AI and Automation in Hospitality: Transforming Operations

2027 □□□□ 12 – 8
Kuala Lumpur (Malaysia)



AI and Automation in Hospitality: Transforming Operations

Ref: 20252455_19682 Location: Kuala Lumpur (Malaysia) Fees: 4900 GBP

Why This Course

Artificial intelligence and automation are reshaping the hospitality industry by changing how hotels, resorts, restaurants, and guest service teams operate. From AI-powered chatbots and virtual concierges to dynamic pricing, predictive maintenance, smart energy systems, and personalized recommendations, these technologies are helping hospitality businesses improve guest satisfaction, reduce operational pressure, and unlock new revenue opportunities.

This comprehensive 1-week AI and Automation in Hospitality Training program equips participants with practical knowledge and tools to understand, evaluate, and implement AI-driven solutions in hospitality environments. The course covers guest experience personalization, process automation, revenue management, data analytics, ethical AI, privacy, cybersecurity, change management, and future technology trends. Through case studies, hands-on exercises, and applied planning activities, participants will learn how to build AI adoption strategies that are practical, responsible, and aligned with business goals.

What You'll Learn and Practice

By joining this program, you will:

- Understand the fundamentals of AI and automation in hospitality contexts.
- Identify current trends and future opportunities for AI adoption in hospitality.
- Evaluate successful AI use cases across hotels, resorts, and guest services.
- Implement AI-driven solutions for personalized guest experiences.
- Use chatbots, virtual concierges, recommendation systems, and voice-enabled services.
- Explore IoT, AR, and VR applications for enhanced guest engagement.
- Apply automation to check-in, check-out, inventory, energy management, and maintenance.
- Use AI for revenue management, dynamic pricing, forecasting, and decision support.
- Apply sentiment analysis for reputation management and customer insight.
- Develop strategies for integrating AI into existing hospitality systems.
- Address data privacy, security, ethical considerations, and responsible AI use.
- Build AI adoption roadmaps supported by change management and staff training.



The Program Flow

Day 1: Introduction to AI and Automation in Hospitality

- Understand AI and automation technologies and their relevance to hospitality.
- Explore current trends and future prospects in hospitality digital transformation.
- Review case studies of successful AI implementations in hotels and service environments.
- Identify opportunities for using AI to improve guest experience, operations, and revenue.
- Analyze challenges, risks, and readiness factors for AI adoption.

Day 2: AI-Powered Guest Experiences

- Explore chatbots and virtual concierges for guest service and support.
- Use personalization and recommendation systems to improve guest satisfaction.
- Understand voice-activated room controls and IoT integration.
- Explore AR and VR applications for immersive guest engagement.
- Design AI-enabled guest journeys that improve convenience, relevance, and service quality.

Day 3: Operational Efficiency and Process Automation

- Apply AI in revenue management and dynamic pricing.
- Use predictive maintenance to reduce downtime and improve asset reliability.
- Explore smart energy management for cost reduction and sustainability.
- Implement automated check-in and check-out processes.
- Apply AI-driven inventory and supply chain optimization techniques.

Day 4: Data Analytics and Decision Support

- Use AI-powered business intelligence for forecasting and decision-making.
- Apply sentiment analysis to support reputation management.
- Use predictive analytics for marketing, sales, and guest behavior insights.
- Build data-driven approaches for improving operational and commercial decisions.
- Address data privacy, cybersecurity, and responsible data handling considerations.

Day 5: Implementation Strategies and Future Trends

- Develop an AI adoption roadmap for hospitality organizations.
- Plan integration of AI and automation with existing hospitality systems.
- Apply change management methods to support staff adoption and operational readiness.
- Design staff training approaches for effective use of AI-enabled tools.
- Explore ethical considerations, responsible AI principles, and future applications in hospitality.



Individual Impact

- Build confidence in understanding AI and automation applications in hospitality.
- Strengthen the ability to evaluate AI tools and match them with business needs.
- Improve skills in guest experience design, process automation, and analytics.
- Gain practical awareness of ethical, privacy, and security issues linked to AI adoption.
- Develop the ability to create realistic AI implementation plans.

Work Impact

- Improve guest satisfaction through personalized and responsive services.
- Streamline hotel operations through automation and smarter workflows.
- Support better revenue decisions through forecasting and dynamic pricing.
- Reduce costs through predictive maintenance, energy management, and inventory optimization.
- Strengthen digital transformation readiness across hospitality teams and departments.

Training Methodology

This program combines hospitality-focused AI concepts with practical application through:

- Case studies of AI and automation in hospitality environments.
- Guest journey and personalization design exercises.
- Revenue management and dynamic pricing scenarios.
- Process automation and operational efficiency workshops.
- Data analytics, sentiment analysis, and decision-support activities.
- AI adoption roadmap, ethics, and change management planning exercises.

Beyond the Course

Upon completion, participants will be able to:

- Design personalized guest experience strategies using AI technologies.
- Develop AI-driven revenue management models for hotel properties.
- Create implementation plans for automating key operational processes.
- Build data analytics frameworks for improved decision-making.
- Evaluate AI tools responsibly with attention to privacy, security, and ethics.
- Support successful AI adoption and digital transformation in hospitality organizations.

