# AIOps Foundation℠
# Course Description

**DevOps Institute**
A member of the PeopleCert Group

**DURATION – 16 Hours**

**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. Tailored for those focused on understanding basic concepts, implementations, use cases and benefits.**

## OVERVIEW

This AIOps Foundation course aims to cover 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.

This course introduces key principles and foundational concepts along with the core technologies of AIOps: big data and machine learning. The course 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 as an indispensable tool in today's IT Operational landscape.

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 foundation course will also provide the student 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.

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.

**COURSE OBJECTIVES**

At the end of the course, the following learning objectives are expected to be achieved:
1.  Clear understanding of the history, origins and current developments of AIOps
2.  Define and comprehend basic concepts and key principles within AIOps
3.  Understand general concepts of big data and artificial intelligence, and how they relate to AIOps
4.  Recognize the relationship between AIOps and MLOps
5.  Understand the effectiveness of AIOps deployment and possible benefits
6.  Understand the changes in mindset, collaboration and skills for AIOps to be applied in the organization
7.  Quantify outcomes of an AIOps implementation leveraging industry standard metrics
8.  Understand usual challenges and opportunities of applying AIOps in the organization
9.  Visualize the challenges, trends and ethical considerations organizations might face while deploying an AIOps initiative

**AUDIENCE**

The target audience for the AIOps Foundation 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

## LEARNER MATERIALS

- Sixteen (16) hours of instructor-led training and discussion facilitation
- Participation in unique exercises designed to apply concepts
- Sample documents, templates, tools and techniques
- Sample exam
- Glossary
- Access to additional value-added resources and communities

## 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 certificate. The certification is governed and maintained by DevOps Institute, a member of the PeopleCert Group.

## COURSE OUTLINE

Course Introduction

Module 1: AIOps Foundation

Module 2: AIOps in the Organization

Module 3: Core Technologies: Data

Module 4: Core Technologies: Machine Learning (ML)

Module 5: AIOPs and Operations Metrics

Module 6: AIOps Use Cases and Organizational Mindset

Module 7: Evaluating AIOps Impact

Module 8: Implementing AIOps in the Organization