

GSDC Certified Generative AI in Finance and Banking

OEM: Global Skill Development Council • Duration: 5 Days (40 hrs) • Code: GSDC-GAI-FINBANK

COURSE MODULES & TOPICS

1 Exploring Generative AI +

- Introduction to Generative AI
- The historical evolution of Generative AI
- Ethical considerations in AI
- Relevance of Generative AI in finance and banking

2 Machine Learning Fundamentals +

- A primer on machine learning
- Understanding supervised and unsupervised learning
- Distinguishing regression from classification

3 Delving into Deep Learning +

- The essence of neural networks
- The backpropagation method and gradient descent
- Activation functions in deep learning
- Key components of deep learning

4 Generative Adversarial Networks (GANs) in Finance +

- Unpacking Generative Adversarial Networks (GANs)
- The mechanics of GANs
- Applications of GANs in finance and banking
- Recognizing GANs' limitations and challenges
- Exploring Advanced GAN Variants (e.g., StyleGAN, CycleGAN) for Specialized Finance Applications

5 Variational Autoencoders (VAEs) in Finance +

- Insights into Variational Autoencoders (VAEs)
- Training VAEs
- VAE applications in finance and banking
- A comparative analysis of GANs and VAEs

6 Time Series Analysis with Generative Models +

- Introduction to time series data
- Forecasting using generative models
- Detecting anomalies through generative models

7 NLP and Sentiment Analysis in Finance +

- Leveraging Natural Language Processing (NLP) for sentiment analysis
- Named entity recognition's significance
- NLP applications in risk assessment within finance

8 Fraud Detection in Finance +

- Generative AI's role in fraud detection
- The associated challenges and risks

9 Credit Scoring and Risk Assessment +

- Credit scoring models and their importance
- Harnessing generative AI for risk assessment
- Regulatory considerations in credit and risk assessment

10 Algorithmic Trading with Generative Models +

- Algorithmic trading's landscape
- Deploying generative AI in trading strategies
- Assessing risks and challenges
- Guidelines for Ethical AI Development

11 Model Interpretability and Explainability +

- The significance of model interpretability
- Techniques for understanding generative AI models
- Adhering to regulatory demands

12 Use Cases with Generative AI Tools & Hands-on Demos +

- Learn to create AI Enhanced PowerPoint Presentations, Images, and Chart Analysis for business purposes
- Leverage AI for automated data insights, simplifying the journey from data collection to impactful business strategies
- AI-Powered Document Summarization for HR & L&D Reports
- AI-Based Personalized Recommendation Systems Using PDFs/Word Documents
- Content Generation (Text, Audio, Video, Images) with Prompt Engineering

13 Personalized 1-1 & Daily Group Live session +

- Personalized 1-on-1 Trainer/SME Connect Session - Receive a 1-on-1 connect session from Trainer/SME to resolve all types of queries.
- Daily Live Session with Lifelong Learning - Participate in a daily live session with industry experts where professionals from around the world connect with SMEs and have a brainstorming session.

14 From Generative to Agentic AI: The Next Big Leap +

- Defining Agentic AI
- Agentic AI vs Generative AI: Key Differences
- The Inner Workings of Agentic AI
- AI Agents as Financial Advisors