Certificate Programme in Generative AI with Quantum Engineering
Duration : 6 month

Logos Analytics provides a comprehensive Generative AI course covering fundamental ideas, important methods, and innovative applications.Enrolling in Logos Analytics Generative AI Programme with Quantum Engineering will provide a strong foundation in AI methodologies and practical experience with current tools and models in Both **AI and Quantum Engineering**

Integrated Learning: Apply concepts from both domains through projects or research that explore the intersection of AI and quantum computing.

Supplement with Quantum Computing Courses: Utilize free or certificate courses offered by us to build knowledge in quantum mechanics and computing.

Suggested Learning Path
To gain expertise in both Generative AI and Quantum Engineering over six months, consider the following approach:

Syllabus

Key Modules:

Begginers Module

- Mathematical Foundations for Machine Learning (ML)
- Machine Learning Techniques
- Natural Language Processing (NLP)
- Generative AI for Text
- Generative AI for Vision
- Responsible AI

Advanced Module

- Foundations of Generative AI
- Generative Adversarial Networks (GANs)
- Variational Autoencoders (VAEs)
- Diffusion Models
- Applications of Generative AI
- Ethical Considerations and Future Directions

Quantum Engineering Education Initiatives

Educational resources and certifications are being offered to nurture the next generation of professionals in quantum computing.

Tools & Frameworks:

Python, NumPy, Pandas, PyTorch, TensorFlow

NLP libraries: NLTK, spaCy

Highlights:

- ✓ Focus on Large Language Models (LLMs) like GPT, BERT, and T5

- ✓ Exploration of Vision-Language Models (VLMs) and Reinforcement Learning with Human Feedback (RLHF)

- ✓ Delivered through live online interactive sessions in a Direct-to-Device (D2D) format

- ✓ Includes industry-relevant case studies, simulations, projects, and assignments

- ✓ One-day campus immersion at Logos Analytics Office with real time case studies