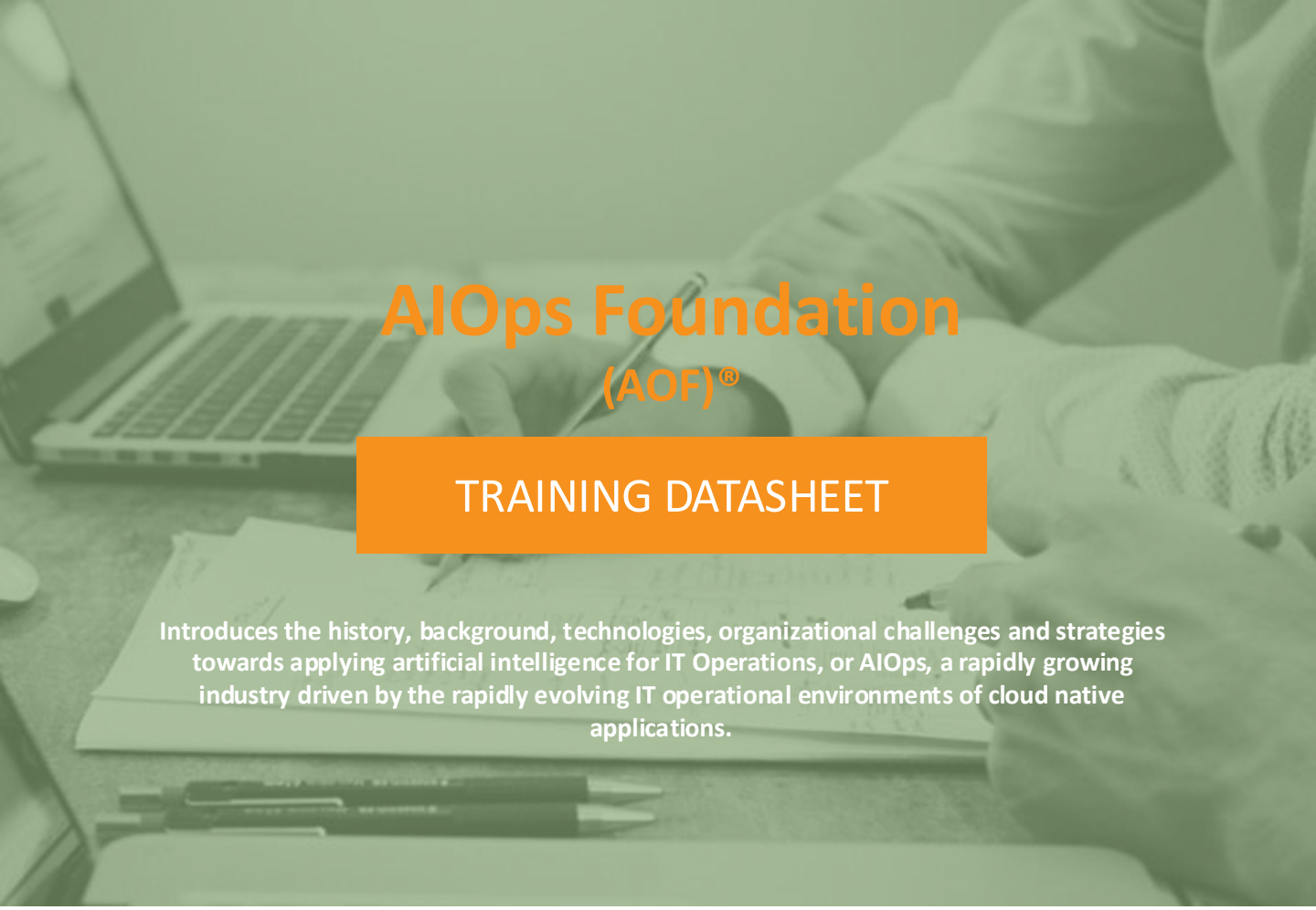

AIOps Foundation

(AOF)®

TRAINING DATASHEET

Introduces the history, background, technologies, organizational challenges and strategies towards applying artificial intelligence for IT Operations, or AIOps, a rapidly growing industry driven by the rapidly evolving IT operational environments of cloud native applications.

