



AI-Powered Instructional Design: Designing Intelligent, Data-Driven Learning Experiences

20 – 24 December 2026
Cape town

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Course Overview:

AI-Powered Instructional Design for L&D Professionals is a comprehensive corporate training course designed to equip learning and development teams with the knowledge, frameworks, and practical approaches required to design, enhance, and scale learning programs using artificial intelligence. As AI instructional design and AI-powered learning design rapidly reshape corporate training, L&D professionals must move beyond traditional instructional models toward AI-driven learning design that is adaptive, data-driven, and performance-focused.

This course examines how artificial intelligence in L&D transforms instructional design with AI across the entire learning lifecycle—analysis, design, development, delivery, and evaluation. Participants explore AI-based course design, AI-generated training content, adaptive learning with AI, and data-driven learning design supported by AI learning analytics. Strong emphasis is placed on learning experience design LXD with AI, AI-assisted eLearning design, and scalable training design with AI aligned to organizational objectives.

Designed specifically for corporate and institutional environments, this digital instructional design training program balances strategic insight with applied practice. Participants gain clarity on AI tools for instructional designers, ChatGPT for instructional design, generative AI for training content, and AI automation in learning development—while maintaining instructional quality, ethics, and human judgment. The course directly supports L&D upskilling with AI and prepares organizations for long-term AI transformation in L&D and the future of instructional design.

Target Audience:

- Learning & Development Managers
- Instructional Designers
- Learning Experience Designers LXD
- Corporate Trainers and Facilitators
- Digital Learning Specialists
- Talent Development Professionals
- HR Learning Partners

Targeted Organizational Departments:

- Learning & Development
- Human Resources
- Talent Management
- Organizational Development
- Corporate Training Units
- Digital Transformation Offices
- Performance Management Teams

Targeted Industries:

- Government and Public Sector
- Banking and Financial Services
- Energy and Utilities
- Healthcare and Life Sciences
- Telecommunications
- Manufacturing and Industrial Services
- Technology and Digital Enterprises
- Education and Professional Training Providers

Course Offerings:

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

- Apply AI instructional design principles to real corporate learning challenges
- Design AI-powered learning experiences aligned with business performance goals
- Integrate AI in instructional design across the full learning lifecycle
- Develop AI-generated training content while maintaining instructional integrity
- Design adaptive learning with AI for personalized learner pathways
- Use AI learning analytics for data-driven learning design decisions
- Support AI transformation in L&D through scalable training design with AI
- Critically evaluate AI tools for instructional designers and their business value

Training Methodology:

The course uses an applied, corporate-focused methodology that blends conceptual clarity with hands-on practice. Participants engage in facilitated discussions, structured case studies, collaborative design exercises, and guided reflection sessions centered on AI-driven learning design. Each module connects artificial intelligence in L&D with real instructional design decisions faced by L&D teams.

Learning experience design LXD with AI is emphasized through redesign activities where participants rework existing courses using AI-assisted eLearning design approaches. Group work mirrors real organizational project teams addressing AI-based course design and change management challenges.

Reflection sessions reinforce ethical use, governance, and the role of human judgment in AI-enabled learning environments.

Course Toolbox:

- AI-enhanced instructional design frameworks and workflows
- AI-based course design templates and checklists
- Learning experience design LXD mapping tools
- Sample AI-generated training content scenarios
- AI learning analytics interpretation guides
- Prompt-design examples for ChatGPT for instructional design

Note: Tools are **not provided**. The course focuses on **practical insights, examples, and demonstrations** of AI tools relevant to instructional design.

Course Agenda:

Day 1: Foundations of AI in Instructional Design & L&D

- **Topic 1:** Introduction to AI Instructional Design and AI in Instructional Design
- **Topic 2:** Artificial Intelligence in L&D: Opportunities, Limits, and Myths
- **Topic 3:** AI for Learning and Development in Corporate Training Environments
- **Topic 4:** From Traditional Instructional Design to AI-Driven Learning Design
- **Topic 5:** Intelligent Learning Systems and Digital Learning Transformation
- **Topic 6:** The Evolving Role of L&D Professionals in the Age of AI
- **Reflection & Review:** Key mindset shifts for adopting AI in corporate instructional design

Day 2: AI-Powered Learning Design & Learning Experience Design LXD

- **Topic 1:** AI-Powered Learning Design Principles for Corporate Learning
- **Topic 2:** Learning Experience Design LXD with AI
- **Topic 3:** AI-Based Course Design Models for Scalable Training
- **Topic 4:** Designing Personalized and Adaptive Learning with AI
- **Topic 5:** Aligning AI-Driven Learning Design with Business Objectives
- **Topic 6:** Digital Instructional Design Training Frameworks Using AI
- **Reflection & Review:** Designing learner-centric experiences with AI



Day 3: AI-Generated Content & AI-Assisted eLearning Design

- **Topic 1:** Generative AI for Training Content and Course Development
- **Topic 2:** AI-Generated Training Content: Use Cases and Quality Control
- **Topic 3:** AI-Assisted eLearning Design for Corporate Programs
- **Topic 4:** ChatGPT for Instructional Design: Practical Applications
- **Topic 5:** AI Automation in Learning Development Workflows
- **Topic 6:** Maintaining Human Judgment in AI-Driven Content Creation
- **Reflection & Review:** Balancing efficiency, quality, and instructional integrity

Day 4: Data-Driven Learning Design & AI Learning Analytics

- **Topic 1:** Data-Driven Learning Design Using AI Learning Analytics
- **Topic 2:** Measuring Learning Effectiveness with AI in Corporate Training
- **Topic 3:** Using AI Insights to Improve Instructional Design Decisions
- **Topic 4:** Adaptive Learning Systems and Continuous Performance Improvement
- **Topic 5:** Ethical, Privacy, and Governance Considerations in AI Analytics
- **Topic 6:** Connecting AI Learning Data to Organizational KPIs
- **Reflection & Review:** Turning learning data into actionable L&D insights

Day 5: AI Transformation, Strategy & the Future of Instructional Design

- **Topic 1:** AI Transformation in L&D: Strategy and Organizational Readiness
- **Topic 2:** Scaling AI-Driven Learning Design Across the Organization
- **Topic 3:** Change Management for AI Adoption in Instructional Design
- **Topic 4:** L&D Upskilling with AI: Building Future-Ready Capabilities
- **Topic 5:** Scalable Training Design with AI for Enterprise Growth
- **Topic 6:** The Future of Instructional Design and Digital Learning Ecosystems
- **Reflection & Review:** Developing a practical AI roadmap for L&D teams

FAQ:

What specific qualifications or prerequisites are needed for participants before enrolling in the course?

No technical or AI background is required. Participants should have experience in L&D, instructional design, or corporate training roles.

How long is each day's session, and is there a total number of hours required for the entire course?

Each day's session is generally 4–5 hours. The total duration is approximately 20–25 training hours.



How does AI differ from traditional instructional design tools?

AI supports instructional designers by enhancing personalization, automation, and data-driven decision-making, while human expertise remains essential for learning strategy and quality.

How This Course is Different from Other AI Instructional Design Courses:

This course is specifically designed for corporate Learning and Development L&D environments, rather than general AI usage. It integrates AI-powered learning design, learning experience design LXD with AI, and data-driven learning design into a single, structured framework aligned with organizational performance goals. Rather than focusing on tools alone, the course develops strategic capability, ethical awareness, and scalable design thinking—enabling participants to lead AI transformation in L&D confidently and responsibly.