AI and Big Data Analytics in Labour Relations Training Course

Professional Development Training Course Outline

Category	Trade Unions	**Duration**	10 Days
Base Fee	$3,000 USD	**Delivery Mode**	Online / On-site Hybrid

Course Introduction

The rapid advancement of Artificial Intelligence (AI), Big Data Analytics, Machine Learning, and Digital Workforce Transformation is reshaping the future of labour relations across industries worldwide. Organizations are increasingly leveraging predictive analytics, HR analytics, workforce intelligence, automation, and data-driven decision-making to improve employee engagement, optimize workforce planning, enhance collective bargaining strategies, and ensure compliance with labour laws. In modern industrial relations environments, AI-powered systems can analyze employee sentiment, identify workplace risks, predict labour disputes, and support strategic human capital management. As businesses navigate the era of Industry 4.0, labour professionals must understand how emerging technologies impact employee rights, workplace ethics, diversity, productivity, and organizational sustainability.

AI and Big Data Analytics in Labour Relations Training Course is designed to equip participants with practical knowledge and strategic capabilities to harness advanced technologies in labour management. Participants will explore real-world applications of People Analytics, Workforce Automation, Digital HR Ecosystems, Cloud-Based HR Platforms, AI Governance, and Cybersecurity in Workforce Data Management. Through practical case studies, interactive workshops, and predictive modelling exercises, the course empowers participants to build agile, data-driven labour relations strategies that align with global best practices, legal frameworks, and sustainable workforce development goals.

Programme Curriculum

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Course Duration

10Days

Course Objectives

1. Understand the fundamentals of Artificial Intelligence in Labour Relations.
2. Apply Big Data Analytics for workforce decision-making.
3. Analyze employee trends using Predictive Workforce Analytics.
4. Improve industrial relations using Machine Learning Algorithms.
5. Utilize HR Analytics Dashboards for strategic planning.
6. Enhance employee engagement through AI-driven Sentiment Analysis.
7. Strengthen compliance using RegTech and Legal Analytics.
8. Integrate Digital Transformation Strategies into labour management.
9. Identify risks through Workforce Risk Analytics.
10. Implement Data Governance and Cybersecurity practices.
11. Evaluate the impact of Automation and Robotics on employment.
12. Develop ethical frameworks for Responsible AI in HR.
13. Design sustainable labour strategies using Data-Driven Workforce Intelligence.

Target Audience

1. Human Resource Managers
2. Labour Relations Officers
3. Trade Union Leaders
4. Industrial Relations Practitioners
5. Compliance and Legal Officers
6. Workforce Planning Specialists
7. Government Labour Administrators
8. Organizational Development Consultants

Course Modules

Module 1: Introduction to AI and Big Data in Labour Relations

- Fundamentals of AI and Big Data
- Evolution of digital labour management
- AI applications in HR and industrial relations
- Data-driven workforce transformation
- Global trends in smart workplaces
- **Case Study:** AI adoption in multinational workforce management.

Module 2: Workforce Analytics and HR Intelligence

- HR data collection methods
- Workforce analytics tools
- Employee performance analytics
- Talent intelligence systems
- KPI-based workforce monitoring
- **Case Study:** Workforce analytics implementation in the banking sector.

Module 3: Predictive Analytics for Labour Management

- Predictive modelling concepts
- Employee turnover prediction
- Labour dispute forecasting
- Workforce demand planning
- Risk prediction frameworks
- **Case Study:** Predicting employee attrition using AI dashboards.

Module 4: AI-Driven Employee Engagement

- Sentiment analysis techniques
- Employee experience analytics
- AI chatbots in HR services
- Real-time engagement monitoring
- Behavioural analytics
- **Case Study:** AI-powered employee feedback systems.

Module 5: Big Data Governance and Cybersecurity

- Data privacy principles
- Cybersecurity risks in HR systems
- Ethical data management
- Data governance frameworks
- Compliance monitoring tools
- **Case Study:** Protecting workforce data from cyber threats.

