AI+ Mining

Category: AI, Data & Analytics | **Vendor:** AI Certs

Duration: 1.00 hours (1 days) **0.8 CPD Hours** **Rating:** ⭐ 4.6 (5,878 reviews)

Course Information

Delivery Format:	vILT
Certification:	AI+ Mining
Related Exam:	AI-MIN

Course Overview

The AI+ Mining™ course explores how artificial intelligence is reshaping exploration, production, and safety within the mining industry, focusing on real-world AI applications for predictive maintenance, resource estimation, and process automation. Gain practical insights into improving efficiency, sustainability, and decision-making through data-driven intelligence. The course also highlights the role of AI in promoting safer and more environmentally responsible mining operations. Designed for industry professionals, it bridges mining expertise with advanced analytical and automation technologies.

About This Course

The AI+ Mining™ course explores how artificial intelligence is reshaping exploration, production, and safety within the mining industry, focusing on real-world AI applications for predictive maintenance, resource estimation, and process automation. Gain practical insights into improving efficiency, sustainability, and decision-making through data-driven intelligence. The course also highlights the role of AI in promoting safer and more environmentally responsible mining operations. Designed for industry professionals, it bridges mining expertise with advanced analytical and automation technologies.

Who Should Attend

No prior coding experience required (coding templates provided)

Prior exposure to GIS, geospatial data, or industrial automation is a plus

Prerequisites & Entry Requirements

General Prerequisites:

Basic knowledge of mining operations, data analytics, and statistics

Familiarity with fundamental concepts of data analytics and statistics

Learning Outcomes

Upon successful completion of this course, participants will be able to:

Understand the transformative role of AI in mining operations and resource management

Apply AI for predictive maintenance, equipment optimization, and production efficiency

Use data analytics for exploration planning, ore grade prediction, and environmental monitoring

Implement AI-driven automation for safety, productivity, and cost control

Evaluate ethical, sustainability, and compliance considerations in AI-enabled mining

Detailed Course Outline

Introduction to AI in Mining

Overview of AI, ML & Deep Learning in Mining

Use Cases

Activity

Machine Learning & Deep Learning for Mining

Introduction to ML & Deep Learning

Use Cases

Case Study

Hands-On Exercise

Activity

AI in Mineral Exploration & Resource Modeling

AI for Smart Exploration & Orebody Modeling

Use-Cases

Hands-On Exercises

Activity

Case Study

AI for Equipment Automation & Fleet Optimization

AI in Autonomous Vehicles & Robotics

Use Cases

Case Study

Hands-On Exercise

Activity

AI in Predictive Maintenance & Asset Management

AI in Equipment Health Monitoring

Use Case

Case Study

Hands-On Exercise

Activity: Group Discussion – “Should AI Decide When Machines Need Maintenance?”

AI for Environmental Compliance & Sustainability

AI-Powered Environmental Monitoring

Use Cases

Case Study: AI-Driven Sustainability at Rio Tinto

Hands-On Exercises: AI for Environmental Risk Assessment – Simulating AI-driven Water Quality Monitoring using Google Earth Engine

Activity: Group Exercise: “Develop an AI-driven sustainability plan for a mining company.

AI for Workforce Transformation & Ethical AI

Ethical AI, Workforce Augmentation & AI Regulations

Use Cases

Case Study

Hands-On Exercises

AI in Mining Strategy & Implementation

AI-Driven Decision-Making in Mining

Use Cases

Certification Path

AI+ Mining

Exam: AI-MIN

Frequently Asked Questions

Q: What delivery options are available for AI+ Mining?

We offer multiple delivery formats:

- Live Instructor-Led Classroom Online (Virtual/Live Online)
- Traditional Instructor-Led Classroom Training (ILT)
- On-site delivery at your offices anywhere in United Kingdom
- Private dedicated courses customized for your team

Q: What certification does this course prepare me for?

The AI+ Mining course helps prepare you for the AI+ Mining certification path.

Q: Which exam does this course prepare me for?

This course prepares you for the AI-MIN official exam. You can take this exam at any exam center across United Kingdom including London, Manchester, Birmingham, Edinburgh, or live online wherever you are located.

Q: How many CPD hours does this course provide?

The 1-day AI+ Mining course provides up to 0.8 CPD hours of structured learning. CPD certificates can be provided upon request.

Q: What is the duration of the AI+ Mining training?

The training takes place over 1 day(s), with each day lasting approximately 1.00 hours including breaks for lunch and refreshments.

Q: Do you provide corporate training for AI+ Mining?

Yes, we provide corporate training, dedicated training, and closed classes for AI+ Mining. Training can take place anywhere in United Kingdom including London, Manchester, Birmingham, Edinburgh, or live online allowing teams from across United Kingdom or internationally to attend.

Q: What related terms do people search for?

Popular related searches include: AI+ Mining, AI Certs, vILT

Q: Why choose Nexus Human for AI+ Mining?

Nexus Human is recognized as one of the leading training providers. Our trainers have won multiple awards including:

- Small Firms Best Trainer Award
- National Training Partner of the Year (Ireland) - Multiple Years
- Global Top 30 Instructor Awards (2012, 2019, 2021)
- Tech Excellence Award Nominations
- Learning Performance Institute (LPI) External Training Provider Sponsor 2024

Q: Are there any discount codes available?

Yes! Use discount code **PENPAL5** when booking your AI+ Mining training. Please note that only one discount code can be used per booking and cannot be combined with other special offers.

Nexus Human

Professional Training & Development

Email: info@nexushuman.com

Website: www.nexushuman.com

Phone: +353 1 889 8700 (Ireland) | +44 20 8142 8961 (UK)

© 2026 Nexus Human. All rights reserved. This brochure was generated on 14/11/2026.