Integrating AIOps with IT Service Management Training Course



30 Nov - 04 Dec 2026

Cape town

4600 € (Per Person)

Ref: #AI4194_291143

Course Introduction / Overview:

This course provides a comprehensive exploration of integrating Artificial Intelligence for IT Operations (AIOps) with traditional IT Service Management (ITSM) frameworks. In today's complex digital landscape, IT teams face overwhelming data volumes and pressure to maintain service availability. This program, offered by BIG BEN Training Center, is designed to bridge the gap between reactive ITSM processes and the proactive, predictive capabilities of AIOps. We will delve into how machine learning and big data analytics can transform core ITSM functions, moving from manual incident response to automated root cause analysis and predictive maintenance. The curriculum is influenced by modern operational principles discussed by thought leaders like Charles Betz and in foundational texts on digital transformation. Participants will learn not just the 'what' and 'why' of AIOps, but the practical 'how'—developing strategies for data ingestion, model training, and seamless integration with existing tools and workflows. This course equips professionals with the skills to build a more resilient, efficient, and intelligent IT operations environment, directly impacting business outcomes by reducing downtime and improving service quality.

Target Audience / This training course is suitable for:

- IT Operations Managers.
- ITSM Practitioners and Process Owners.
- Site Reliability Engineers (SREs).
- DevOps Engineers.
- IT Infrastructure and Cloud Engineers.
- Service Desk Managers and Team Leads.
- IT Architects and Strategists.
- Digital Transformation Leaders.
- IT Analysts and Consultants.
- Technology Project Managers.

Target Sectors and Industries:

- Information Technology and Services.
- Financial Services and Banking.
- Telecommunications.
- Healthcare and Pharmaceuticals.
- E-commerce and Retail.
- Manufacturing and Supply Chain.
- Energy and Utilities.
- Government Agencies and Public Sector Organizations.
- Media and Entertainment.
- Transportation and Logistics.

Target Organizations Departments:

- IT Operations.
- Service Management Office.
- Infrastructure and Cloud Services.
- DevOps and Platform Engineering.
- Application Support and Maintenance.
- Cybersecurity Operations (SecOps).
- Digital Transformation and Strategy.
- Enterprise Architecture.
- Quality Assurance and Testing.
- Data Analytics and Business Intelligence.

Course Offerings:

By the end of this course, the participants will have able to:

- Articulate the core concepts of AIOps and its value proposition in a modern ITSM context.
- Evaluate and select appropriate AIOps tools and platforms based on organizational needs.
- Integrate AIOps principles into existing ITSM frameworks like ITIL for enhanced efficiency.
- Utilize AI and machine learning for predictive incident management and proactive problem identification.
- Automate root cause analysis to significantly reduce Mean Time to Resolution (MTTR).
- Design and implement an effective data strategy for AIOps, focusing on observability.
- Develop a strategic roadmap for AIOps adoption, including key performance indicators (KPIs).
- Enhance change management processes with AI-driven impact analysis and risk assessment.
- Foster a culture of data-driven decision-making within IT operations teams.

Course Methodology:

The training methodology at BIG BEN Training Center is designed to be highly interactive, practical, and engaging, ensuring participants can apply their learning directly to their work environments. This course moves beyond theoretical lectures by incorporating a blended learning approach. Sessions will feature expert-led instruction, real-world case studies of successful AIOps implementations, and in-depth analysis of integration challenges. A significant portion of the course is dedicated to hands-on workshops and group exercises where participants will collaborate to design AIOps strategies for hypothetical business scenarios. These activities encourage critical thinking and problem-solving. Interactive Q&A sessions, peer-to-peer discussions, and continuous feedback loops are integral to the learning process. We focus on building a deep conceptual understanding combined with the practical skills needed to champion and implement AIOps initiatives, ensuring a tangible return on investment for both the participant and their organization.

Course Agenda (Course Units):

Unit One: Foundations of AIOps and Modern ITSM

- Introduction to IT Service Management (ITSM) and ITIL.
- The evolution of IT operations and the rise of complexity.
- Defining AIOps: Core concepts, components, and capabilities.
- The business case for AIOps: ROI, efficiency, and service quality.
- Understanding the AIOps maturity model.
- Key differences between traditional monitoring and AIOps.
- Exploring the relationship between AIOps, DevOps, and SRE.

Unit Two: The AIOps Technology Stack and Data Strategy

- The role of Big Data and analytics in AIOps.
- Core Machine Learning (ML) algorithms for IT operations.
- The three pillars of observability: Metrics, logs, and traces.
- Strategies for effective data collection, ingestion, and processing.
- Data quality and governance for successful AIOps.
- Overview of AIOps platforms and toolchains.
- Building a unified data model for operational intelligence.

Unit Three: Integrating AIOps with Core ITSM Processes

- Transforming Incident Management with predictive alerts and correlation.
- Proactive Problem Management through automated root cause analysis (RCA).
- Enhancing Change Management with AI-powered risk and impact analysis.
- Automating Service Request fulfillment and knowledge management.
- AIOps for improved Capacity and Performance Management.
- Integrating AIOps with Configuration Management Database (CMDB).
- Case studies of successful ITSM process automation.

Unit Four: Advanced AIOps Applications and Automation

- Implementing intelligent alerting and noise reduction techniques.
- Developing automated remediation and self-healing systems.
- Predictive analytics for forecasting IT resource needs and potential failures.
- Applying AIOps for enhanced security operations (SecOps).
- Business value dashboards and AIOps-driven reporting.
- Natural Language Processing (NLP) for unstructured IT data.
- Leveraging AIOps for cloud cost optimization and management.

Unit Five: AIOps Strategy, Implementation, and the Future

- Developing a strategic roadmap for AIOps adoption.
- Building a business case and securing stakeholder buy-in.
- Key Performance Indicators (KPIs) for measuring AIOps success.
- Overcoming organizational and cultural challenges to adoption.
- Ethical considerations and the role of human oversight in AIOps.
- The future of AIOps: Generative AI and Large Language Models (LLMs) in IT operations.
- Final project: Creating a tailored AIOps implementation plan.

FAQ:

Qualifications required for registering to this course?

There are no requirements.

How long is each daily session, and what is the total number of training hours for the course?

This training course spans five days, with daily sessions ranging between 4 to 5 hours, including breaks and interactive activities, bringing the total duration to 20 - 25 training hours.

Something to think about:

As AIOps automates more complex decision-making, what is the evolving role of human oversight and ethical governance in IT operations?

What unique qualities does this course offer compared to other courses?

This course distinguishes itself by focusing on the strategic integration of AIOps and ITSM, rather than concentrating solely on specific tools or platforms. While many programs teach the technical aspects of AIOps, we emphasize the crucial link between technology, process, and people. Our curriculum is built around a practical, process-oriented framework, teaching participants how to embed AI-driven intelligence directly into their existing ITSM workflows like incident, problem, and change management. We explore the 'how' and 'why' behind building a data-driven operational culture, a critical component often overlooked. The content moves beyond basic monitoring to advanced concepts like predictive analytics, automated remediation, and the ethical considerations of AI in operations. By incorporating real-world case studies and a forward-looking module on the future of AIOps, including generative AI, this course provides a holistic and strategic perspective. Participants leave not just with technical knowledge, but with a comprehensive roadmap for leading a successful AIOps transformation within their organization.