COURSE SYPNOSIS

The course covers the origins of AIOps including the history behind the term, patterns that preceded it and the technology context in which it has evolved. Learners will gain an understanding of the processes of combining big data analytics, machine learning algorithms, automation, and optimization into a single platform.

Key principles and foundational concepts will provide students with an understanding of how and why digital transformation, together with the evolution of machine learning, have brought about the rise of AIOps. Core technologies of machine learning and big data will be discussed, as well as the basic concepts of artificial intelligence, different types of machine learning models that can be implemented, and the relationship between AIOps and MLOps, DevOps and Site Reliability.

This course provide learners with an 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.

Unique and exciting exercises will be 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.

DEVOPS INSTITUTE
ACCREDITED TRAINING ORGANISATION
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COURSE DURATION

3 Days Instructor-Led Classroom Training

COURSE OBJECTIVES

On completion of this course, the following learning outcomes will be achieved:

- Understand the history, origins, current developments, basic concepts and key principles within AIOps
- Understand AIOps-related concepts of big data and artificial intelligence and relationship with MLOps
- Understand effectiveness of AIOps deployment and possible benefits
- Understand mindset changes, collaboration and skills for AIOps to be applied in the organization
- Quantifying implementation outcomes
- Understand typical challenges and opportunities in applying AIOps
- Visualize the potential challenges, trends and ethical considerations organizations face in an AIOps initiative

WHO SHOULD ATTEND

The target audience for this course are professionals, such as:

- 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

OUTLINE

- AIOps Foundation
  - History and Predecessors
  - Meaning of AIOps
  - Differences between AIOps and IT Operations Analytics
  - Core Technologies and Basic Concepts
  - Stages of an AIOps System
  - Overlapping Practices
- AIOps in the Organization
  - Drivers and Influences
  - AIOps and DevOps
  - AIOps and Site Reliability
  - AIOps and Security
  - Data, Telemetry and Systems Complexity
  - A New Paradigm to Understand System State
- Core Technologies: Data
  - What is Big Data?
  - The Five V's of Big Data
  - Characteristics of Big Data
  - AIOps Data Sources and Types
  - Diverse Data
- Core Technologies: Machine Learning (ML)
  - AI and Machine Learning
  - Supervised vs Unsupervised
  - Machine Learning vs Analytics
  - Machine Learning and Training Models
  - AIOps and the Future of AI
  - AIOps vs. Analytics Similarities and Differences
- AIOPs and Operations Metrics
  - Metrics and Operations
  - Key Metrics to Track Across Systems
  - Agreements, Objectives and Indicators
  - Incident Related Metrics
  - Quantifying Incidents (MTTD, MTBF, MTTA, MTTR)
  - Service Level Agreements

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- AIOps Use Cases and Organizational Mindset
  - Shifting from Reactive to Proactive
  - Characteristics of a Reactive Approach to Operations
  - Deterministic to Probabilistic
  - Deep Dive Into Use Cases
  - AIOps and Shifts in the Organization
  - Understanding the Past and Predicting the Future
- Evaluating AIOps Impact
  - AIOps and Operations Metrics
  - AIOps, DevOps and SRE
  - Improving AI Accuracy
  - AIOps System Visibility
  - Tracking Impact of AIOps
  - Impact to Incident Related Metrics
  - AIOps and DORA Metrics
- Implementing AIOps in the Organization
  - Avoiding Common Challenges
  - Ethics and Machine Learning
  - Paths to Implementation
  - Data Quality and Processes
  - Culture and Organizational Practices
  - Data and Regulation
  - Machine Learning Bias
  - Privacy and User Data

CERTIFICATION

Participants who successfully complete the course and pass the examination will be recognized as a certified AIOps Foundation (AOF) practitioner. The certification is issued and maintained by DevOps Institute. Delegates who do not attain a passing score for the examination would be awarded a course attendance certificate only.

PRE-REQUISITES

There are no prerequisites to attending the AIOps Foundation course or sitting the certification examination. Familiarity with IT terminology and IT related work experience is advantageous.

PRE-COURSE READING

There are no pre-course reading resources or assignments prior to attending the course.

EXAMINATION FORMAT

- 40 Multiple Choice
- 1 mark per correct answer
- 26 marks required to pass (out of 40 available) – 65%
- Sixty minutes duration
- Web-based Open-book exam

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