AI+ Quantum

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

Duration: 40.00 hours (5 days) **32.5 CPD Hours** **Rating:** ⭐ 4.6 (5,878 reviews)

Course Information

Delivery Format:	Instructor Led - Online
Certification:	AI+ Quantum
Related Exam:	AI+ Quantum

Course Overview

The AI+ Quantum course program provides an in-depth exploration of the intersection between Artificial Intelligence (AI) and Quantum Computing. This comprehensive course begins with a refresher on AI and Quantum Computing fundamentals, setting a solid foundation for understanding advanced topics. Participants will delve into Quantum Computing Gates, Circuits, and Algorithms, learning about core quantum algorithms and their applications in AI. The curriculum covers Quantum Machine Learning (QML) and Quantum Deep Learning, showcasing how these technologies are revolutionizing traditional AI methods. Ethical considerations are integrated throughout the course, ensuring participants understand the implications of their work. With discussions on current trends, future outlooks, and real-world case studies, attendees will gain practical insights. Hands-on workshops provide the opportunity to apply learned concepts, making this course essential for professionals and enthusiasts aiming to innovate in the transformative field of AI and Quantum Computing.

About This Course

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Who Should Attend

AI Engineer

Prerequisites & Entry Requirements

General Prerequisites:

A foundational knowledge of AI concepts, no technical skills are required., Willingness to exploring unconventional approaches to problem-solving within the context of AI and Quantum., Openness to engage critically with ethical dilemmas and considerations related to AI technology in quantum practices.

Learning Outcomes

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

Course Objectives

- Gain a foundational understanding of Artificial Intelligence and Quantum Computing concepts and techniques.
- Learn about Quantum Computing Gates, Circuits, and Algorithms, and their applications in AI.
- Explore Quantum Machine Learning and Quantum Deep Learning, focusing on algorithms for regression, classification, and neural networks.
- Understand the ethical considerations in AI and Quantum Computing, ensuring responsible implementation and development.
- Stay updated on current trends, future outlooks, and practical use-cases in AI and Quantum Computing.

Detailed Course Outline

- Overview of Artificial Intelligence (AI) and Quantum Computing

  Artificial Intelligence Refresher Quantum Computing Refresher

- Quantum Computing Gates, Circuits, and Algorithms

  Quantum Gates and their Representation Multi Qubit Systems and Multi Qubit Gates

- Quantum Algorithms for AI

  Core Quantum Algorithms QFT and Variational Quantum Algorithms

- Quantum Machine Learning

  Algorithms for Regression and Classification Algorithms for Dimensionality and Clustering

- Quantum Deep Learning

  Algorithms for Neural Networks ® Part I Algorithms for Neural Networks ® Part II

- Ethical Considerations

  Ethics for Artificial Intelligence Ethics for Quantum Computing

- Trends and Outlook

Current Trends and Tools Future Outlook and Investment

- Use Cases & Case Studies

Quantum Use Cases QML Case Studies

- Workshop

Project ® I: QSVM for Iris Dataset Project ® II: VQC/QNN on Iris Dataset Bonus: IBM Quantum Computers

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, Overview of Artificial Intelligence (AI) and Quantum Computing, Quantum Computing Gates, and Algorithms, Quantum Algorithms for AI, Quantum Machine Learning, Quantum Deep Learning, Ethical Considerations, Trends and Outlook, Use Cases & Case Studies, Workshop, Optional Module: AI

Certification Path

AI+ Quantum

Exam: AI+ Quantum

Additional Course Details

Nexus Humans AI+ Quantum training program is a workshop that presents an invigorating mix of sessions, lessons, and masterclasses meticulously crafted to propel your learning expedition forward. This immersive bootcamp-style experience boasts interactive lectures, hands-on labs, and collaborative hackathons, all strategically designed to fortify fundamental concepts.

Guided by seasoned coaches, each session offers priceless insights and practical skills crucial for honing your expertise. Whether you're stepping into the realm of professional skills or a seasoned professional, this comprehensive course ensures you're equipped with the knowledge and prowess necessary for success.

While we feel this is the best course for the AI+ Quantum course and one of our Top 10 we encourage you to read the course outline to make sure it is the right content for you.

Additionally, private sessions, closed classes or dedicated events are available both live online and at our training centres in Dublin and London, as well as at your offices anywhere in the UK, Ireland or across EMEA.

Frequently Asked Questions

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

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+ Quantum course helps prepare you for the AI+ Quantum certification path.

Q: Which exam does this course prepare me for?

This course prepares you for the AI+ Quantum 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 5-day AI+ Quantum course provides up to 32.5 CPD hours of structured learning. CPD certificates can be provided upon request.

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

The training takes place over 5 day(s), with each day lasting approximately 40.00 hours including breaks for lunch and refreshments.

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

Yes, we provide corporate training, dedicated training, and closed classes for AI+ Quantum. 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+ Quantum, AI Certs, vILT

Q: Why choose Nexus Human for AI+ Quantum?

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+ Quantum training. Please note that only one discount code can be used per booking and cannot be combined with other special offers.

Nexus Human

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