Module 6: Machine Learning Applications in Labour Relations

- Machine learning fundamentals
- Pattern recognition in workforce data
- AI decision-support systems
- Algorithmic workforce analysis
- Intelligent workforce automation
- **Case Study:** Machine learning in employee productivity analysis.

Module 7: Automation and the Future of Work

- Workplace automation trends
- Robotics and employment impact
- Digital workforce transformation
- Skills disruption analysis
- Future workforce planning
- **Case Study:** Automation in manufacturing labour systems.

Module 8: AI in Collective Bargaining and Negotiation

- Digital negotiation platforms
- AI-supported bargaining analysis
- Data-driven negotiation strategies
- Labour contract analytics
- Conflict prediction systems
- **Case Study:** AI-assisted collective bargaining processes.

Module 9: Labour Law Compliance Analytics

- Labour compliance technologies
- Regulatory technology (RegTech)
- AI for policy monitoring
- Automated compliance reporting
- Legal risk assessment
- **Case Study:** Compliance analytics in multinational organizations.

Module 10: Diversity, Equity, and Inclusion Analytics

- DEI data measurement
- Bias detection algorithms
- Inclusive workforce analytics
- Gender equity monitoring
- Ethical AI frameworks
- **Case Study:** AI tools for reducing workplace discrimination.

Module 11: Cloud-Based HR and Workforce Systems

- Cloud HR platforms
- Digital employee records
- Workforce collaboration tools
- HR digital ecosystems
- Real-time labour analytics
- **Case Study:** Cloud transformation in public sector HR.

Module 12: Strategic Workforce Planning with AI

- AI-driven workforce forecasting
- Skills gap analytics
- Succession planning tools
- Strategic talent management
- Scenario planning models

- **Case Study:** Workforce planning in technology companies.

Module 13: Data Visualization and Reporting

- Dashboard development
- Interactive workforce reports
- Data storytelling techniques
- Visualization software tools
- Executive decision-support reporting
- **Case Study:** Executive HR dashboards for strategic decisions.

Module 14: Ethical AI and Responsible Workforce Management

- Responsible AI principles
- Workplace ethics and transparency
- Algorithm accountability
- Employee trust and digital ethics
- Governance models for AI adoption
- **Case Study:** Ethical challenges in automated HR systems.

Module 15: Capstone Project and Industry Applications

- Integrated workforce analytics project
- AI strategy development
- Labour relations transformation roadmap
- Team-based analytics presentation
- Industry benchmarking exercises
- **Case Study:** End-to-end AI transformation in labour relations.

Training Methodology

- Interactive lectures and presentations.
- Group discussions and brainstorming sessions.
- Hands-on exercises using real-world datasets.
- Role-playing and scenario-based simulations.
- Analysis of case studies to bridge theory and practice.
- Peer-to-peer learning and networking.
- Expert-led Q&A sessions.
- Continuous feedback and personalized guidance.

Register as a group from 3 participants for a Discount

Send us an email: info@fineskilltrainingcenter.org or call *+254769199797*

Certification

Upon successful completion of this training, participants will be issued with a globally- recognized certificate.

Tailor-Made Course

We also offer tailor-made courses based on your needs.

Key Notes

a. The participant must be conversant with English.

b. Upon completion of training the participant will be issued with an Authorized Training Certificate

c. Course duration is flexible and the contents can be modified to fit any number of days.

d. The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.

e. One-year post-training support Consultation and Coaching provided after the course.

f. Payment should be done at least a week before commence of the training, to Fineskill Training Center account, as indicated in the invoice so as to enable us prepare better for you.

Upcoming Scheduled Sessions

Start Date	End Date	Location	Price
23 Nov 2026	04 Dec 2026	Online	$2,000
23 Nov 2026	04 Dec 2026	Physical	$3,000
23 Nov 2026	04 Dec 2026	Physical	$6,000
23 Nov 2026	04 Dec 2026	Physical	$6,000
23 Nov 2026	04 Dec 2026	Physical	$12,000
23 Nov 2026	04 Dec 2026	Physical	$9,000
23 Nov 2026	04 Dec 2026	Physical	$12,000
23 Nov 2026	04 Dec 2026	Physical	$12,000

Ready to enroll or request a customized program? Book online or contact us:

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