# Deploy and Manage Generative Al Models on Google Cloud

**Duration: 03 days (24 hours)** 

#### **Course Outcomes**

- 1. Master MLOps for Generative Al
- 2. Model Evaluation
- 3. Responsible Al
- 4. Al Security
- 5. Build and Deploy ML Solutions

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#### **Table of Content**

#### Module 01: Machine Learning Operations (MLOps) for Generative Al

 This module is dedicated to equipping you with the knowledge and tools needed to uncover the unique challenges faced by MLOps teams when deploying and managing Generative AI models, and exploring how Vertex AI empowers AI teams to streamline MLOps.

# Module 02: Machine Learning Operations (MLOps) with Vertex AI: Model Evaluation

 This module equips machine learning practitioners with the essential tools, techniques, and best practices for evaluating both generative and predictive Al models. Model evaluation is a critical discipline for ensuring that ML systems deliver reliable, accurate, and high-performing results.

## Module 03: Responsible Al for Developers: Fairness & Bias

 This module introduces concepts of responsible AI and AI principles. It covers techniques to practically identify fairness and bias and mitigate bias in AI/ML practices. It explores practical methods and tools to implement Responsible AI best practices using Google Cloud.

#### Module 04: Responsible Al for Developers: Interpretability & Transparency

This module introduces concepts of AI interpretability and transparency. It
discusses the importance of AI transparency for developers and engineers. It
explores practical methods and tools to help achieve interpretability and
transparency in both data and AI models.

#### Module 05: Responsible Al for Developers: Privacy & Safety

• This module introduces important topics of AI privacy and safety. It explores practical methods and tools to implement AI privacy and safety recommended practices through the use of Google Cloud products and open-source tools.

## Module 06: Introduction to Security in the World of Al

 This module equips security and data protection leaders with strategies to securely manage AI within their organizations. Learn a framework for proactively identifying and mitigating AI-specific risks.

#### Module 07: Build and Deploy Machine Learning Solutions on Vertex Al

• Earn the intermediate skill badge by completing the Build and Deploy Machine Learning Solutions with Vertex AI module, where you will learn how to use Google Cloud's Vertex AI platform, AutoML, and custom training services to train, evaluate, tune, explain, and deploy ML models.